

# Pennsylvania Learning Standards for Early Childhood

# PRE-KINDERGARTEN

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## Office of Child Development and Early Learning



Pennsylvania  
Department of Human Services

2024



Pennsylvania  
Department of Education

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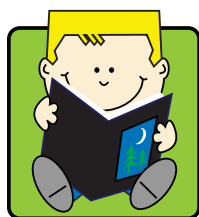
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## Learning Standards Development

Pennsylvania's Learning Standards for Early Childhood were originally constructed as a joint project of the Departments of Education and Human Services. The Office of Child Development and Early Learning in collaboration with the Office of Elementary and Secondary Education have overseen revisions to the standards.

Each set of standards has been formulated with help and guidance from practitioners and program specialists who represented early childhood programs, school districts, higher education, family leaders, policy analysts, and researchers. A group of Pennsylvania educators, in conjunction with the Office of Child Development and Early Learning, created a set of Pennsylvania Core Standards beginning with Pre-Kindergarten. The Pennsylvania Core Standards start in Pre-Kindergarten and continue through 12th grade. The Pennsylvania State Board of Education adopted the Pennsylvania Core Standards in March 2014. The 2014 revisions include updates related to the Pennsylvania Core Standards; Science, Technology, Engineering, and Math (STEM) supportive practices; and current research trends.

### Learning Standards for Early Childhood are used to:

- Inform professionals about curriculum and assessment
- Guide the selection of instructional materials and the design of interactions/goal setting
- Inform families of appropriate expectations for children
- Provide a common framework for community-based birth–grade 3 alignment work

### Learning Standards for Early Childhood are NOT used as:

- A specific curriculum
- A means to prohibit children from moving from one grade or age level to another

## INTRODUCTION

Children are born with an incredible capacity and desire to learn. More than 40 years of research confirms the foundational importance of early education and care for children's school and life success. It is essential that children's first experiences are robust ones, steeped in activities that develop critical thinking and problem-solving skills, a deep understanding about themselves in a social society, and age-appropriate content.

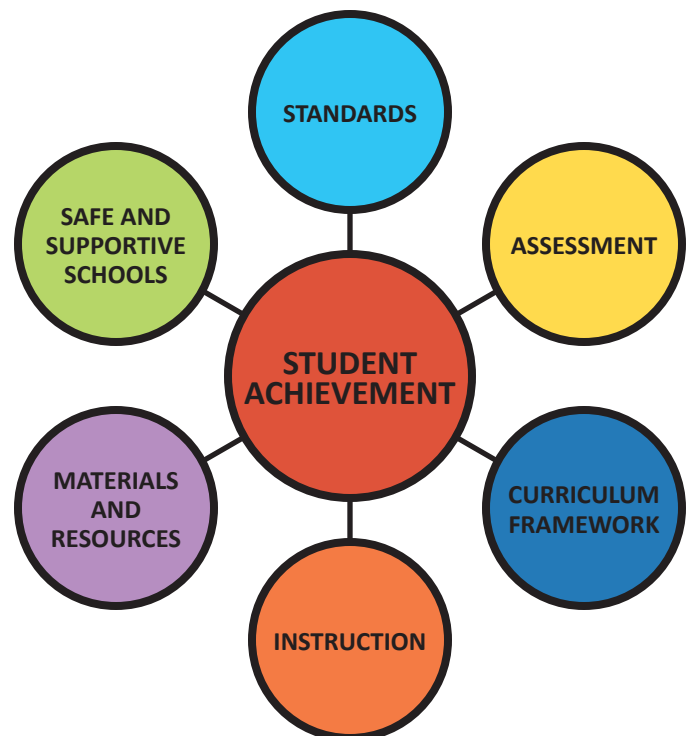
Instructional practices must embed the domains of development—cognitive, social-emotional, language, and physical—with approaches to learning that enable children to explore, understand, and reach beyond the “here and now” to challenge themselves, experiment, and transform information into meaningful content and skills.

Professionals interacting with young children have the critical task of providing rich information and experiences. Such experiences build skills and understanding in the context of everyday routines and within intentionally-designed play opportunities that capture children's interests and curiosity. Pennsylvania's Learning Standards for Early Childhood are designed to support and enhance the learning environment; responsive relationships; age, cultural, and linguistically-appropriate curriculum; and practices being used to assess children, classrooms, and programs.

The Department of Education and the Office of Child Development and Early Learning use a Standards Aligned System. The Standards Aligned System is a collective body of research that identifies six elements which, when used together, provide a framework for program improvement and child success. The elements identified are standards, assessments, curriculum framework, instruction (including interven-

tions), safe and supportive schools, and materials and resources. A web-based portal including more information and resources related to these elements is accessible at [www.pdesas.org](http://www.pdesas.org).

### STANDARDS ALIGNED SYSTEM (SAS)



## 1. Standards

Learning standards provide the framework for learning. They provide the foundational information for what children should be able to know and do. Pennsylvania's Learning Standards for Early Childhood build on information learned previously, creating a continuum of learning that assures consistent and linked learning that begins in infancy, increasing in complexity as it extends through graduation.

Pennsylvania also uses program standards that assure children's experiences are being offered in high-quality settings. Pennsylvania's state-funded programs all offer similar sets of standards that provide guidance on program operation that exhibit best practices.

## 2. Assessments

Professionals must use both informal and formal assessments to understand children's progress. In early childhood, formative assessments that provide information about how children are progressing allow professionals to make adaptations or adjustments in the individualized learning plans for every child. Early childhood professionals observe and assess children using the materials that are found in the learning environment. Professionals must use the information they have documented during observation, along with information from the family, to identify goals and next steps for children's learning.

## 3. Curriculum framework

A curriculum framework reminds us what information should be taught to young children within each of the Key Learning Areas. It assures the continuum of learning that begins at birth and continues through graduation. Pennsylvania's curriculum framework includes big ideas, essential questions, concepts, and competencies that further define the learning standards.


## 4. Instruction including interventions

Instruction in the early years often looks different than instruction in the older grades. Learning occurs within the context of play and active learning strategies where children are engaged in concrete and hands-on discovery; experimentation; and interaction with materials, their peers, and nurturing adults.

Professionals help construct knowledge during these active learning times by designing activities that build on children's prior knowledge to create new understandings and information. Direct instruction should be combined with child-initiated play to produce optimal conditions for young children's learning. Adults become facilitators who interact with children throughout the day. Adults ask open-ended questions that encourage children to think about what comes next. With this approach, adults support children's creativity, problem-solving, intuition, and inventiveness (approaches to learning) by challenging and encouraging them. Professionals design focused instruction that is based on the identified individual needs of every child and assure these experiences encompass their interests, abilities, and culture.

### **STEM (Science, Technology, Engineering, Math)**

Science, Technology, Engineering, and Math (STEM) education is an intentional, integrative approach to teaching and learning, in which students uncover and acquire a comprehensive set of concepts, competencies, and thinking skills of science, technology, engineering, and mathematics that they transfer and apply in both academic and real-world contexts.

Education in Science, Technology, Engineering, and Math beginning at birth is supported by research in neuroscience and other developmental sciences. This research shows that the basic architecture of a child's brain is constructed through an ongoing process that begins before birth and continues through adulthood. Research also confirms that the brain is predominantly receptive to learning math and logic between the ages of 1 and 4, and that early math skills are the most powerful predictors of later learning. Providing children with opportunities to have early experiences in STEM supports children in their academic growth, develops early critical thinking and reasoning skills, and enhances later interest in STEM careers. The foundations of STEM learning lie in the natural inquiry and exploration of young children, as well as intentionally designed activities which build scientific and mathematical concepts, and the effective use of available technologies. Positive interactions early in life, in an environment intentionally designed to provide STEM experiences where children explore; ask questions; brainstorm, plan, and test solutions; and receive support from educators will help to lay this foundation. Early learning STEM experiences are based on the Pennsylvania Learning Standards for Early Childhood for infants and toddlers and prekindergarten. The Science, Technology & Engineering, and Environmental Literacy & Sustainability (STEELS) Standards are used for kindergarten through grade 2. STEM subjects are supported within these standards and are noted by the symbol,  throughout the supportive practices. Science, Technology, Engineering, and Math are not separate subjects broken down into their own time slots. These topics of study are incorporated and encouraged within all activities throughout the day. In addition, laying this early foundation will help to bridge the educational gap between birth to age 5 and K-12 educational programs.

### **Interventions**

#### • *Early childhood special education*

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying learning experience alongside their typically developing peers. Professionals may need to adapt or modify the classroom environment, interactions, and/or materials and equipment to help children with disabilities fully participate.

Pennsylvania's Learning Standards for Early Childhood are designed to be used for all children. The content within these standards provides the breadth of information from which to create goals and experiences for all children that will help them reach their highest potential while capturing their interests and building on what they already know. Professionals must emphasize and celebrate all children's accomplishments and focus on what all children can do.

#### • *English Language Learners/Dual Language Learners*

Children develop language much the same way they acquire other skills. Children learn native and second languages using an individual style and rate. Differences among English Language Learners/Dual Language Learners such as mixing languages or a silent period are natural. Each child's progress in learning English needs to be respected and viewed as acceptable and part of the ongoing process of learning any new skill. Children can demonstrate proficiency in most of the standards using their native language. Use of home language in the classroom environment, and in simple phrases, validates a child's place in the classroom, encouraging the child to see him/herself as

a learner. Working alongside English-speaking adults and peers in authentic learning experiences which respect home language is an effective means of learning English. Similar to all young children, English Language Learners/Dual Language Learners benefit from use of visuals, props, and realia (objects from real life used in classroom instruction to improve children's understanding of other cultures and real life situations). The skills needed for young English Language Learners/Dual Language Learners to become proficient in English are fully embedded in the Pennsylvania Learning Standards for Early Childhood.

## 5. Materials and resources

Every early-learning setting, whether it is in a home atmosphere or center-based classroom, must be a comfortable, safe, and nurturing environment where children can learn through their play. Children discover and understand science, social studies, and math information when they actively explore materials and ideas that are guided by professionals who intentionally design activities that engage children in critical thinking and processing. Children also learn about their own abilities and learning styles, how to get along with others, and how to appreciate others' contributions in classrooms that include a diverse set of materials and experiences.

School environments should be linked to a child's home environment, incorporating cultural and ethnic materials and children's home language, and provide experiences that are inclusive for all children, regardless of ability, socio-economic status, or family background. Well-designed environments demonstrate a commitment to the whole child by offering materials and activities that promote social, physical, cognitive, and language learning. Resources provided within the Standards Aligned System (SAS) portal include Pennsylvania educator-created lesson plans, instructional strategies, digital media resources, and other valuable information.

## 6. Safe and supportive schools

The safe and supportive schools element found on the Standards Aligned System portal showcases resources and exemplars that promote active child engagement in a safe and positive learning environment. The three areas of focus within safe and supportive schools are:

**Engagement**—Program engagement is essential for child success and building a positive program climate. Engagement within a program is a process of events and opportunities that lead to children gaining the skills and confidence needed to cope and feel safe within their environment. These events and opportunities include relationships, respect for cultural diversity, and family participation. Relationships are the connection between two or more people or groups and their involvement with and behavior toward one another. Respect for diversity shows an understanding, appreciation, and response to differences in individuals or groups. Family participation includes the active involvement within classroom and school events.

**Safety**—Program safety refers to the security of the setting and program-related activities as perceived and experienced by all stakeholders, including families, caregivers, children, school staff, and the community. Program safety encompasses both emotional and physical safety, and is influenced by positive and negative behaviors of children and staff. Emotional safety focuses on the feeling of connection, comfort, and acceptance within a secure setting. Physical safety ensures children are free from danger or threatening circumstances.

**Environment**—Program environment refers to the extent to which program settings promote child safety and health. Environment is inclusive of all aspects of a program—academic components, its physical and mental health supports and services, and its physical building and location within a community. The physical environment looks at the external surrounding and physical conditions within a program. Classroom assessment instruments that help providers assess the arrangement of indoor space, the provision of materials and activities, and their development of class schedules are useful in a sharing best practice implementation and alignment to Pennsylvania's Learning Standards for Early Childhood. The academic environment is the climate set within a program that values and promotes learning and self-fulfillment. Wellness within a program supports good physical and mental health, including the promotion of a proper diet, exercise, and healthy habits.

## EARLY CHILDHOOD CONNECTIONS

High quality early care and education programs also promote connections that assure children's school success. Programs that build relationships with children and families and coordinate their work with other early-learning programs and school districts create strong partnerships for success.

### 1. Connections to children

Relationships are the key to successful connections between the adult and the child. Professionals must take time to know every child, to understand the way in which each child learns best, and to identify the special talents and skills each child possesses. Adults who work with young children must be students themselves. They must learn about children's home experiences and culture so they can design learning environments that support the home-school connection and expand prior learning into new knowledge.

### 2. Connections to families

Families of young children have much to offer in the learning process. When a partnership is formed between professional and family, the connection has been strengthened, assuring that children receive consistent messages about learning and skill development. Families should be given opportunities to learn about their children's day at school, to provide input into the information they want their children to learn and master, and to understand what they can do at home to enhance the learning experience. To assure effective family engagement strategies, professionals can reference the Partnerships for Learning Standards.

At-home resources for families such as *Kindergarten, Here I Come*; *Kindergarten, Here I Am*; *Learning Is Everywhere*; *Building Blocks for Babies*; *Every Day I Learn through Play*; and *Recipes for Readiness* provide professionals and families tools to share age-appropriate expectations and to connect learning experiences.

Family ethnicity and culture must be interwoven into the life of an early childhood program and classroom. Professionals must embrace all children's heritages and provide activities, materials, and experiences that help children become aware of and appreciate their own culture while learning about and appreciating the similarities and differences of others. Families can provide authentic cultural experiences and resources that support cultural awareness and appreciation. Such opportunities foster family and school relations and partnerships. Communications with families should be made in the home

language. Professionals in high quality, early education programs know and understand their own attitudes and biases and are culturally sensitive and supportive of diversity.

### 3. Connections with other early-learning programs

Children and families often have other needs and priorities in addition to participation in high quality early care and education programs. Families may need to coordinate their early care and education program services with health services or early intervention services, as well as with their other children's school experiences. Programs within a community that support families' single point of contact or help to coordinate services for children demonstrate a strong understanding and respect for families. Providers that reach out to neighborhood schools to facilitate transition into the public school or who have developed a working relationship with their intervention provider assure

linkages that support children's school readiness and ongoing success. To assure effective family engagement strategies, professionals can reference the Partnerships for Learning Standards.

### 4. Connections for learning

Young children make learning connections through authentic hands-on experiences. Professionals that allow children time to explore and discover both inside and outside, optimize children's capacity to internalize and generalize content by making their own connections to prior knowledge. All children, regardless of age and ability, need opportunities to engage in practice activities and experiences that are steeped in play. Adults should design learning experiences with connections among multiple domains. Integrated learning experiences support both content and social and cultural learning.

## THE LEARNING STANDARDS CONTINUUM

**W**ithin all Pennsylvania's Learning Standards for Early Childhood, the Key Learning Areas define the domains or areas of children's learning that assure a holistic approach to instruction. All children, regardless of age and ability, should be exposed to experiences that build their skill development in approaches to learning, social and emotional development, language and literacy development, health wellness and physical development, creative expression, and the cognitive areas of mathematics, science, and social studies. The Standards within each Key Learning Area provide the information that children should know and the skills children should be able to do when they leave the age level or grade.

Pennsylvania's Learning Standards for Early Childhood are connected through a continuum of learning and link to the 3rd grade academic standards. Some skills will not emerge in a noticeable way until a child is older. These standards will be intentionally blank or identified as emerging.

Professionals who view children's skill development across ages and grades will be able to understand the sequential way children learn and become familiar with the way in which teachers at higher grade levels support learning.

## AGE GROUPING IN PENNSYLVANIA'S LEARNING STANDARDS FOR EARLY CHILDHOOD

### Learning Standards for Infant-Toddler

The Infant-Toddler Standards are divided into three age levels: infant (birth through 12 months), young toddler (9 months–27 months), and older toddler (24 months through 36 months). These age divisions are arbitrary as a means for organizing the content; very young children's development is uneven and may span two or all three of the age levels in different Key Areas of Learning. This is reflected by the overlap of the age 9 months–27 months in younger toddlers.

The Standards in each Key Area of Learning are displayed on an Infant-Toddler continuum with the content within one strand presented together. Practitioners can look down each level to determine the skills that best match their children's current development, identifying additional concepts and competencies, and supportive practices to scaffold

children's learning.

When strands include "emerging" these concepts are beginning to emerge but are not expected to be mastered. For example, infants and young toddlers may be exploring mathematical estimation as they interact with materials, but intentional instruction would not be appropriate for that age. Adults should continue to introduce these concepts whenever appropriate for the individual child without expectation of mastery.

### Learning Standards for Pre-Kindergarten

Professionals will find the skills that pre-kindergarteners (ages three to five) are practicing and mastering within the pre-kindergarten standards. Younger preschoolers will be learning the content, while older children will be mastering the skills and showing proficiency. Classroom environments, materials, and activities that are developed for this age will be appropriate for both three- and four-year-olds; expectations for mastery will be different.

### Learning Standards for Kindergarten

Students who complete kindergarten should demonstrate mastery of the skills within the kindergarten standards. This document is designed for full-day kindergarten classrooms. Half-day kindergarten teachers will need to modify the amount of content that is introduced to children during the kindergarten year, but the cognitive processing that children must develop and the holistic instruction will remain constant regardless of the length of the kindergarten day.

It is critical that kindergarten instruction occurs through an active learning approach where teachers use differentiated instructional strategies and focus on learning centers and play as key elements of the daily schedule. Child-initiated investigation should be predominant with supportive direct instruction in content areas infused throughout the day. Kindergarten children should be given opportunities to develop social and emotional skills, physical skills, and their creative expression within the course of a kindergarten day.

# GUIDING PRINCIPLES

**H**igh-quality early care and education programs offer learning opportunities that have a significant impact on the success of all children. A warm, responsive relationship with a highly-trained teaching staff is foundational. It is expected that teachers will intentionally integrate developmental knowledge with the attitudes,

skills, and concepts children need to make progress socially and academically. High-quality early care and education programs maintain high developmentally achievable expectations for all children using clear performance standards with a continuous cycle of assessment understood and used by staff, children, and families.



High-quality early care and education programs have a significant impact on children's future successes.



Children's learning development and opportunities are supported when their teachers are trained in early childhood development and education, including professional training and ongoing professional development, and are intentional in their relationships and work with children and families.



All children can learn and deserve high expectations that are age-, individually-, and culturally-appropriate.



Early care and education programs must address the individual needs of a diverse population of children, e.g., children with special needs, children from diverse cultural backgrounds, children from all socio-economic groups.



Young children learn best when they are able to construct knowledge through meaningful play, active exploration of the environment, and thoughtfully planned activities.



Early care and education programs are defined by a set of comprehensive standards that maximize a child's growth and development across cognitive and non-cognitive domains.



The learning environment for young children should stimulate and engage their curiosity of the world around them and meet their physical and emotional needs so that they feel safe and secure.



There must be a system of research-based assessments that documents children's growth and development in relationship to a defined set of standards and is used to inform instruction.



Language and early literacy development must be supported and integrated throughout all aspects of early care and education programs.



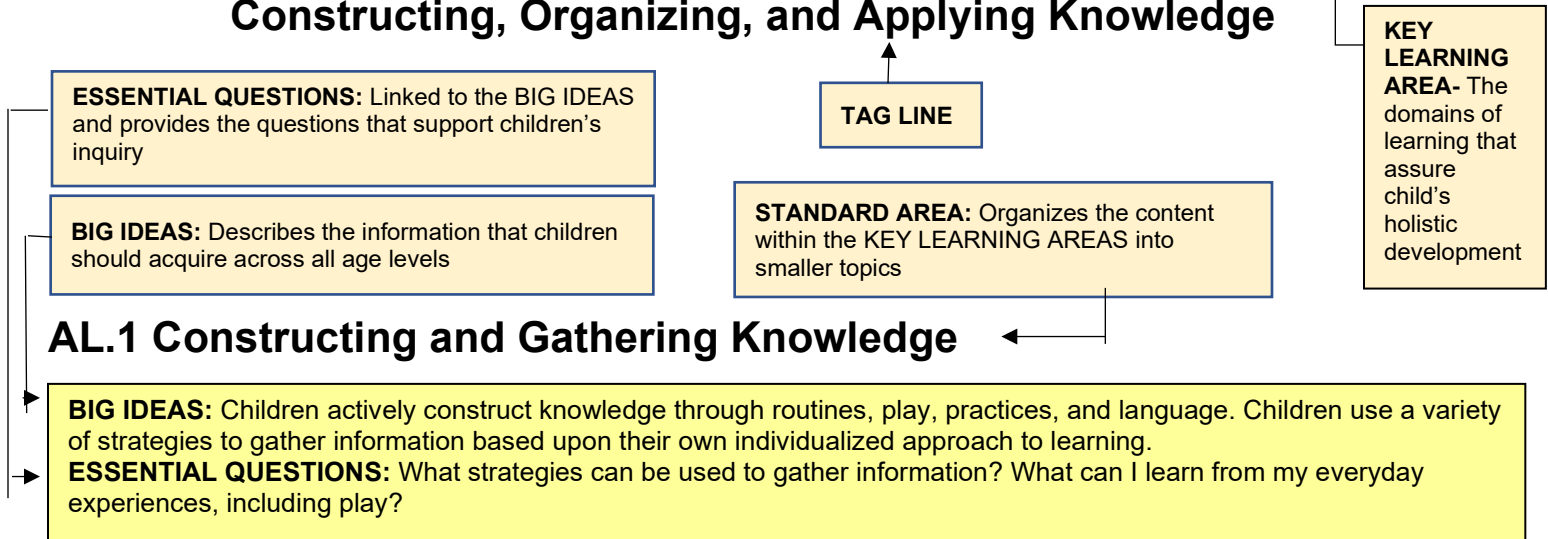
Children's learning is enhanced when families, schools, and communities work together.



# THE LEARNING STANDARDS FOR EARLY CHILDHOOD FORMAT

(Approaches to Learning Through Play, Social and Emotional Development, Language and Literacy Development, Social Studies Thinking, Creative Thinking and Expression, Health, Wellness, and Physical Development)

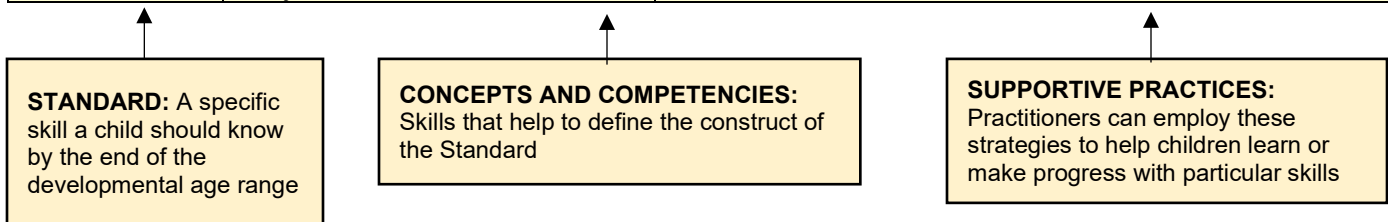
## Approaches to Learning Through Play Constructing, Organizing, and Applying Knowledge



### A. CURIOSITY AND INITIATIVE **STRAND**

*Infant (Young Toddler Standard and Older Toddler Standard follow after Infant)*

Standard	Concepts and Competencies	Supporting Practices
<b>Standard AL.1.PK.A</b> <b>Explore and ask questions to seek meaningful information about a growing range of topics, ideas, and tasks.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Utilize senses to explore and learn from the environment.</li> <li>Show interest and interact with others about their work or actions.</li> <li>Demonstrate interest in new materials and experiences that are introduced into the classroom.</li> <li>Ask questions to understand something (e.g., "How does that work?").</li> <li>Watch others play and ask to join in.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide opportunities for children to explore their natural and human-made environment.</li> <li>Talk about and describe objects in the environment with children. (e.g., trees, bark, leaves, flowers, petal, stem, mailbox, birdfeeder).</li> <li>Put objects around the room to capture children's interest.</li> <li>Intentionally use music or other sensory activities.</li> <li>Engage children in routines by describing what is being done.</li> <li>Show children how objects work.</li> <li>Provide safe areas where infants can explore.</li> </ul>



# THE LEARNING STANDARDS FOR EARLY CHILDHOOD FORMAT

## Scientific Thinking and Expression

New academic standards for Science, Technology & Engineering, Environmental Literacy & Sustainability were adopted by the State Board of Education in January 2022. Due to the need to align with the newly adopted science standards, the formatting in this key learning domain will look slightly different than the other domains.

There is a new classification called the core ideas. The core ideas all have broad importance within or across science or engineering disciplines, provide a key tool for understanding or investigating complex ideas and solving problems, relate to societal or personal concerns, and can be taught over multiple grade levels at progressive levels of depth and complexity.

This is an example of the new formatting found in the Infant Toddler Learning Standards for Early Childhood.

Note: the standard is found above the Core Ideas, Concepts and Competencies, and Supportive Practices.

### **3.2 PK.A: Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.**

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Different kinds of matter exist, and matter can be described and classified by its observable properties.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Recognize the different types of matter (e.g., solid, liquid, gas).</li> <li>Describe objects according to size, shape, color, or properties of matter.</li> <li>Collect items and sort them according to shape, color, or other attributes.</li> <li>Recognize that matter takes on different shapes depending upon its type (e.g., solids have a definite shape, liquids take the shape of their container, gas lacks shape and is present everywhere).</li> <li>Ask questions about objects.</li> <li>Use the five senses and simple equipment to gather data.</li> <li>Make a prediction about the results of the experiment.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Encourage children to collect, sort, classify, and describe many materials.</li> <li>Provide opportunities to sort by size, color, shape, and texture.</li> <li>Explicitly use science vocabulary (e.g., solid, liquid, texture).</li> <li>Provide children with various solid objects (e.g., books, boxes, pencils, and pebbles) and have them determine the shape of the object.</li> <li>Provide children with glasses of water. Give them a square bowl, a circular bowl, and a cup. Let them pour the water from the glass to each container. Instruct them to pour the water onto the table or a tile floor. Have them determine the shape of the water and how it changes depending on the container.</li> <li>Provide children with baggies. Let them inflate the baggies. Tie them tightly. Now puncture the baggie. Let them feel the air that comes out through the small hole.</li> <li>Conduct experiments that use solids, liquids, and gas (e.g., melting an ice cube and re-freezing it, adding powdered drink mix to water).</li> <li>Ask for predictions about what might happen when one substance is combined with another.</li> <li>Encourage documentation of observations in journals with words and/or pictures.</li> <li>Encourage collaboration and discussion among peers about their questions and observations.</li> <li>Provide various types of matter to explore in science area or sensory table.</li> </ul>

# FOUNDATIONAL SKILLS FOR LEARNING: APPROACHES TO LEARNING THROUGH PLAY, SOCIAL EMOTIONAL DEVELOPMENT

The Approaches to Learning Through Play and Social Emotional Development standards are included first in our standards because these are foundational skills. These standards provide children with skills needed for school, life, and career success. These skills should be taught to children throughout the day.



# Approaches to Learning through Play

## Constructing, Organizing, and Applying Knowledge

### AL.1 Constructing and Gathering Knowledge

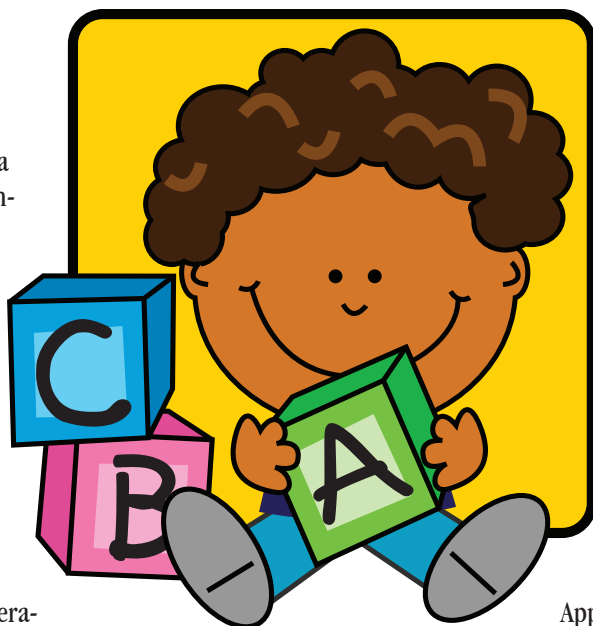
### AL.2 Organizing and Understanding Information

### AL.3 Applying Knowledge

### AL.4 Learning through Experience

**A**pproaches to Learning through Play Standards describe the essential life skills that enable a child to grow, learn, develop, and become a successful member of his/her community. The use and development of these skills begin at birth and continue across the human life span. Approaches to Learning through Play Standards addresses how a child gathers and constructs knowledge, organizes and understands information, applies that knowledge, and transfers the self-constructed learning beyond the immediate moment. The child must develop these imperative capacities to understand and use the content of literacy, mathematics, science, and social studies, as well as necessary emotional well-being and lifelong success. It is essential to provide children with optimal learning opportunities that feature the development of these skills as the key component of 21st century classrooms across our state.

**F**rom the moment of birth, healthy children are in a continuous state of exploring, discovering, and constructing meaningful relationships with the world around them. These innate qualities support children as they venture out to connect with and understand the world in which they live. When children are encouraged to follow their innate inquisitiveness, they develop processes that enable them to succeed in answering important self-constructed “how” or “I wonder” questions. While children follow their own self-directed leads, they may be unsure of the outcome but are willing to take that risk to find out what will happen next. This outlook provides children with great pleasure as they interact successfully to understand their world; therefore, they desire to return to this preferred state of mind again and again. Children enjoy learning that includes active self-direction, positive anticipation, risk-



taking, pleasure, knowledge construction, absorption in the moment, and the desire to return to this state of mind, which is what we call play. Therefore, play is a powerful learning tool that enables the child to grow and develop a lifelong love of learning. Play is the child’s natural state of mind and therefore influences all of the child’s domains of development including physical, cognitive, language, social, aesthetic, and emotional. And equally as important, play as a focused state of mind provides the child with a context and positive attitude in which to develop their

Approaches to Learning skills, which are shown to lead to lifelong success.

## Play, Play, and Play Some More!



**T**he best way to support children’s learning in the early years is to provide hands-on, active learning experiences that include play activities. Play enables children to weave together past knowledge and new information to acquire new understanding and skill development. A child who discovers the characteristics of apples through manipulating, investigating, and exploring them understands the depth of apples better than a child who colors a worksheet picture of an apple. Children can cooperate in the block area to determine how many blocks can be added to a structure before it falls. This type of play enhances children’s social and creative thinking sequences. Play sequences and activities expand across all Key Areas of Learning and can build social, cognitive, and physical skill development when they are intentionally planned and facilitated by teachers who interact with children, asking open-ended questions to scaffold children’s thinking and problem-solving.

## AL.1 Constructing and Gathering Knowledge

**BIG IDEA:** Children actively construct knowledge through routines, play, practices, and language. Children use a variety of strategies to gather information based on their own individualized approach to learning.

**ESSENTIAL QUESTIONS:** What strategies can be used to gather information? What can I learn from my everyday experiences, including play?

### A. CURIOSITY AND INITIATIVE

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.1 PK.A</b>  <b>Explore and ask questions to seek meaningful information about a growing range of topics, ideas, and tasks.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Use senses to explore and learn from the environment.</li> <li>• Show interest and interact with others about their work or actions.</li> <li>• Demonstrate interest in new materials and experiences that are introduced into the classroom.</li> <li>• Ask questions to understand something (e.g., “How does that work?”).</li> <li>• Watch others play and ask to join in.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Stimulate children’s curiosity through use of “provocation” strategies when introducing new topics or ideas (e.g., ask children to guess what might be inside a box or bag, place new materials in sensory table and encourage exploration, ask “I wonder” questions).</li> <li>•  Provide real objects that can be manipulated or explored to understand a concept.</li> <li>•  Respond to children’s questions with explanations that help them to understand.</li> <li>• Encourage children to research answers to questions through books and other media.</li> <li>• Regularly rotate classroom materials and formally introduce new objects and activities into the classroom by showing excitement (e.g., “Look what I brought for us to do today!”).</li> </ul>

### B. RISK-TAKING

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.1 PK.B</b>  <b>Demonstrate a willingness to participate in new and challenging experiences.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Actively explore new materials that are introduced into the classroom.</li> <li>• Observe peers engaged in an unfamiliar or new activity before joining in.</li> <li>• Listen attentively to learn proper technique for a new skill, and then follow through using the learned technique.</li> <li>• State discomfort at trying something new, but make attempts to try after encouragement.</li> <li>• Differentiate between appropriate and inappropriate methods for learning information (e.g., understand that jumping from a high wall is a dangerous way to discover its height).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Introduce materials into the classroom by pairing new items with familiar things.</li> <li>• Make explicit requests for listening at important teachable moments (e.g., “Turn on your listening ears now.”).</li> <li>• Allow children time to warm up to new ideas or activities without expecting them to fully participate.</li> <li>• Introduce new materials and activities by explaining what they are and providing instructions on their use.</li> <li>• Describe appropriate strategies for children’s participation or exploration of materials that may be challenging.</li> <li>• Demonstrate enthusiasm when introducing new materials.</li> <li>• Engage children in “what if” scenarios to discuss potentially dangerous or inappropriate responses and situations.</li> </ul>

C. STAGES OF PLAY




Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.1 PK.C</b> Engage in complex play sequences with two or more children.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Use materials and objects to represent other objects.</li> <li>• Initiate cooperative play with peers by establishing roles and a simple play scenario (e.g., act out a doctor’s office scenario, assigning a doctor and patients).</li> <li>• Extend play scenarios over more than one day.</li> <li>• Incorporate personal experiences and themes learned into play scenarios.</li> <li>• Engage in simple games with rules with adult reminders and support.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Understand the stages of play (solitary, parallel, associative, and cooperative).</li> <li>• Use “I wonder” statements to encourage children to extend their pretend play (e.g., “I wonder how we could pretend to ride on a train.”).</li> <li>• Rotate props and materials in the dramatic play area to encourage children to engage in play scenarios with others.</li> <li>• Join in pretend play scenarios with children and support children’s positive interactions with peers.</li> <li>• When appropriate allow structures or scenario props to stay in location for several days without clean-up.</li> <li>• Observe and explicitly point out when children are referencing prior knowledge in their play scenarios.</li> <li>• Observe play scenarios for use of new vocabulary, knowledge, and/or for misconceptions/interests that can be addressed through instruction.</li> <li>• Engage children in simple game play with their peers.</li> <li>• Provide support for positive social interactions when needed.</li> <li>• Use children’s cooperative play to model and teach key social skills.</li> </ul>

**AL.2 Organizing and Understanding Information**

**BIG IDEA:** Strategies for filtering and organizing information are important to the learning process.

**ESSENTIAL QUESTIONS:** How do I decide what information/task to attend to? What strategies do I use to organize information?

A. ENGAGEMENT AND ATTENTION

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.2 PK.A</b> Work toward completing a task, even if challenging, and despite interruptions.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• State when they are being distracted.</li> <li>• State when they are frustrated by a challenge.</li> <li>• Move away from distractions to complete a task.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Save children’s work for later completion if transition to a new activity is necessary.</li> <li>•  Show flexibility during transitions to allow children who are working on a project time to complete it.</li> <li>•  Encourage children to complete tasks that are challenging.</li> <li>• Help children learn to identify when they become distracted (e.g., “I see you didn’t finish your drawing. What distracted you?”).</li> <li>• Allow ample time for children to complete tasks and activities in which they are engaged.</li> <li>• Minimize interruptions and disruptions for children who are concentrating on a specific task or activity.</li> <li>• Redirect children back to the task at hand when they become distracted.</li> <li>• Explicitly teach children simple strategies for staying engaged (e.g., move away from a noise, tell self to finish first then move).</li> </ul>

**B. TASK ANALYSIS**

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.2 PK.B</b> Independently break simple tasks into steps and complete them one at a time.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Attend and follow through on two-step directions.</li> <li>Explain a routine sequence.</li> <li>Relate the steps necessary to complete a task or activity.</li> <li>Relate the desired outcome or end goal of a task or activity.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Explicitly provide the desired outcome or end goal of an assigned task or activity.</li> <li>Model goal-setting and breaking tasks into steps using explicit vocabulary (e.g., first, next, last).</li> <li>Use clear and concise directions for the completion of tasks visually and/or verbally.</li> <li>Encourage children to relate the sequence, steps, and desired outcomes of self-initiated tasks and activities.</li> <li>Review steps of a task with children prior to asking them to complete the task and provide reminders throughout the process.</li> </ul>

**C. PERSISTENCE**

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.2 PK.C</b> Attempt to accomplish challenging tasks by employing familiar and new strategies as needed.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Attempt to complete a task in more than one way (e.g., using materials in new ways, trial and error, breaking tasks into steps) before asking for help or stopping due to frustration.</li> <li>Stick to a task after stating frustration.</li> <li>Show pride in completion of a challenging task.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Encourage children to develop alternative solutions to accomplish a task.</li> <li>Explicitly discuss and present/model a variety of strategies that can be used to follow through on a challenging task. (e.g., using materials in new ways, trial and error, breaking tasks into steps, asking for help from a competent peer or adult, self-talk)</li> <li>Offer specific feedback on children’s efforts to work through challenging tasks (e.g., “I noticed you were frustrated but you kept trying anyway.”).</li> </ul>

**D. PATTERNING**

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.2 PK.D</b> Recognize and extend simple patterns.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Identify patterns in the environment (e.g., stripes on a flag).</li> <li>Clap out rhythmic patterns.</li> <li>Practice extending simple repeating patterns using manipulatives.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide a variety of manipulatives and encourage their use for creating and re-creating patterns.</li> <li>Model creating simple patterns.</li> <li>Draw children’s attention to various patterns in the environment (e.g., “I see a pattern on your shirt—blue stripe, red stripe, blue stripe.”).</li> <li>Engage children to find patterns in the environment.</li> <li>Discuss patterns (e.g., “Why do you think that is a pattern?” “What is missing from this pattern?”).</li> </ul>



**E. MEMORY**

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.2 PK.E</b>  <b>Retain and recall information presented over a short period of time.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Relate information and/or experiences from the past.</li> <li>• Remember and update simple information (e.g., one’s place in a story, song, or game if interrupted).</li> <li>• Engage in memory games.</li> <li>• Recall details from stories, events, and experiences.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Encourage children to talk about past experiences and events.</li> <li>•  Ask questions which challenge children to recall the details of experiences they are relating.</li> <li>•  Maintain documentation of past events through pictures, photos, videos, and quotes from children. Post and explore this documentation with the children over time.</li> <li>• Provide opportunities to engage in age-appropriate memory games (e.g., 2–3 step clap/dance pattern and ask children to repeat it in reverse order, going around the circle and each child repeats what others have said and adds to).</li> <li>• Encourage families to make and share memory books highlighting children’s past experiences.</li> <li>• Teach children specific strategies for remembering information (e.g., singing a song, making a picture in your mind, repeating silently).</li> </ul>

**AL.3 Applying Knowledge**

**BIG IDEA:** Prior knowledge and experiences can be used to express and create new understandings.

**ESSENTIAL QUESTIONS:** How do I use what I already know to understand new things? How do I represent new understandings?

**A. CREATIVITY**


Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.3 PK.A</b>  <b>Use music, art, and/or stories to express ideas, thoughts, and feelings.</b></p>	<p><i>Reference 9.1.M PK.E; 9.1.D PK.E; 9.1.V PK.E; 1.4 PK.M; 1.5 PK.E</i></p>	<p><i>Reference 9.1.M PK.E; 9.1.D PK.E; 9.1.V PK.E; 1.4 PK.M; 1.5 PK.E</i></p>

**B. INVENTION**

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.3 PK.B</b>  <b>Produce and explain the purpose for a new creation.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Engage in a variety of creative activities.</li> <li>• Describe or draw a desired product (e.g., create a blueprint for a block structure).</li> <li>• Answer questions to explain the purpose of a creation.</li> <li>• Show pride in a creation.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Encourage children to pre-plan their creative efforts.</li> <li>•  Provide opportunities for children to present and describe their creations.</li> <li>•  Ask questions about children’s creations (e.g., “How did you make that?” “What is that used for?”).</li> <li>• Provide opportunities for children to engage in creative activities.</li> <li>• Offer specific feedback on children’s creative efforts.</li> </ul>



**C. REPRESENTATION**

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.3 PK.C</b>                      Use materials and objects to represent new concepts.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Use non-conforming objects to create representations of real life objects or activities (e.g., block for a phone, stick for a spoon).</li> <li>• Use real life objects to represent make-believe or fantasy objects (e.g., spoon for a magic wand, broom for a flying horse).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Provide opportunities for children to use materials in non-conforming ways.</li> <li>• Encourage children to describe their actions during play scenarios.</li> <li>• Use “I wonder” statements to encourage children’s creativity with use of objects.</li> </ul>

**AL.4 Learning through Experience**

**BIG IDEA:** Experiences provide the context in which learning is constructed.

**ESSENTIAL QUESTIONS:** In what ways does an experience in one setting influence my learning and experiences in another setting? How do I learn from my mistakes and/or from challenging situations?

**A. MAKING CONNECTIONS**

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.4 PK.A</b>                      Relate knowledge learned from one experience to a similar experience in a new setting.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Relate personal (e.g., home, cultural, community) experiences during play, and other school activities.</li> <li>• Understand that appropriate activities and events may differ from home to school.</li> <li>• Share new skills or tasks learned or practiced outside of school setting (e.g., “Mommy taught me how to tie my shoe,” demonstrate a forward roll that was learned in a weekend gymnastics class).</li> <li>• Practice skills learned in whole group demonstration or role-play during center exploration.</li> <li>• Apply a skill to multiple tasks (e.g., use measuring cups in sensory table, outside, and in cooking activity).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Encourage families to continue school activities at home.</li> <li>• Provide families daily updates about activities that are occurring in school (e.g., daily message boards, newsletters, classroom web sites, journals).</li> <li>• Talk with families about what children are working on at home and incorporate those goals in the school day.</li> <li>• Ask children to describe extra-curricular activities they participate in and show what they are learning.</li> <li>• Provide “take home” activity kits that can travel back and forth between school and home.</li> <li>• Acknowledge and value differences in class and home structure.</li> <li>• Provide materials in centers that encourage practice of skills demonstrated during whole group meeting time.</li> <li>• Observe children during center time and document their skill practice.</li> </ul>

**B. RESILIENCY**

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.4 PK.B</b>                      Recognize that everyone makes mistakes and that using positive coping skills can result in learning from the experience.</p>	<p><i>Reference 16.1 PK.C</i></p>	<p><i>Reference 16.1 PK.C</i></p>

C. PROBLEM-SOLVING

Standard	Concepts and Competencies	Supportive Practices
<p><b>AL.4 PK.C</b>  <b>Attempt problem-solving activities to achieve a positive outcome.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Try new ways to complete a familiar task.</li> <li>• Attempt to complete a task in more than one way (e.g., using materials in new ways, trial and error, breaking tasks into steps) before asking for help or stopping due to frustration.</li> <li>• Ask questions to clarify problems.</li> <li>• Discuss the different ways used to accomplish a task or to solve a problem.</li> <li>• Recall and use a previously successful strategy.</li> <li>• Change plan if a better strategy presents itself.</li> <li>• Observe mistakes and note the effectiveness of a different solution (e.g., “That didn’t work because . . .”).</li> <li>• Demonstrate increasing flexibility in a variety of situations, task, and activities.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Explicitly discuss and present/model a variety of strategies that can be used to solve problems (e.g., using materials in new ways, trial and error, breaking tasks into steps, asking for help from a competent peer or adult).</li> <li>• Create and provide opportunities for learners to engage in problem solving activities (e.g., role-play).</li> <li>• Encourage children to use available materials to solve problems (e.g., “I wonder what we can use to make our building sturdier?”).</li> <li>• Engage learners in interactions that use known strategies in new situations.</li> <li>• Display a variety of materials and ask learners to complete a task, allowing them to choose the material that best suits the activity.</li> <li>• Ask open-ended questions that require thought and creative thinking (e.g., “How can we move this heavy box onto the floor?”).</li> <li>• Observe how learners solve problems in the classroom and offer assistance when needed.</li> <li>• Offer specific feedback on children’s efforts to problem-solve.</li> <li>• Describe the pros and cons of strategies used by children to solve a problem.</li> <li>• Ask questions to identify whether or not a solution is working well.</li> <li>• Allow children to practice solving a problem in multiple ways to support flexible thinking (e.g., “We can sort the beads by color or we can sort them by shape.” “Let’s try it another way.”).</li> </ul>



# Approaches to Learning through Play Glossary

**Associative Play**—A form of play in which a group of children participate in similar and identical activities without formal organization, group direction, group interaction, or a definite goal; children may imitate others in a group but each child acts independently.

**Attention**—An ability to focus; take all stimuli in environment and focus on one thing.

**Competence**—The ability to perform a task, action, or function successfully.

**Cooperative Play**—Any organized recreation among a group of children in which activities are planned for the purpose of achieving some goal.

**Culture**—The way of life of a particular social, ethnic, or age group of people which includes beliefs, arts, customs, and behaviors.

**Curiosity**—A desire to learn or know about something; inquisitiveness.

**Engagement**—Ability to express oneself physically, cognitively, and emotionally during an activity; to feel a connection or a strong bond to work.

**Extrinsic Motivation**—Motivation that comes from factors outside an individual.

**Initiative**—A readiness and ability to be eager to lead an action.

**Intrinsic Motivation**—Motivation that comes from inside an individual rather than from any external or outside rewards.

**Invention**—An act of devising, creating, or producing using imagination (art, music).

**Memory**—The mental capacity or faculty of retaining and reviving facts, events, impressions, etc., or of recalling or recognizing previous experiences.

**Parallel Play**—A developmental stage of social development; an activity in which children play with toys like those the children around them are using, but child is absorbed in his/her own activity; usually play beside rather than with one another.

**Pattern**—A set or sequence of shapes or numbers that are repeated in a predictable manner.

**Persistence**—The steady continuance of an action in spite of obstacles or difficulties.

**Play**—A self-selected activity that may or may not have a specific purpose.

**Pretend Play**—Using an object to represent something else while giving it action and motion; actively experimenting with the social and emotional roles of life; can build skills in many developmental areas.

**Proximity**—The state, quality, sense, or fact of being near or next to; closeness.

**Resilience**—The ability to cope with and bounce back from all types of challenges. A person thrives, matures, and increases competence by drawing on biological, psychological, and environmental resources.

**Task Analysis**—A process of breaking down complex behaviors into smaller, discrete, specific sub-behaviors to be performed in a certain order for maximum success.

**Temperament**—The combination of mental, physical, and emotional traits of a person; natural predisposition.



# Social and Emotional Development

## Student Interpersonal Skills

### 16.1 Self-Awareness and Self-Management

### 16.2 Establishing and Maintaining Relationships

### 16.3 Decision-Making and Responsible Behavior

#### Positive Behavior Techniques

All children benefit from safe, nurturing environments, clear and consistent routines, and effective caregivers who understand children's behavior as attempts to communicate needs. When children are taught skills to assist them in positive communication, coping, and interpersonal relationships, challenging behaviors can be prevented. For a smaller group of children more focused efforts can be applied to address specific behavioral needs. An even smaller population of children will need more intensive interventions in collaboration with trained professionals. This tiered-approach to addressing behavior contributes to a safe



and supportive environment in which all children are respected and valued.

All children need early childhood experiences that nurture emotional security, positive self-concept, and respect for

others. Children's social and emotional development are strengthened when they have experiences that promote a sense of identity and belonging within an accepting and responsive environment. Adults support children's self-identity and social competence by modeling respect for the children, using positive guidance techniques that support the development of self-control and interpersonal problem-solving, and by encouraging positive approaches to learning and interacting with others.

## 16.1 Self-Awareness and Self-Management

**BIG IDEA:** Understanding of self and ability to regulate behaviors and emotions are inextricably linked to learning and success.

**ESSENTIAL QUESTIONS:** How do I develop positive feelings about myself? How do I express and manage my emotions?

### A. MANAGES EMOTIONS AND BEHAVIORS

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.1 PK.A</b>  <b>Distinguish between emotions and identify socially accepted ways to express them.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Recognize and label basic feelings.</li> <li>Express feelings that are appropriate to the situation.</li> <li>Express feelings verbally or through play and artistic representation.</li> <li>Name a range of feelings (e.g., excited, scared, angry, surprised).</li> <li>Control negative responses by expressing them in appropriate ways (e.g., talking with a peer or telling a teacher).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Offer materials in dramatic play, blocks, and art that encourage children to creatively express emotions.</li> <li>Read books about feelings and talk about what the characters are feeling and the outcomes.</li> <li>Engage children in discussions about how they feel when they experience certain situations (both positive and negative).</li> <li>Model genuine, appropriate emotional responses.</li> <li>Use expressions (e.g., “I feel . . .” or “That must have made you feel . . .”) when interacting with children.</li> <li>Encourage open expression of feelings by asking children how they feel.</li> <li>Respond to children’s verbal and non-verbal cues.</li> <li>Use the Pyramid Model to support children’s social and emotional success.</li> <li>Model and explain an appropriate cool-down strategy (e.g., deep breathing, counting slowly to 5, give yourself a bear hug).</li> <li>Establish and state clear behavior expectations (e.g., “At school we do not throw things. If you feel angry you can visit the peace table and choose something to work on.”).</li> </ul>

### B. INFLUENCES OF PERSONAL TRAITS ON LIFE


Standard	Concepts and Competencies	Supportive Practices
<p><b>16.1 PK.B</b>  <b>Recognize that everyone has personal traits which guide behavior and choices.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Demonstrate awareness of self and one’s own preferences.</li> <li>Know and state independent thoughts and feelings.</li> <li>Show pride in own accomplishments.</li> <li>Demonstrate confidence in own abilities (e.g., “I can kick that ball really far.”).</li> <li>Choose materials and activities based on preferences and personal interests.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide children with opportunities to make decisions and choices.</li> <li>Ask children to share opinions about classroom activities and other experiences.</li> <li>Graph children’s likes and dislikes.</li> <li>Share enthusiasm and describe child’s abilities and preferences (e.g., “I see you enjoy building with blocks.”).</li> <li>Display children’s work at their eye level.</li> <li>Ask children about their decisions (e.g., “Why did you decide to play with Legos today?”).</li> </ul>



**C. RESILIENCY**

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.1 PK.C</b>                      Recognize that everyone makes mistakes and that using positive coping skills can result in learning from the experience.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Stay calm when something does not go the way intended.</li> <li>• Strive to correct mistakes.</li> <li>• Move forward with a second attempt at something after the first attempt was unsuccessful.</li> <li>• Ask for help with a task after an unsuccessful attempt.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Encourage children to talk about mistakes.</li> <li>• Encourage children to come up with solutions when mistakes occur (e.g., “What can you do to fix that?”).</li> <li>• Model resiliency by reflecting on own mistakes aloud.</li> <li>• Offer a quiet space in the classroom where children can calm themselves.</li> <li>• Foster a positive environment where children can make mistakes without embarrassment or ridicule.</li> <li>• Remind children of prior mistakes and consequences, while encouraging them to make different choices.</li> <li>• Understand that children struggling to identify basic feelings may not demonstrate resiliency until those basic emotion-related skills develop.</li> <li>• Notice children’s successes and acknowledge their efforts in difficult or frustrating times.</li> </ul>

**D. GOAL-SETTING**

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.1 PK.D</b>                      Establish goals independently and recognize their influence on choices.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Set and discuss goals for play and activities when asked.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Explicitly use words such as “goal,” “plans,” “achieve,” “met,” “change.”</li> <li>• Use “Plan-Do-Review” strategy to encourage planning and discussion about goals and follow-through.</li> <li>• Discuss children’s choices in terms of “goals” to be met.</li> <li>• Provide children with opportunities to make decisions and choices.</li> <li>• Ask children to share opinions about classroom activities and other experiences.</li> <li>• Graph children’s likes and dislikes.</li> <li>• Share enthusiasm and describe child’s abilities and preferences (e.g., “I see you enjoy building with blocks.”).</li> <li>• Display children’s work at their eye level.</li> <li>• Ask children about their decisions (e.g., “Why did you decide to play with blocks today?”).</li> <li>• Model goal-setting throughout the day and week (e.g., talk about classroom goals, acknowledge children’s progress toward set goals).</li> </ul>



## 16.2 Establishing and Maintaining Relationships

**BIG IDEAS:** Early adult-child relationships, based on attachment and trust, set the stage for life-long expectations that impact children’s ability to learn, respect adult authority, and express themselves. Positive peer interactions create collaborative learning opportunities. Relationships with others provide a means of support.

**ESSENTIAL QUESTION:** How do my relationships with adults and peers help me feel secure, supported, and successful?

### A. RELATIONSHIPS – TRUST AND ATTACHMENT

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.2 PK.A</b> Interact with peers and adults in a socially acceptable manner.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Engage in reciprocal conversation with familiar peers and adults.</li> <li>Respond to familiar adult’s questions and directions.</li> <li>Demonstrate appropriate affection for familiar adults and peers.</li> <li>Seek out companionship from another child.</li> <li>Use words denoting friendship.</li> <li>Ask a child to play (e.g., “Do you want to make a block house with me?”).</li> <li>Play cooperatively with a few peers for a sustained period of time.</li> <li>Respond with empathy to others who are upset.</li> <li>Share and take turns.</li> <li>Respect feelings and belongings of others.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Talk with children about ideas related to their work, play, and home life.</li> <li>Arrange the environment so that children can work together on activities.</li> <li>Provide duplicate materials so children can play together.</li> <li>Set timers to encourage toy or equipment sharing.</li> <li>Set aside large blocks of time for uninterrupted child-directed play.</li> <li>Engage in active instruction and modeling of social interactions (e.g., how to ask others to play, how to take turns, how to share).</li> <li>Actively structure social skills times (e.g., dramatic play, cooperative games).</li> <li>Provide opportunities for one-on-one conversations between children and adults.</li> <li>Describe others’ feelings during difficult situations (e.g., “Look at Molly’s face. She is sad. What could you do to help her feel better?”).</li> </ul>

### B. DIVERSITY

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.2 PK.B</b> Identify similarities and differences between self and others.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Understand that each person has a set of unique characteristics.</li> <li>Make drawings of people, including self-portraits, depicting body parts, clothing, and other physical characteristics.</li> <li>Label personal characteristics.</li> <li>Discuss the similarities and differences between self and others.</li> <li>Understand that family structures may differ from one family to another.</li> <li>Understand that the thoughts and feelings of others may differ from own.</li> <li>Demonstrate respect for children’s differences, including differences in thoughts and feelings.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide opportunities to discuss and compare personal traits among members of your class.</li> <li>Encourage family members to volunteer or share information, materials, and activities that reflect home cultures.</li> <li>Include multicultural materials, especially those relevant to the cultures of children in the class, throughout the classroom (e.g., skin-tone crayons, books, dolls, music, dress-up clothing and props, posters).</li> <li>Display pictures/posters and materials showing children/families of different races, cultures, ages, and abilities.</li> <li>Explicitly discuss points of difference in thoughts and feelings.</li> </ul>

**C. COMMUNICATION**

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.2 PK.C</b>  <b>Engage in reciprocal communication with adults and peers.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Communicate using detail related to topic being discussed including topics of personal interest, and special events.</li> <li>• Pose questions related to topic being discussed.</li> <li>• Respond to questions posed by adults and peers.</li> <li>• Allow wait time before responding.</li> <li>• Engage in turn-taking.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Explicitly restate comments made by children and encourage those responding to add further detail, or contribute further to the topic being discussed.</li> <li>• Pose questions to children to initiate conversation or to encourage them to continue with a conversation.</li> <li>• Talk to children about events that are going on in their lives.</li> <li>• Use meal times as an opportunity for one-on-one and small group conversation.</li> <li>• Model appropriate participation in discussions including polite interactions, one person speaking at a time, or asking questions.</li> <li>• Incorporate “Turn and Talk” throughout the daily routine (e.g., At lunch time, children turn and talk to a peer about what activity they liked best. Each takes a turn to talk and listen. During a read-aloud, children turn and talk to a peer about what they think might happen next in the story.).</li> <li>• Provide time to practice turn-taking skills.</li> <li>• Provide visual reminders to wait and listen during turn-taking activities.</li> </ul>


**D. MANAGING INTERPERSONAL CONFLICTS**

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.2 PK.D</b>  <b>Recognize that conflict occurs and distinguish between appropriate and inappropriate ways to resolve conflict.</b>  <i>*See also 5.2 PK.B</i></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Use appropriate words and actions to express one’s own desires.</li> <li>• Identify a problem and discuss possible solutions.</li> <li>• Solve simple conflicts with peers with independence (e.g., share, take turns, apologize, try something else, ask for help).</li> <li>• Begin to negotiate conflicts that arise using words before seeking help.</li> <li>• Use words during a conflict instead of physically responding.</li> <li>• Accept and attempt teacher’s or others’ ideas about new strategies to solve a conflict.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Use conflict as an opportunity to teach problem-solving skills (e.g., acknowledge that conflict is a normal part of life and there are positive ways to solve a conflict).</li> <li>• Be available to help children resolve conflicts rather than removing the child or toy.</li> <li>• Encourage children to find appropriate ways to resolve a conflict.</li> <li>• Set up an area in your room (e.g., peace table) that children can visit to solve conflicts.</li> <li>• Discuss with children possible strategies for resolving conflict.</li> <li>• Read stories involving conflict resolution.</li> <li>• Use puppets and dramatic play to discuss and demonstrate conflict resolution.</li> <li>• Model appropriate language that children can use in conflict situations (e.g., “I feel upset because ...”).</li> </ul>





**E. SUPPORT – ASKING FOR HELP**

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.2 PK.E</b>  <b>Ask for and accept offers of help when needed or appropriate.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Attempt tasks independently before asking for help.</li> <li>• Recognize when help is needed.</li> <li>• Recognize appropriate sources of help (e.g., familiar adult, community helpers, peers).</li> <li>• Ask for adult help to solve a problem or to complete a task.</li> <li>• Respond appropriately to offers of help (e.g., “That’s okay, I can do it.” or “Yes, thank you.”).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Explicitly use words such as “goal,” “plans,” “achieve,” “met,” “change.” Encourage children to try tasks independently before offering assistance.</li> <li>• Create an environment of trust by providing consistency and predictability in daily routines, activities, and staff.</li> <li>• Ask if a child wants help before solving a situation (e.g., “Can I help you with that zipper?”).</li> <li>• Assign a primary adult for each child when there are multiple adults in a classroom.</li> <li>• Discuss where children can go to for help when needed (e.g., familiar adult, community helpers, peers).</li> </ul>

**16.3 Decision-Making and Responsible Behavior**

**BIG IDEA:** Actions and behaviors either positively or negatively affect how I learn, and how I get along with others.  
**ESSENTIAL QUESTION:** How do I use healthy strategies to manage my behavior?

**A. DECISION-MAKING SKILLS**

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.3 PK.A</b>  <b>Interpret the consequences of choices.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Recognize unsafe situations and tell an adult.</li> <li>• Tell a peer when a rule is broken.</li> <li>• Warn a peer about a safety risk on the playground.</li> <li>• Encourage two friends who are having a dispute to “use their words and work it out.”</li> <li>• Discuss the reasons for having rules.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide opportunities for children to create rules and to discuss the reasons for having specific rules.</li> <li>• Provide reminders of rules and consequences when a child tests the rules.</li> <li>• Use natural consequences (e.g., falling due to running in the classroom) as opportunities to discuss consequences of behaviors.</li> </ul>

**B. UNDERSTANDING SOCIAL NORMS (Social Identity)**

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.3 PK.B</b>  <b>Recognize there are socially acceptable ways to behave in different places.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Make transitions between places and people with minimal distress.</li> <li>• Use inside voices while indoors and outside voices when outdoors.</li> <li>• Cooperate in both large and small group activities that are facilitated by adult.</li> <li>• Apply classroom rules to new situations.</li> <li>• Adjust to changes in routines and activities.</li> <li>• Follow rules and routines in classroom and other settings with reminders.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Discuss expectations of differing environments (e.g., library, restroom, cafeteria, classroom, outside).</li> <li>• Discuss expectations of a new or unfamiliar environment or situation (e.g., field trip, classroom visitor).</li> <li>• Model appropriate behavior.</li> <li>• Provide visual reminders of classroom rules and expectations (e.g., quiet voice, hands to self).</li> <li>• Provide consistent rules and expectations in classroom environment.</li> <li>• Encourage families to provide consistent rules and expectations in home environment.</li> </ul>

C. RESPONSIBLE ACTIVE ENGAGEMENT – EMPATHY

Standard	Concepts and Competencies	Supportive Practices
<p><b>16.3 PK.C</b>  <b>Actively engage in assisting others when appropriate.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Respond with empathy to others who are upset.</li> <li>• Recognize when someone needs help and offer assistance.</li> <li>• Respect another’s attempts to complete tasks independently.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Encourage peers to help one another rather than offering adult assistance, as appropriate.</li> <li>• Read and discuss books about empathy.</li> <li>• Identify and describe other people’s feelings, including use of non-verbal cues (e.g., book characters, peers as situations arise).</li> <li>• Provide specific feedback and praise on children’s efforts to help others.</li> </ul>

## Social and Emotional Development Glossary

**Active Engagement**—The process of acting, participating, assisting, or actively connecting with others.

**Communication**—Processes by which information is exchanged between individuals.

**Communication Skills**—Verbal and nonverbal means of effectively conveying meaningful information.

**Conflict**—Inherent incompatibility between two or more people or two or more choices.

**Conflict Resolution**—Process by which issues arising from a disagreement or clash between ideas, principles, or people are settled.

**Consequence**—A positive or negative outcome resulting from a choice or decision.

**Coping Skills**—Behavioral tools that enable one to express negative feelings in ways that are not self-destructive or threatening to others and to overcome personal adversity or stress.

**Culture**—Shared attitudes, values, goals, behaviors, interactions, and practices that are learned through social interactions which identify or distinguish groups.

**Decision-Making**—Process of coming to a conclusion or determination.

**Diversity**—Variety of characteristics that make individuals unique.

**Emotions**—The outward and inward expression of a person’s state of mind based upon personality, mood, and temperament that influence relationships and must be appropriately managed.

**Resilience**—An ability to recover from or adjust easily to misfortune or change.

**Pyramid Model**—Is used to support social and emotional competence in infants and young children.

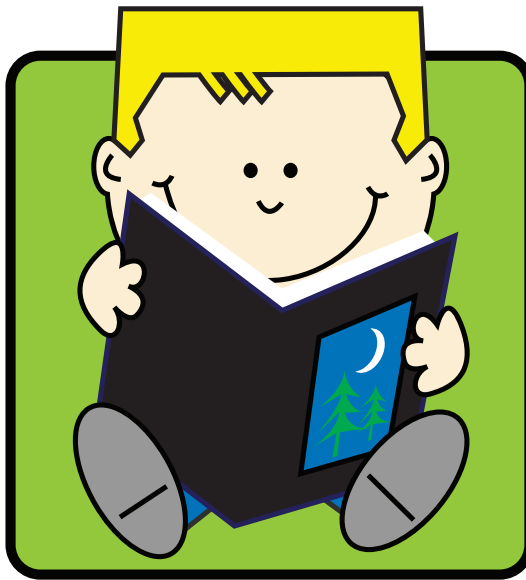


# Language and Literacy Development

## English Language Arts

- 1.1 Foundational Skills
- 1.2 Reading Informational Text
- 1.3 Reading Literature
- 1.4 Writing
- 1.5 Speaking and Listening

**C**ommunication occurs in different ways. It is a way to share one's ideas and understand the ideas of others. Reading involves the use of pictures, symbols, and text to gain information and derive meaning, and writing is used for a variety of purposes. Children should be exposed to a variety of books to acquire new information and for personal fulfillment. Children apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate text. Children draw meaning from their prior knowledge and experience, their interactions with others, their knowledge of word meaning, and their word identification strategies. Children vary their use of the spoken and written language to communicate effectively with others. One of the first building blocks of reading is phonemic awareness; this is one of the best predictors of early reading achievement. Children should be developing this awareness in the early years by listening to rhyming



stories and songs and engaging in word play activities.

### Diversity and Culture

**T**oday's early childhood programs include increasingly diverse groups of children, families, and teachers who represent many cultures, values, and lifestyles. Providers have a unique opportunity to create

welcoming environments that emphasize respect for diversity and support families' cultural and linguistic differences. Teachers must help assure the preservation of home language while supporting the acquisition of Standard English. Programs should create experiences and opportunities that honor all children's cultures and values by developing creative strategies for including and expanding home to school connections and by providing children with varied ways to demonstrate their learning. Such experiences and opportunities assure all children's success in school.

## 1.1 Foundational Skills

**BIG IDEA:** Emerging reading involves the use of pictures, symbols, and text to gain information and derive meaning.

**ESSENTIAL QUESTION:** How do I acquire and practice pre-reading skills?

### A. BOOK HANDLING

Standard	Concepts and Competencies	Supportive Practices
<b>1.1 PK.A</b> <b>Practice appropriate book-handling skills.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Orient a book correctly.</li> <li>• Turn pages in order.</li> <li>• Use pointers or finger to track print on charts, posters, environmental print or in books.</li> <li>• Practice tracking from top to bottom and left to right with scaffolding.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Model correct book orientation.</li> <li>• Model turning pages carefully and in order.</li> <li>• Provide pointers and charts for children to practice tracking.</li> <li>• Reinforce children moving from top to bottom and left to right.</li> </ul>

### B. PRINT CONCEPTS

Standard	Concepts and Competencies	Supportive Practices
<b>1.1 PK.B</b> <b>Identify basic features of print.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Differentiate between numbers and letters and letters and words.</li> <li>• Recognize and name some upper and lower case letters of the alphabet.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Provide rich environmental print in the classroom (e.g., posters, charts, word walls).</li> <li>• Provide a variety of materials (e.g., hands-on, print, and/or digital) for exploration of letters.</li> <li>• Provide opportunities in group and learning centers for identifying letters, words, numbers, and sentences.</li> <li>• Use print and digital-text materials for functional purposes.</li> </ul>

### C. PHONOLOGICAL AWARENESS

Standard	Concepts and Competencies	Supportive Practices
<b>1.1 PK.C</b> <b>Demonstrate understanding of spoken words, syllables, and sounds (phonemes).</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Recognize rhyming words.</li> <li>• Recognize when two or more words begin with the same sound (alliteration).</li> <li>• Count syllables in spoken words.</li> <li>• Isolate and pronounce initial sounds.</li> <li>• Segment single-syllable spoken words into phonemes.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Provide opportunities for children to experiment and play with the sounds that words make through rhymes, nonsense words, poems, music, and chants.</li> <li>• Read books that contain rich language (rhyme, repetition, and rhythm).</li> <li>• Provide opportunities for children to clap out the syllables of names or words.</li> <li>• Play rhyming and sound games.</li> <li>• Provide materials for exploration of sounds.</li> </ul>

### D. PHONICS AND WORD RECOGNITION

Standard	Concepts and Competencies	Supportive Practices
<b>1.1 PK.D</b> <b>Develop beginning phonics and word skills.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Associate some letters with their names and sounds.</li> <li>• Identify familiar words and environmental print.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Provide charts and morning messages for children to read independently.</li> <li>• Promote reading the room strategy, such as searching for letters and words in environmental print.</li> <li>• Create learning centers that focus on letters, sounds, words, and creating simple sentences.</li> <li>• Use print and digital-text materials for functional purposes.</li> </ul>


**E. FLUENCY**

Standard	Concepts and Competencies	Supportive Practices
<i>Emerging to ...</i> <b>Read emergent-reader text with purpose and understanding.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Recite rhymes, songs, and familiar text while tracking with a finger or pointer.</li> <li>• Apply knowledge of letters, words, and sounds to read simple sentences.</li> <li>• Assemble letters to form words and words to form sentences and (pretend) to read the words or sentences back.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide purposeful and playful exposure to a variety of printed materials.</li> <li>• Read and re-read text daily.</li> <li>• Provide learning centers and a classroom library where learners can interact with emergent reader text.</li> <li>• Provide a variety of opportunities for children to engage in pre-reading (e.g., morning messages, charts, etc.).</li> <li>• Use print and digital-text materials for functional purposes.</li> </ul>

**1.2 Reading Informational Text**

**BIG IDEAS:** Effective readers use appropriate strategies to construct meaning. Critical thinkers actively and skillfully interpret, analyze, evaluate, and synthesize information. An expanded vocabulary enhances one’s ability to express ideas and information.  
**ESSENTIAL QUESTIONS:** What is the text really about? How does interaction with the text promote thinking and response? Why learn new words? What strategies and resources does the learner use to figure out unknown vocabulary?

**A. KEY IDEAS AND DETAILS – MAIN IDEA**

Standard	Concepts and Competencies	Supportive Practices
<b>1.2 PK.A</b> <b>With prompting and support, retell key details of text that support a provided main idea.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Know that the details of a text can be used to support a main topic or idea.</li> <li>• Provide relevant details from a text which support a provided main idea.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Read a variety of informational text (e.g., nonfiction text, recipes, web pages, menus, phone books, maps, etc.) to children.</li> <li>• Before reading a text, provide a main idea to set the stage for reading.</li> <li>• Point out details which support the main idea while reading the text.</li> <li>• Discuss how text detail supports a main idea after reading a text.</li> </ul>

**B. KEY IDEAS AND DETAILS – TEXT ANALYSIS**

Standard	Concepts and Competencies	Supportive Practices
<b>1.2 PK.B</b> <b>Answer questions about a text.</b>	<ul style="list-style-type: none"> <li>• Use specific details from the text to answer questions.</li> <li>• Answer “who” or “what” the text is about.</li> <li>• Answer “how” and/or “why” questions using specifics from the text.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide purposeful and playful exposure to a variety of informational text (e.g., nonfiction text, recipes, web pages, menus, phone books, maps, etc.).</li> <li>• Ask children to identify facts from text.</li> <li>• Ask “who,” “what,” “how,” and “why” questions.</li> <li>• Provide verbal prompts and picture cues to assist in recall.</li> </ul>

**C. KEY IDEAS AND DETAILS**

Standard	Concepts and Competencies	Supportive Practices
<b>1.2 PK.C</b> <b>With prompting and support, make connections between information in a text and personal experience.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Share personal experience and prior knowledge that is relevant to the text.</li> <li>• Contribute relevant information to a K (know), W (what child wants to learn), L (what group learned) chart.</li> <li>• Choose text based on personal interests and experiences.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide learning centers and a classroom library where learners can interact independently with emergent reader text.</li> <li>• Ask children how a text relates to their family, home, or school.</li> <li>• Model connecting a text to your own personal experiences.</li> <li>• Provide opportunities to complete KWL charts on various topics.</li> </ul>

**E. CRAFT AND STRUCTURE – TEXT STRUCTURE**

Standard	Concepts and Competencies	Supportive Practices
<b>1.2 PK.E</b> Identify the front cover, back cover, and title page of a book.	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Relate that texts are organized in a predictable format.</li> <li>• Identify the title page of a book.</li> <li>• Identify the front cover of a book.</li> <li>• Identify the back cover of a book.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Identify and discuss the front cover, back cover, and title page.</li> <li>• Ask children to identify the front cover, back cover, and title page of a book.</li> </ul>

**F. CRAFT AND STRUCTURE – VOCABULARY**

Standard	Concepts and Competencies	Supportive Practices
<b>1.2 PK.F</b> With prompting and support, answer questions about unfamiliar words read aloud from a text.	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Participate in discussions about unfamiliar words.</li> <li>• Connect prior understandings to unfamiliar words.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Introduce vocabulary in the context of topics when using a variety of informational text (e.g., nonfiction text, recipes, web pages, menus, phone books, maps, etc.).</li> <li>• Model own connections to new vocabulary.</li> <li>• Model how use of picture cues can help one determine the meaning of new words.</li> </ul>

**G. INTEGRATION OF KNOWLEDGE AND IDEAS – DIVERSE MEDIA**



Standard	Concepts and Competencies	Supportive Practices
<b>1.2 PK.G</b> With prompting and support, answer questions to connect illustrations to the written word.	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Retell a simple sequence in a text using picture support.</li> <li>• Match pictures to ideas, objects, or steps in a sequence.</li> <li>• Describe pictures in a text in detail to answer specific questions about the text.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Provide various experiences for children to engage with picture/text connections (e.g., cooking, dramatic play, construction, gardening, posting picture schedule).</li> <li>• Model how to attach words (nouns and verbs) to illustrations.</li> <li>• Provide opportunities to practice sequencing.</li> </ul>

**I. INTEGRATION OF KNOWLEDGE AND IDEAS – ANALYSIS ACROSS TEXTS**

Standard	Concepts and Competencies	Supportive Practices
<b>1.2 PK.I</b> With prompting and support, identify basic similarities and differences between two texts read aloud on the same topic.	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Recognize that texts have similar components that can be compared and contrasted (e.g., main ideas, details).</li> <li>• Participate in strategies that provide opportunities to compare and contrast texts and/or components of texts (e.g., Venn diagrams, T-charts).</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Provide opportunities to engage with a variety of text on the same topic.</li> <li>• Ask questions regarding similarities and differences after reading two or more texts on the same topic.</li> <li>• Introduce strategies (e.g., Venn diagrams, T-charts) using concrete materials (e.g., hula hoops, string) to compare and contrast texts and components of texts in teacher-led, small group, and individual activities.</li> </ul>



**J. VOCABULARY ACQUISITION AND USE**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.2 PK.J</b>                      Use new vocabulary and phrases acquired in conversations and being read to.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Talk about pictures using new vocabulary words or phrases.</li> <li>• Use new vocabulary in the context of dramatic play, daily routines, and classroom conversations.</li> <li>• Begin to use new vocabulary when asking questions or describing situations or objects.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Encourage children to use new vocabulary words or phrases when discussing pictures or real objects.</li> <li>•  Explicitly introduce Tier II vocabulary words.</li> <li>• Provide learning centers for children to engage with words and pictures.</li> <li>• Model use of newly learned words or phrases.</li> <li>• Support and acknowledge children’s use of new words or phrases.</li> <li>• Introduce vocabulary in the context of topics when using a variety of informational text (e.g., nonfiction text, recipes, web pages, menus, phone books, maps, etc.).</li> <li>• Scaffold the definition of words when introducing a new topic, being certain to provide several examples that help to demonstrate the meaning.</li> <li>• Encourage children to listen for new vocabulary words within the context of the text.</li> </ul>

**K. VOCABULARY ACQUISITION AND USE**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.2 PK.K</b>                      With prompting and support, clarify unknown words or phrases read aloud.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Recognize words or phrases that are unfamiliar to them.</li> <li>• Ask, “What does that mean?”</li> <li>• Talk about connections between familiar and unfamiliar words or phrases that mean similar things (e.g., grass, lawn).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Introduce vocabulary in the context of topics when using a variety of informational text (e.g., nonfiction text, recipes, web pages, menus, phone books, maps, etc.).</li> <li>• Provide concrete materials in learning centers to assist children in connecting prior knowledge to new words or phrases.</li> <li>• Respond with interest and support when children seek clarification of a word or phrase.</li> </ul>

**L. RANGE OF READING**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.2 PK.L</b>                      With prompting and support, actively engage in group reading activities with purpose and understanding.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Ask and answer questions about text being read aloud.</li> <li>• Share relevant prior knowledge about text being read aloud.</li> <li>• Respond to and build on comments from other children.</li> <li>• Use ideas gained in group reading activities in other daily routines, learning centers, and activities.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Read to children daily in large groups, small groups, and individually.</li> <li>• Use strategies prior to reading to involve children in the text being read (e.g., predict the topic of the text using front cover and/or illustrations, picture walk).</li> <li>• Attend to children’s questions and comments during reading.</li> <li>• Ask questions about text during reading.</li> <li>• Provide learning center materials and activities that extend the ideas explored in group reading activity (These opportunities can be planned or emergent.).</li> </ul>

## 1.3 Reading Literature

**BIG IDEAS:** Effective readers use appropriate strategies to construct meaning. Critical thinkers actively and skillfully interpret, analyze, evaluate, and synthesize information. An expanded vocabulary enhances one’s ability to express ideas and information.

**ESSENTIAL QUESTIONS:** What is the text really about? How does interaction with the text promote thinking and response? Why learn new words? What strategies and resources does the learner use to figure out unknown vocabulary?

### A. KEY IDEAS AND DETAILS – THEME

Standard	Concepts and Competencies	Supportive Practices
<b>1.3 PK.A</b> With prompting and support, retell a familiar story in a sequence with picture support.	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Retell a story in sequential order using various materials.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide opportunities to practice sequencing using pictures, flannel boards, dramatic play.</li> <li>Engage with children using digital media to reinforce sequencing skills.</li> <li>Ask questions that support the use of sequencing (e.g., “What was the first thing that happened?” “What happened after?”).</li> </ul>

### B. KEY IDEAS AND DETAILS – TEXT ANALYSIS

Standard	Concepts and Competencies	Supportive Practices
<b>1.3 PK.B</b> Answer questions about a particular story (who, what, how, when, and where).	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Use specific details from the story to answer questions.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide purposeful and playful exposure to a variety of fictional texts (e.g., fables, folklore, fairy tales, nursery rhymes, tall tales, dramas, poetry, picture books, storybooks).</li> <li>Ask “who,” “what,” “how,” “when,” and “where” questions.</li> <li>Provide verbal prompts and picture cues to assist in recall.</li> </ul>

### C. KEY IDEAS AND DETAILS – LITERARY ELEMENTS

Standard	Concepts and Competencies	Supportive Practices
<b>1.3 PK.C</b> With prompting and support, answer questions to identify characters, settings, and major events in a story.	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Demonstrate understanding that “setting” is where a story takes place.</li> <li>Demonstrate understanding that “characters” are people or animals who have a role in the story.</li> <li>Respond to questions and prompts about characters, settings, and events during a read-aloud.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Explicitly use the term “character” along with verbal or visual prompts (e.g., “Who is this story about?”) when asking questions about a text.</li> <li>Explicitly use the term “setting” along with verbal or visual prompts (e.g., “Look at this picture. Where do you think this story takes place?”).</li> </ul>

### D. CRAFT AND STRUCTURE – POINT OF VIEW

Standard	Concepts and Competencies	Supportive Practices
<b>1.3 PK.D</b> With prompting and support, name the author and illustrator of a story.	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Understand that an author writes the story.</li> <li>Understand that the illustrator draws the pictures.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Explicitly use the terms “author” and “illustrator” along with their definitions.</li> <li>Credit children as “author” and “illustrator” of their own works (drawings and dictations).</li> </ul>



**E. CRAFT AND STRUCTURE – TEXT STRUCTURE**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.3 PK.E</b>                      With prompting and support, recognize common types of text.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Understand that different types of texts are used for different purposes.</li> <li>• Understand that a storybook has characters, setting, and actions associated with words and, most often, illustrations.</li> <li>• Understand that a poem consists of words arranged in patterns of sound (e.g., rhyming words, alliteration).</li> <li>• Tell if a text is storybook or poem.</li> <li>• Differentiate between real and make-believe.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide purposeful and playful exposure to a variety of texts (e.g., fables, folklore, fairy tales, nursery rhymes, tall tales, dramas, poetry, picture books, storybooks, nonfiction text, recipes, web pages, menus, phone books, maps).</li> <li>• Use printed materials for functional purposes, including entertainment and enjoyment.</li> <li>• Explicitly use the labels for different genres (“storybook,” “poem,” “fiction,” and “nonfiction”).</li> </ul>

**F. CRAFT AND STRUCTURE – VOCABULARY**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.3 PK.F</b>                      Answer questions about unfamiliar words read aloud from a story.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Participate in discussions about unfamiliar words.</li> <li>• Connect prior understandings to unfamiliar words.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Introduce vocabulary in the context of topics when using storybooks, finger plays, songs, or poems.</li> <li>• Model own connections to new vocabulary.</li> <li>• Model how use of picture cues can help one determine the meaning of new words.</li> </ul>

**G. INTEGRATION OF KNOWLEDGE AND IDEAS – SOURCES OF INFORMATION**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.3 PK.G</b>                      Describe pictures in books using detail.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Attach action and descriptive words to illustrations (e.g., “That man in the yellow hat is running fast.”).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Model how to attach action and descriptive words to illustrations.</li> <li>• Ask questions about pictures in books.</li> </ul>


**H. INTEGRATION OF KNOWLEDGE AND IDEAS – TEXT ANALYSIS**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.3 PK.H</b>                      Answer questions to compare and contrast the adventures and experiences of characters in familiar stories.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Understand that characters within the same story or characters from different stories can be compared and contrasted.</li> <li>• Participate in strategies that provide opportunities to compare and contrast the experiences of characters (e.g., Venn diagrams, T-charts, dramatic play).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide purposeful and playful exposure to a variety of fictional texts (e.g., fables, folklore, fairy tales, nursery rhymes, tall tales, dramas, poetry, picture books, storybooks).</li> <li>• Ask questions regarding similarities and differences between the experiences of characters.</li> <li>• Introduce strategies (e.g., Venn diagrams, T-charts) using concrete materials (e.g., hula hoops, string) to compare and contrast texts and components of texts in teacher-led, small group, and individual activities.</li> </ul>

**I. VOCABULARY ACQUISITION AND USE – STRATEGIES**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.3 PK.I</b>  <b>With prompting and support, clarify unknown words or phrases read aloud.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Recognize words or phrases that are unfamiliar to them.</li> <li>• Ask, “What does that mean?”</li> <li>• Talk about connections between familiar and unfamiliar words or phrases that mean similar things (e.g., grass, lawn).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Introduce vocabulary in the context of topics when using a variety of fictional texts (e.g., fables, folklore, fairy tales, nursery rhymes, tall tales, dramas, poetry, picture books, storybooks).</li> <li>• Provide concrete materials in learning centers to assist children in connecting prior knowledge to new words or phrases.</li> <li>• Respond with interest and support when children seek clarification of a word or phrase.</li> </ul>

**J. VOCABULARY ACQUISITION AND USE**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.3 PK.J</b>  <b>Use new vocabulary and phrases acquired in conversations and being read to.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Talk about pictures using new vocabulary words or phrases.</li> <li>• Use new vocabulary in the context of dramatic play, daily routines, and classroom conversations.</li> <li>• Begin to use new vocabulary when asking questions or describing situations or objects.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Encourage children to use new vocabulary words or phrases when discussing pictures or real objects.</li> <li>• Provide learning centers for children to engage with words and pictures.</li> <li>• Model use of newly learned words or phrases.</li> <li>• Support and acknowledge children’s use of new words or phrases.</li> <li>• Introduce vocabulary in the context of topics when using a variety of fictional text (e.g., fables, folklore, fairy tales, nursery rhymes, tall tales, dramas, poetry, picture books, storybooks).</li> <li>• Explicitly introduce Tier II vocabulary words.</li> <li>• Scaffold the definition of words when introducing them before a story, being certain to provide several examples that help to demonstrate the meaning.</li> <li>• Encourage children to listen for new vocabulary words within the context of the story.</li> </ul>

**K. RANGE OF READING**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.3 PK.K</b>  <b>With prompting and support, actively engage in group reading activities with purpose and understanding.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Ask and answer questions about story or poem being read aloud.</li> <li>• Share relevant prior knowledge about text being read aloud.</li> <li>• Respond to and build on comments from other children.</li> <li>• Use ideas gained in group reading activities in other daily routines, learning centers, and activities.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Read to children daily in large groups, small groups, and individually.</li> <li>• Use strategies prior to reading to involve children in the story or poem being read (e.g., predict what story will be about using front cover and/or illustrations, picture walk).</li> <li>• Attend to children’s questions and comments during reading.</li> <li>• Ask questions about story or poem during reading.</li> <li>• Provide learning center materials and activities that extend the ideas explored in group reading activity (These opportunities can be planned or emergent.).</li> </ul>

## 1.4 Writing

**BIG IDEAS:** Audience and purpose influence a writer’s choice of organizational pattern, language, and literary techniques. Effective research requires the use of varied resources to gain or expand knowledge.

**ESSENTIAL QUESTIONS:** What makes clear and effective writing? Why do writers write? Who is the audience? What will work best for the audience? Where can one find information to answer questions?

### A. INFORMATIVE/EXPLANATORY

Standard	Concepts and Competencies	Supportive Practices
<b>1.4 PK.A</b> <b>Draw/dictate to compose informative/explanatory texts examining a topic.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Use illustration/dictation to convey meaning about a particular topic.</li> <li>Create a picture about a nonfiction topic and talk about it.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide a variety of materials and opportunities for children to write daily.</li> <li>Encourage children to draw and talk about topics of interest.</li> <li>Use journals where children can write about specific topics of interest.</li> <li>Write children’s words on their drawings.</li> </ul>

### B. INFORMATIVE/EXPLANATORY – FOCUS

Standard	Concepts and Competencies	Supportive Practices
<b>1.4 PK.B</b> <b>With prompting and support, draw/dictate about one specific topic.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Create a picture about a nonfiction topic and talk about it.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Create charts of children’s ideas about topics of interest to facilitate children’s choice of a particular topic.</li> <li>Talk about the focus of books and pictures that children see.</li> </ul>

### C. INFORMATIVE/EXPLANATORY – ORGANIZATION

Standard	Concepts and Competencies	Supportive Practices
<b>1.4 PK.C</b> <b>With prompting and support, generate ideas to convey information.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Brainstorm ideas for pictures and stories.</li> <li>Tell adult what she/he will draw.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Create a list of ideas brainstormed by the children.</li> <li>Facilitate discussion between small groups of children interested in a similar topic to organize thoughts and ideas.</li> </ul>

### D. INFORMATIVE/EXPLANATORY – ORGANIZATION

Standard	Concepts and Competencies	Supportive Practices
<b>1.4 PK.D</b> <b>With prompting and support, make logical connections between drawing and dictation.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Understand that words are connected to print.</li> <li>Work with adult to create words or sentences that relate to drawings.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Write the child’s words on the picture and read it out loud.</li> <li>Encourage children to (pretend) read their dictations.</li> </ul>

### F. INFORMATIVE/EXPLANATORY – CONVENTIONS OF LANGUAGE

Standard	Concepts and Competencies	Supportive Practices
<b>Emerging to ...</b> <b>Spell simple words phonetically.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Write symbols, letters, or letter-like shapes.</li> <li>Attempt to reproduce own name and/or simple words, with most letters correct.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide a variety of materials and opportunities for children to write daily.</li> <li>Encourage children to write their name.</li> <li>Have children think of how to spell words that have the same sounds as their name.</li> <li>Have children sign in and out for the day. (e.g., attendance)</li> </ul>

**M. NARRATIVE**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.4 PK.M</b> Dictate narratives to describe real or imagined experiences or events.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Use illustration/dictation to convey meaning about an experience or event.</li> <li>• Create a picture about an experience or event and talk about it.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide a variety of materials and opportunities for children to write daily.</li> <li>• Encourage children to draw and talk about their experiences.</li> <li>• Encourage children to tell imagined stories.</li> <li>• Use journals where children can write about their experiences and “imaginings.”</li> <li>• Write children’s words on their drawings.</li> <li>• Have children take turns dictating a daily message during circle.</li> </ul>

**N. NARRATIVE – FOCUS**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.4 PK.N</b> Establish “who” and “what” the narrative will be about.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Generate ideas for writing.</li> <li>• Understand that “who” a story will be about refers to the person, animal, or animated object that the story will be about.</li> <li>• Understand that “what” a story will be about refers to the sequenced events that happen to the referenced “who.”</li> <li>• Respond when asked “who” or “what” a story is about, and follow through when drawing about or dictating the story.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Explicitly use terms like “character” along with a verbal or visual prompts (e.g., “Who is this story about?”) when responding to children’s stories or when sharing stories with children (spoken or read).</li> <li>• Explicitly use terms like “details” and “sequence” along with a verbal or visual prompts (e.g., “What is this story about?” “What happens in your story?”) when responding to children’s stories or when sharing stories with children (spoken or read).</li> <li>• Encourage children to follow through with their generated “who” and “what.”</li> </ul>

**O. NARRATIVE – CONTENT**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.4 PK.O</b> With prompting and support, describe experiences and events.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• When prompted, provide details (e.g., descriptive words, feelings, and thoughts of the character) to further develop a story.</li> <li>• Tell adult what she/he has drawn/written about.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Ask children for details about their illustrations or dictated stories (e.g., “Was it hot that day?” “I wonder how she felt about that.” “Did you like when that happened?”).</li> <li>• Use “I wonder ...” statements to prompt further details.</li> <li>• Write the child’s words on the picture and read it out loud or have child echo back the words.</li> </ul>

**P. NARRATIVE – ORGANIZATION**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.4 PK.P</b> Recount a single event and tell about the events in the order in which they occurred.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Understand that stories can be told about a single event.</li> <li>• Understand that a single event is made up of a series of smaller events that are in a sequence (before, next, end).</li> <li>• Respond with a logical sequence of events when asked “what” their story is about.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide opportunities to practice sequencing using pictures, flannel boards, dramatic play, graphic organizers.</li> <li>• Engage with children using digital media to reinforce sequencing skills.</li> <li>• Ask children “What happened before that?”</li> <li>• Ask children “What happened next?”</li> <li>• Ask children “How did that end?”</li> </ul>

**R. NARRATIVE – CONVENTIONS OF LANGUAGE**

Standard	Concepts and Competencies	Supportive Practices
<i>Emerging to ...</i> <b>Spell simple words phonetically.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Write symbols, letters, or letter-like shapes.</li> <li>• Attempt to reproduce own name and/or simple words, with most letters correct.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Provide a variety of materials and opportunities for children to write daily.</li> <li>• Encourage children to write their name.</li> <li>• Have children think of how to spell words that have the same sounds as their name.</li> <li>• Have children sign in and out for the day (e.g., attendance).</li> </ul>


**T. PRODUCTION AND DISTRIBUTION OF WRITING – WRITING PROCESS**

Standard	Concepts and Competencies	Supportive Practices
<b>1.4 PK.T</b> <b>With guidance and support from adults and peers, respond to questions and suggestions, and add details as needed.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Understand that drawings and dictations can convey meaning to an audience.</li> <li>• Understand that stories may have to be changed to make meaning more clear.</li> <li>• Share work with others.</li> <li>• Participate in discussions about their work.</li> <li>• When prompted, make changes to work based on feedback.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Assure a supportive environment where children feel confident enough to share their work.</li> <li>• Provide opportunities for children to share their work with adults and peers and to receive feedback (e.g., author’s chair).</li> <li>• Use explicit prompts to encourage peers to use both positive and constructive feedback (“I liked when ...” “I wish ...”, “I wonder ...”).</li> </ul>

**V. CONDUCTING RESEARCH**

Standard	Concepts and Competencies	Supportive Practices
<b>1.4 PK.V</b> <b>Ask questions about topics of personal interest to gain information; with teacher guidance and support, locate information on the chosen topic.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Ask adults for explanations or information using why, how, where, and when questions (e.g., “Why do leaves turn colors?” “Why doesn’t Jamal like pizza?”).</li> <li>• Use a variety of resources (e.g., adults and peers, books, digital media, maps, recipes, experts) to find new information.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Encourage children to talk about topics of interest.</li> <li>• Share personal curiosity and interests using “I wonder” statements and questioning.</li> <li>• Provide a variety of resources that respond to the children’s interests and inquiries (e.g., adults and peers, books, digital media, maps, recipes, experts).</li> <li>• Engage individual children or groups of children interested in a similar topic in project-based learning.</li> </ul>

**W. CREDIBILITY, RELIABILITY, AND VALIDITY OF SOURCES**

Standard	Concepts and Competencies	Supportive Practices
<b>1.4 PK.W</b> <b>With guidance and support, recall information from experiences or books.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Respond to prompts which require reference to prior experiences.</li> <li>• Relate prior experiences and learning to a current topic.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>•  Model connecting prior experiences and learning to a current topic.</li> <li>• Use prompts to encourage children to reference prior experiences in their discussions, drawings, writing, and play (e.g., “Remember when we read about ...?” “Remember our field trip to the farm?”).</li> </ul>

**X. RANGE OF WRITING**

Standard	Concepts and Competencies	Supportive Practices
<i>Emerging to ...</i> <b>Write routinely over short time frames.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Engage in writing opportunities including journaling.</li> <li>Ask adult to “write down the words” of his/her story or to his/her drawing.</li> <li>Ask to revisit previous work.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide a variety of materials and opportunities for children to write daily and over time (e.g., journals, “author’s” chair, projects, child-initiated environmental print for the classroom).</li> <li>Provide opportunities and encourage children to revisit prior work.</li> <li>Encourage children to persist (“stick-with-it”) in their drawing/dictation/writing.</li> </ul>

**1.5 Speaking and Listening**

**BIG IDEAS:** Active listeners make meaning from what they hear by questioning, reflecting, responding, and evaluating. Effective speakers prepare and communicate messages to address the audience and purpose.

**ESSENTIAL QUESTIONS:** What do good listeners do? How do active listeners make meaning? How do speakers effectively communicate a message?




**A. COMPREHENSION AND COLLABORATION – COLLABORATIVE DISCUSSION**

Standard	Concepts and Competencies	Supportive Practices
<b>1.5 PK.A</b> <b>Participate in collaborative conversations with peers and adults in small and larger groups.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Communicate using detail related to topic being discussed.</li> <li>Pose questions related to topic being discussed.</li> <li>Allow wait time before responding.</li> <li>Engage in turn-taking.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Explicitly restate comments made by children and encourage those responding to add further detail, or contribute further to the topic being discussed.</li> <li>Encourage children to restate comments made by other children.</li> <li>Encourage children to ask questions to find out more information.</li> <li>Model appropriate participation in discussions including polite interactions, one person speaking at a time, or asking questions.</li> <li>Embed opportunities for children to “turn and talk” to share ideas on a topic.</li> </ul>

**B. COMPREHENSION AND COLLABORATION – CRITICAL LISTENING**

Standard	Concepts and Competencies	Supportive Practices
<b>1.5 PK.B</b> <b>Answer questions about key details in a text read aloud or information presented orally or through other media.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Respond to a question with an answer or details related to the topic being discussed.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Engage children in conversation about topics of interest daily.</li> <li>Ask “who,” “what,” “how,” “when,” and “where” questions.</li> <li>Ask children to identify facts from text.</li> <li>Invite children to discuss how they would react to a situation if they were the character in the story.</li> </ul>

**C. COMPREHENSION AND COLLABORATION – EVALUATING INFORMATION**

Standard	Concepts and Competencies	Supportive Practices
<b>1.5 PK.C</b> <b>Respond to what a speaker says to follow directions, seek help, or gather information.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Follow two-step directions.</li> <li>Act upon or respond to simple statements and questions showing understanding of intent.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li> Reinforce following directions.</li> <li> Encourage children to ask questions to find out more information.</li> <li> Direct children to multiple sources of assistance and information, including their peers and media resources.</li> <li>Encourage children to restate comments made by other children.</li> </ul>

**D. PRESENTATION OF KNOWLEDGE AND IDEAS – PURPOSE, AUDIENCE, AND TASK**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.5 PK.D</b> Use simple sentences; share stories, familiar experiences, and interests, speaking clearly enough to be understood by most audiences.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Talk about stories, experiences, and interests using some detail.</li> <li>• Use appropriate volume to be heard by group, paying attention to inside and outside voices.</li> <li>• Use appropriate pacing when speaking.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Speak to and engage children in group and individual conversation daily.</li> <li>• Re-phrase learner’s sentence structure or grammar by repeating the sentence properly.</li> <li>• Model appropriate volume and pace when speaking.</li> <li>• Explicitly encourage children to adapt volume and pacing as appropriate to the situation.</li> <li>• Acknowledge children’s efforts to share stories and experiences.</li> </ul>

**E. PRESENTATION OF KNOWLEDGE AND IDEAS – CONTEXT**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.5 PK.E</b> Use simple sentences; express thoughts, feelings, and ideas, speaking clearly enough to be understood by most audiences.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Talk about personal thoughts, feelings, and ideas.</li> <li>• Use appropriate volume to be heard by group, paying attention to inside and outside voices.</li> <li>• Use appropriate pacing when speaking.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Allow time for children to talk with each other throughout the day.</li> <li>• Use meal time as an opportunity for sharing and discussion.</li> <li>• Re-phrase learner’s sentence structure or grammar by repeating the sentence properly.</li> <li>• Model appropriate volume and pace when speaking.</li> <li>• Explicitly encourage children to adapt volume and pacing as appropriate to the situation.</li> <li>• Encourage children to express thoughts, feelings, and ideas within conversations (e.g., “Tell me about a time you felt scared.”).</li> <li>• Acknowledge children’s efforts to share information.</li> </ul>

**G. CONVENTIONS OF STANDARD ENGLISH**

Standard	Concepts and Competencies	Supportive Practices
<p><b>1.5 PK.G</b> Demonstrate command of the conventions of standard English when speaking based on Pre-Kindergarten level and content.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Speak in complete sentences that contain more than three words.</li> <li>• Use past tense.</li> <li>• Use plurals including those which do not end in “s.”</li> <li>• Use pronouns.</li> <li>• Use a variety of prepositions.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Speak to and engage children in group and individual conversation daily.</li> <li>• Re-phrase learner’s sentence structure or grammar by repeating the sentence properly.</li> <li>• Model appropriate use of the conventions of standard English.</li> <li>• State phrases in both home language and standard English, as appropriate.</li> </ul>



# Languages and Literacy Development

## Glossary

**Alliteration**—The repetition of initial consonant sounds.

**Antonym**—A word that is the opposite of another word.

**Basic Features of Print**—Letters, words, and sentences

**Characterization**—The method an author uses to reveal characters and their various personalities.

**Choral Reading**—Reading of a text where an adult or an experienced reader reads a line of text and student repeats the line.

**Collaboration**—The action of working with someone to produce or create something.

**Collaborative Conversations**—Also called reciprocal conversation; knowing and following the back and forth rules of conversation.

**Compare**—Place together characters, situations, or ideas to show common or differing features in literary selections.

**Context Clues**—Information from the reading that identifies a word or group of words.

**Conventions of Language**—Mechanics, usage, and sentence completeness.

**Credibility**—The quality of being believable or worthy of trust.

**Decoding**—Analyzing text to identify and understand individual reading.

**Dialogic Reading**—An effective strategy to enhance vocabulary, oral language skills, and comprehension.

**Dictation**—The act of saying words aloud to be written down.

**Emergent Literacy**—One stage of literacy development; reading and writing behaviors that precede and develop into convention and literacy.

**Environmental Print**—The print of everyday life; symbols, signs, numbers, colors, and logos found within the environment.

**Expressive Language**—Being able to convey messages using words.

**Evaluate**—Examine and judge carefully.

**Explanatory**—Something that makes things more clear; intended to make people understand something by describing it or giving the reasons for it.

**Fine Motor**—Demonstrate increased control of hand and eye coordination; using hands and fingers such as in writing, painting, drawing, modeling clay, or pinching clothespins.

**Fluency**—The clear, easy, written or spoken expression of ideas. Freedom from word-identification problems which might hinder comprehension in silent reading or the expression of ideas in oral reading.

**Genre**—A category used to classify literary works, usually by form, technique, or content (prose, poetry).

**Guided Reading**—Teachers work with students at their instructional level to guide them in using context, visual, and structural cues.

**Homophone**—One of two or more words pronounced alike, but different in spelling or meaning (hair/hare; road/rode).

**Informative**—Something that contains useful, helpful, or relevant information or details.

**Literary/Story Elements**—The essential techniques used in literature (characterization, setting, plot, theme, problem, solution).

**Literary Devices**—Tools used by the author to enliven and provide voice to the writing (dialogue, alliteration).

**Main Idea**—The most important or central thought of a paragraph or larger section of text, which tells the reader what the text is about.

**Narrative**—A story, actual or fictional, expressed orally or in writing.

**Onset**—A sound in word that comes before the vowel.

**Phonemic Awareness**—Ability to hear and identify parts of spoken language and auditory divide into phonemes.

**Phoneme**—A sound unit of speech.

**Phonics**—A way of teaching reading that stresses sound symbol relationships; refers to the relationship between the letters and letter sounds of language.

**Phonological Awareness**—A broad term that includes phonemic awareness. In addition to phonemes, phonological awareness refers to larger spoken units such as rhymes, words, syllables, and onsets and rimes.

**Picture Walk**—A pre-reading strategy that is an examination of the text looking at pictures to gain an understanding of the story and to illicit story related language in advance of reading the story.

**Point of View**—The way in which an author reveals characters, events, and ideas in telling a story; the vantage point from which the story is told.

**Print Awareness**—Ability to understand how print works.

**Project-Based Learning**—An instructional approach built upon authentic learning activities that engage student interest and motivation.

**Reading Critically**—Reading in which a questioning attitude, logical analysis, and inference are used to judge the worth of text; evaluating relevancy and adequacy of what is read; the judgment of validity or worth of what is read, based on sound criteria.



**Reciprocal Conversations**—Also called collaborative conversations; knowing and following the back and forth rules of conversation.

**Receptive Language**—Being able to receive and give meaning to message/words heard.

**Research**—A systematic inquiry into a subject or problem to discover, verify, or revise relevant facts or principles having to do with that subject or problem.

**Rhyme**—Correspondence of sound between words or the endings of words.

**Rime**—The part of a syllable that contains at least one vowel and all that follows.

**Shared Reading**—Teachers guides the entire class through stories with a high level of support; sharing and reading a story together (echo reading, choral reading, or fill the gap reading).

**Shared Writing**—Teacher and learner work together to compose a message or story.

**TIER I Words**—Words that rarely require direct instruction and typically do not have multiple meanings.

**TIER II Words**—High-frequency words that occur across a variety of domains; occur often in mature language situations such as adult conversations and literature; TIER II words also contain multiple meanings. (e.g., here/hear)

**TIER III Words**—Low-frequency words that occur in specific domains (including subjects in school, hobbies, occupations, geographic regions, technology, weather).

**Tone**—The attitude of the author toward the audience and characters (serious or humorous).

**Voice**—The fluency, rhythm, and liveliness in writing that make it unique to the writer.



# Mathematical Thinking and Expression

## Exploring, Processing, and Problem-Solving

- 2.1 Numbers and Operations
- 2.2 Algebraic Concepts
- 2.3 Geometry
- 2.4 Measurement, Data, and Probability

### Use of Manipulatives in Early Learning Settings

**S**mall toys or objects may be one of the most important teaching tools for early childhood classrooms. Counters, pegs, and/or small blocks support children's learning in math and science as a means of learning complex concepts. As children combine, sort, count, or describe the characteristics of these small objects, they are using active, hands-on strategies for problem-solving, exploration, and experimentation, and scaffolding previous knowledge and interactions to learn new information. In addition, children are learning motor control, patterns, and concrete ways to understand abstract ideas. All classrooms should provide ample opportunities for children's independent access to manipulatives throughout the daily routine.

**M**athematical learning is a key element of Science, Technology, Engineering, and Math (STEM) education. To fully understand math, children must be able to connect mathematical concepts to real-world situations and across disciplines. Math skills are developed and based on children's expe-



riences with their environment, their interactions with adults and other children, and their daily observations.

Throughout the early years of life, children notice and discover mathematical dimensions of their world. They compare quantities, find patterns, problem-solve, communicate, and confront real problems such as balancing a tall block building or angling a ramp to roll a ball

down. Mathematics helps children make sense of their world and helps them construct a solid foundation for future success. By asking intentional questions, adults can help encourage STEM concepts where children are identifying objects, making comparisons, making predictions, testing ideas, and sharing discoveries, all while investigating their environment. Mathematical thinking is foundational and important to academic success in all subjects. All children are capable of developing a strong knowledge of mathematics in their earliest years. Math and science subjects are connected to other subject matters and the real world. Adults should tap into children's natural curiosity and give them ample opportunities to be active participants in their own learning.

## 2.1 Numbers and Operations

**BIG IDEA:** Mathematical relationships among numbers can be represented, compared, and communicated.

**ESSENTIAL QUESTION:** How is mathematics used to quantify, compare, represent, and model numbers?

### A. COUNTING AND CARDINALITY

#### 1. CARDINALITY

Standard	Concepts and Competencies	Supportive Practices
<b>2.1 PK.A.1</b> <b>Know number names and the count sequence.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Name numerals up to 10.</li> <li>Rote count up to 20.</li> <li>Match a numeral to a set of 0–10 objects.</li> <li>Represent a number of objects with a written numeral 0–10.</li> <li>Differentiate numerals from letters.</li> <li>Counts on when a specific number is provided.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Teach children counting songs, rhymes, and chants.</li> <li>Provide and read books, poems, chants with numbers, and number concepts.</li> <li>Use number words and numerals, including zero, in everyday situations.</li> <li>Provide experiences with numbers through daily routines such as attendance and calendar.</li> <li>Provide opportunities for writing numerals and representing numbers.</li> <li>Play number recognition games.</li> </ul>

#### 2. COUNTING

Standard	Concepts and Competencies	Supportive Practices
<b>2.1 PK.A.2</b> <b>Count to tell the number of objects.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Subitize (visually quantify) to determine how many: attach a numerical value to a set of objects without counting up to six.</li> <li>Use one-to-one correspondence when counting to 10.</li> <li>State the total number of objects counted, demonstrating understanding that the last number named tells the number of objects counted.</li> <li>Use counting and numbers as part of play and as a means for determining quantity.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide manipulatives (e.g., counting bears, magnetic numbers, lacing numbers).</li> <li>Model strategies to help children keep track of what they are counting.</li> <li>Provide daily opportunities for children to count and recount objects.</li> <li>Ask children to pass out utensils, napkins, cups at meals and snacks to reinforce one-to-one correspondence.</li> </ul>

#### 3. COMPARING

Standard	Concepts and Competencies	Supportive Practices
<b>2.1 PK.A.3</b> <b>Compare numbers.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Create sets of objects with same and different amounts.</li> <li>Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group up to 10.</li> <li>Compare two numbers between 1 and 5 when presented as written numerals.</li> <li>Practice use of mathematical vocabulary to compare numbers of objects.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Model counting and comparing of objects in daily experiences.</li> <li>Explicitly teach mathematical vocabulary (e.g., “more than,” “less than,” “equal to”).</li> <li>Provide opportunities for quantifying sets of objects.</li> </ul>

**MP. MATHEMATICAL PROCESSES**

Standard	Concepts and Competencies	Supportive Practices
<p><b>2.1 PK.MP</b> Use mathematical processes when quantifying, comparing, representing, and modeling numbers.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Engage in numerical play.</li> <li>Persist in numerical play (<i>Reference AL.2 PK.C</i>).</li> <li>When prompted, communicate thinking while engaged in numerical play.</li> <li>Talk and listen to peers during numerical play.</li> <li>Use common forms of numerical representation (e.g., fingers, tally marks, dots).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Notice children engaged in numerical play and describe what they are doing.</li> <li>Ask open-ended questions to encourage children to talk about their thinking (e.g., How do you know there are six blocks?).</li> <li>Listen carefully to children’s responses, and restate their responses using clear, age-appropriate, mathematical language.</li> <li>Listen carefully to children’s responses to identify and clarify misconceptions.</li> <li>Model reasoning language (e.g., “If that is right, then . . .” “That can’t be because if it were, then . . .”).</li> <li>Provide many opportunities for children to talk and listen to their peers.</li> <li>Model reasoning by thinking-out-loud.</li> <li>Explicitly call attention to a child’s think-aloud to engage peers in the process.</li> <li>Acknowledge children’s use of fingers, concrete objects, or symbols to represent quantity.</li> </ul>

**2.2 Algebraic Concepts**

**BIG IDEA:** Mathematical relationships can be represented as expressions, equations, and inequalities in mathematical situations.  
**ESSENTIAL QUESTION:** How are relationships represented mathematically?

**A. OPERATIONS AND ALGEBRAIC THINKING**

**1. OPERATIONS AND ALGEBRAIC THINKING**

Standard	Concepts and Competencies	Supportive Practices
<p><b>2.2 PK.A.1</b> Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.</li> <li>Explain adding and subtracting sets of objects up to and including six, using basic math vocabulary (e.g., putting together, adding to, taking away, taking apart, taking from).</li> <li>Join sets of objects.</li> <li>Separate sets of objects.</li> <li>Add objects to a set and tell a number story about it.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Model using appropriate math vocabulary when adding objects to a set.</li> <li>Model using appropriate math vocabulary when taking away objects from a set.</li> <li>Use manipulatives to demonstrate joining and separating sets.</li> <li>Tell stories about joining and separating sets.</li> </ul>

**MP. MATHEMATICAL PROCESSES**

Standard	Concepts and Competencies	Supportive Practices
<p><b>2.2 PK.MP</b>  <b>Use mathematical processes when representing relationships.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Engage in mathematical play.</li> <li>Persist in mathematical play (<i>Reference AL.2 PK.C</i>).</li> <li>Problem-solve during mathematical play (<i>Reference AL.4 PK.C</i>).</li> <li>When prompted, communicate thinking while engaged in mathematical play.</li> <li>Talk and listen to peers during mathematical play.</li> <li>Use common forms of numerical representation (e.g., fingers, tally marks, dots).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Notice children engaged in mathematical play and describe what they are doing.</li> <li>Ask open-ended questions to encourage children to talk about their thinking (e.g., “Tell me how you joined your piles of objects to make a bigger pile.” “I wonder what would happen if you ate some of those gummy bears?”).</li> <li>Listen carefully to children’s responses, and restate their responses using clear, age-appropriate, mathematical language.</li> <li>Listen carefully to children’s responses to identify and clarify misconceptions.</li> <li>Model reasoning language (e.g., “If that is right, then . . .” “That can’t be because if it were, then . . .”).</li> <li>Provide many opportunities for children to talk and listen to their peers.</li> <li>Model reasoning by thinking-out-loud.</li> <li>Explicitly call attention to a child’s think-aloud to engage peers in the process.</li> <li>Acknowledge children’s use of fingers, concrete objects, or symbols to represent quantity.</li> </ul>

**2.3 Geometry**

**BIG IDEA:** Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization.  
**ESSENTIAL QUESTIONS:** How are spatial relationships, including shape and dimension, used to draw, construct, model, and represent real situations or solve problems? How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?

**A. GEOMETRY**

**1. IDENTIFICATION**

Standard	Concepts and Competencies	Supportive Practices
<p><b>2.3 PK.A.1</b>  <b>Identify and describe shapes.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Describe objects in the environment using names of shapes.</li> <li>Recognize and describe the attributes of geometric figures.</li> <li>Describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to.</li> <li>Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (solid).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Explicitly use the names of geometric shapes.</li> <li>Take children on a shape walk looking for geometric shapes in the environment.</li> <li>Provide books about geometric shapes.</li> <li>Provide shape templates, puzzles, attribute blocks, parquetry and pattern blocks in learning centers.</li> <li>Model naming shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (solid).</li> </ul>

2. APPLICATION

Standard	Concepts and Competencies	Supportive Practices
<p><b>2.3 PK.A.2</b>  <b>Analyze, compare, create, and compose shapes.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts, and other attributes.</li> <li>Model shapes in the world by building shapes from components and drawing shapes.</li> <li>Use geoboards to create shapes with rubber bands.</li> <li>Use simple shapes to compose larger shapes.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide experiences for children to compare attributes of various geometrical shapes.</li> <li>Provide shape templates, puzzles, attribute blocks, parquetry and pattern blocks in learning centers.</li> <li>Provide opportunities to make shapes with playdough, geoboards, Popsicle sticks, and pattern blocks.</li> </ul>

MP. MATHEMATICAL PROCESSES

Standard	Concepts and Competencies	Supportive Practices
<p><b>2.3 PK.MP</b>  <b>Use mathematical processes when drawing, constructing, modeling, and representing shapes.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Engage in geometric play.</li> <li>Persist in geometric play (<i>Reference AL.2 PK.C</i>).</li> <li>Problem-solve during geometric play (<i>Reference AL.4 PK.C</i>).</li> <li>When prompted, communicate thinking while engaged in geometric play.</li> <li>Talk and listen to peers during geometric play.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Notice children engaged in geometric play and describe what they are doing.</li> <li>Foster geometric awareness (e.g., encourage children to sketch their block creation before taking it down).</li> <li>Ask open-ended questions to encourage children to talk about their thinking (e.g., “I wonder if we could make a square out of our pile of triangles?”).</li> <li>Listen carefully to children’s responses, and restate their responses using clear, age-appropriate, mathematical language.</li> <li>Listen carefully to children’s responses to identify and clarify misconceptions.</li> <li>Model reasoning language (e.g., “If that is right, then . . .” “That can’t be because if it were, then . . .”).</li> <li>Provide many opportunities for children to talk and listen to their peers.</li> <li>Model reasoning by thinking-out-loud.</li> <li>Explicitly call attention to a child’s think-aloud to engage peers in the process.</li> </ul>



## 2.4 Measurement, Data, and Probability

**BIG IDEAS:** Measurement attributes can be quantified and estimated using customary and non-customary units of measure. Mathematical relations and functions can be modeled through multiple representations and analyzed to raise and answer questions.

**ESSENTIAL QUESTIONS:** Why does “what” we measure influence “how” we measure? How can data be organized and represented to provide insight into the relationship between quantities?

### A. MEASUREMENT AND DATA

#### 1. MEASUREMENT

Standard	Concepts and Competencies	Supportive Practices
<b>2.4 PK.A.1</b> <b>Describe and compare measurable attributes of length and weights of everyday objects.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Recognize attributes of objects that can be measured.</li> <li>Measure objects using non-standard items (e.g., hands, shoes, yarn, blocks).</li> <li>Practice use of standard measurement tools.</li> <li>Practice using measurement vocabulary.</li> <li>Sort and order by one attribute.</li> <li>Use ordinal number words to describe the position of objects (first, second, last).</li> <li>Compare two objects with a measureable attribute in common to see which object has “more of”/“less of” the attribute and describe the difference.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Show children how to measure with non-standard items.</li> <li>Provide measuring tools (e.g., rulers, scales, measuring cups) for children to explore and use in their play.</li> <li>Explicitly discuss and model use of standard measuring tools, using measurement vocabulary.</li> <li>Engage children in cooking experiences.</li> <li>Ask questions about measurement (e.g., “How tall are you?” “How much does that weigh?” “How many footsteps to the door?”).</li> </ul>

#### 4. DATA

Standard	Concepts and Competencies	Supportive Practices
<b>2.4 PK.A.4</b> <b>Classify objects and count the number of objects in each category.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Classify up to 10 objects using one attribute into categories.</li> <li>Display the number of objects in each category.</li> <li>Count and compare the quantities of each category to describe which category has “more of”/“less of” the attribute.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide materials to practice sorting and classifying.</li> <li>Model sorting and classifying.</li> <li>Use verbal prompts (e.g., “Let’s put all the red crayons in this cup.”).</li> <li>Label storage containers with visual prompts to encourage sorting and classifying.</li> <li>Sing, recite finger plays, and read books that explore different categories (e.g., colors, shapes, animals).</li> <li>Ask children about groups (e.g., “Why do these things belong together?”).</li> <li>Collect objects to use for data collection.</li> <li>Model organization of data for graphing purposes.</li> <li>Model, using mathematical vocabulary, comparing data on graphs and charts (e.g., more, equal, less, not equal).</li> <li>Make comparisons part of daily routine (e.g., “Do more people walk or ride to school?”).</li> </ul>

MP. MATHEMATICAL PROCESSES

Standard	Concepts and Competencies	Supportive Practices
<p><b>2.4 PK.MP</b>  <b>Use mathematical processes when measuring; representing, organizing, and understanding data.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Engage in activities that include measuring, representing, organizing, and understanding data.</li> <li>Persist in activities that include measuring, representing, organizing, and understanding data (<i>Reference AL.2 PK.C</i>).</li> <li>Problem-solve in activities that include measuring, representing, organizing, and understanding data (<i>Reference AL.4 PK.C</i>).</li> <li>When prompted, communicate thinking while engaged in activities that include measuring, representing, organizing, and understanding data.</li> <li>Talk and listen to peers during activities that include measuring, representing, organizing, and understanding data.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Notice children engaged in measurement activities and describe what they are doing.</li> <li>Engage children in opportunities to measure, represent, organize, and understand data.</li> <li>Ask open-ended questions to encourage children to talk about their thinking (e.g., “I wonder how we could discover which type of weather we get the most of this month?”).</li> <li>Listen carefully to children’s responses, and restate their responses using clear, age-appropriate, mathematical language.</li> <li>Listen carefully to children’s responses to identify and clarify misconceptions.</li> <li>Model reasoning language (e.g., “If that is right, then ...” “That can’t be because if it were, then ...”).</li> <li>Provide many opportunities for children to talk and listen to their peers.</li> <li>Model reasoning by thinking-out-loud.</li> <li>Explicitly call attention to a child’s think-aloud to engage peers in the process.</li> </ul>





# Mathematical Thinking and Expression Glossary

**Algebraic Expression**—A group of numbers, symbols, and variables that express a single series of operations.

**Ascending Order**—A listing in which numbers or terms are organized in increasing value.

**Attribute**—A quality or feature regarded as a characteristic or inherent part of someone or something.

**Bar Graph**—A graph in which horizontal or vertical bars represent data.

**Cardinality**—The number of elements in a set or other grouping.

**Concrete Objects**—Physical objects used to represent mathematical situations.

**Counting On**—Given two sets of objects in which to find the sum; learner counts one set and then counts on from the first set to the second set (3 apples in one set, 1 apple in other set – learner says 1 – 2 – 3 and then 4; there are 4 in all).

**Data**—Information gathered by observation, questioning, or measurement, usually expressed with numbers.

**Descending Order**—A listing in which numbers or terms are organized in decreasing value.

**Graph**—A pictorial device that shows a relationship between variables or sets of data.

**Manipulatives**—A wide variety of physical materials, objects, and supplies that students use to foster mathematical learning.

**Non-Standard Measurement**—A measure that is not determined by the use of standard units (paper clips, blocks).

**Numerical Operations**—Place value, number sense, counting, correspondence, comparison, ordering numbers, addition, subtraction (joining/separating sets).

**Number Sense**—Understanding of numbers and their quantities.

**Ordinal Number**—A whole number that names the position of an object in a sequence.

**Pictograph**—A graph that uses pictures or symbols to represent data.

**Place Value**—The value of the position of a digit in a numeral.

**Probability**—The measure of the likelihood of an event occurring.

**Reflection**—A transformation creating a mirror image of a figure on the opposite side of a line.

**Seriation**—Arranging objects in order by size or position in space (arrange in a series of pattern).

**Spatial Sense**—Building and manipulating mental representations of two- and three-dimensional objects.

**Standard Measurement**—A measure determined by the use of standard units. (e.g., inches, feet, pounds, cups, pints, gallons, centimeters, meters, kilos, milliliters, liters)

**Subitize**—To perceive the number of (a group of items) at a glance and without counting.

**Symbol**—A sign used to represent something.

**Symmetry**—An attribute of a shape or relation; an exact reflection of a form on opposite sides of a dividing line or place.

**Three-dimensional**—Involving or relating to three dimensions or aspects; giving the illusion of depth.

**Two-dimensional**—Having only two dimensions, especially length and width.

**Whole Numbers**—The set of numbers consisting of the counting numbers and zero.



# Scientific Thinking and Technology

## Exploring, Scientific Inquiry, and Discovery

### 3.1 Life Science

### 3.2 Physical Science

### 3.3 Earth and Space Science

### 3.4 Environmental Literacy and Sustainability

### 3.5 Technology and Engineering

**C**hildren are born with natural curiosity and the innate science and math skills to interpret and respond to the world. Children learn about Science, Technology, Engineering, and Math (STEM) concepts through play. They explore, experiment, invent, design and test solutions and form ideas about how the world works. Technology, engineering, and math are the application of science to the design, creation, and construction of things. Children, who are given opportunities to conduct experiments, gather data and make conclusions, are developing skills that support discovery about the natural world and scientific inquiry. Adults support science in play by providing an engaging environment and facilitating appropriately. Scientific play is enhanced with natural objects. High quality early learning environments provide children with the structure in which to build upon their natural desire to explore, build, and question. Adults must acknowledge and support children in extending their curiosity through the scientific process of inquiry, observing, asking questions, forming hypothesis, investigating, gathering data, drawing conclusions, and building ideas that lead to new questions.

**A**dults facilitate scientific inquiry when classrooms or learning environments are structured to promote curiosity. Scientific inquiry is the active search for knowledge and occurs most successfully when adults intentionally create activities and experiences that allow children to use previously learned



knowledge to understand new information. One role of the adult during this active exploration is to scaffold children's thinking by asking open-ended questions. Open-ended questions encourage problem-solving and support children's learning of the world around them. Open-ended questions are a more effective strategy to encourage learning and critical thinking when compared to closed questions, which typically result in short answers that don't provide insight into children's thinking.

When learning environments are structured to promote curiosity, children use strategies that are based on scientific inquiry.

## The Scientific Method

**T**he scientific method is a way for scientists to study and learn things. It involves making an observation and identifying a problem, gathering data, making a hypothesis, and testing the hypothesis. Sometimes the problem or the hypothesis changes as you do experiments. The scientific method can be used by children on topics and questions that interest them.

## Steps of the Scientific Method

1. Make an observation and identify a problem
2. Gather data
3. Make a hypothesis
4. Test the hypothesis
5. Make changes

## The Engineering Design Process

**A**ccording to The National Association for the Education of Young Children (NAEYC), adding engineering practices to the preschool classroom formally introduces young children to the design process. Design is the “study of aesthetics and the utility of items in our daily lives” (Bequette & Bequette 2012, 40). While professional designers typically have an elaborate multistep process for creating and improving their plans to solve problems, a streamlined approach for novice designers is needed for young children.

**E**ngineering is Elementary developed a five-step engineering design process for elementary students (Museum of Science, Boston 2018):

1. Ask—to identify the problem and others’ solutions
2. Imagine—to brainstorm and select a solution to test
3. Plan—to specify the design and materials
4. Create—to make and test a model
5. Improve—to ask how the design can be even better and start the cycle again

**N**AEYC developed a slightly modified four-step design process for preschoolers:

- Find a problem: Identify a problem or need. Ask why is it important and how have others approached the problem.
- Imagine and plan: Brainstorm solutions. Sketch possible plans. Choose one to build. List and gather needed materials.
- Create: Refer to the plan and build a model or prototype. Share the model for feedback or test the prototype.
- Improve: Analyze the model or prototype with others. How could it be improved? Redesign based on feedback.

## 3.1 Life Science

**BIG IDEAS:** Living things have unique characteristics which differ from non-living things. The characteristics of living things can be observed and studied.

**ESSENTIAL QUESTIONS:** In what ways do living and non-living things differ? What are similarities, differences, and patterns of living things?

### ORGANIZATION FOR MATTER AND ENERGY FLOW IN ORGANISMS

**3.1 PK.A:** Use observations to identify and describe what plants and animals (including humans) need to survive.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>There are differences between living and non-living things.</b></p> <p><b>All living things have basic needs that allow them to live and grow.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Sort objects by living and non-living.</li> <li>Categorize common living things into plants and animals.</li> <li>State that living things need air, food, and water to survive.</li> <li>Observe the effect of darkness and light on growing plants.</li> <li>Tell the parts of a person, animal, or plant.</li> <li>Draw a picture of a person, an animal, or a plant including most of the major observable features.</li> <li>Ask questions about objects, organisms, and events.</li> <li>Use the five senses and simple equipment to gather data.</li> <li>Collect objects during a nature walk.</li> <li>Describe observations accurately.</li> <li>Compare observations with others.</li> <li>Make a prediction about the result of the experiment.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Include live animals and plants along with non-living representations of animals and plants (e.g., pictures/posters and plastic animals).</li> <li>Display worm farms, bird feeders, or ant hills for observation.</li> <li>Read books about living and non-living things.</li> <li>Set up a science table or exploration area, stocked with both living and non-living things.</li> <li>Provide living things within the classroom that children actively care for (e.g., non-toxic plants, classroom pet).</li> <li>Explicitly discuss what living things need to survive.</li> <li>Provide pictures and real objects for observation.</li> <li>Discuss the names of parts (e.g., root, stalk, bud or hoof, wing, claw).</li> <li>Encourage documentation of observations in journals with words and/or pictures.</li> <li>Provide tools for exploration (e.g., magnifying glass, microscope, tweezers, eye droppers, and scale).</li> <li>Use outdoor time as opportunities to explore and investigate the environment.</li> <li>Provide materials for children to sort, examine, and explore at the science table.</li> <li>Compare and contrast plants and animals.</li> <li>Discuss how plants and animals are similar and different.</li> <li>Encourage collaboration and discussion among peers about their questions and observations.</li> <li>Encourage children to make predictions about simple experiments and observations.</li> </ul>
<p><b>Plants and animals grow and change.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Observe and document the growth of a living thing through drawings, writing, and/or photos.</li> <li>Describe changes in people and animals over time (e.g., losing teeth, growing out of clothing, beans sprouting).</li> <li>Care for plants and animals in the classroom.</li> <li>Identify changes that occur to animals during the seasons.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Encourage documentation of observation in journals with words and pictures.</li> <li>Display pictures that show life cycles.</li> <li>Provide opportunities to observe changes in plants and animals.</li> <li>Set up a science table and exploration area.</li> <li>Take nature walks during different seasons and point out differences in observations of plants and animals.</li> <li>Read books about animals and their adaptations to the changing seasons.</li> </ul>

## 3.2 Physical Science

**BIG IDEAS:** Physical properties help us to understand the world.

**ESSENTIAL QUESTIONS:** What are physical properties of objects? How are physical properties of objects discovered? What effect does energy have on the physical properties of objects?

### STRUCTURE AND PROPERTIES OF MATTER

**3.2 PK.A:** Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Different kinds of matter exist, and matter can be described and classified by its observable properties.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Recognize the different types of matter (e.g., solid, liquid, gas).</li> <li>Describe objects according to size, shape, color, or properties of matter.</li> <li>Collect items and sort them according to shape, color, or other attributes.</li> <li>Recognize that matter takes on different shapes depending upon its type (e.g., solids have a definite shape, liquids take the shape of their container, gas lacks shape and is present everywhere).</li> <li>Ask questions about objects.</li> <li>Use the five senses and simple equipment to gather data.</li> <li>Make a prediction about the results of the experiment.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Encourage children to collect, sort, classify, and describe many materials.</li> <li>Provide opportunities to sort by size, color, shape, and texture.</li> <li>Explicitly use science vocabulary (e.g., solid, liquid, texture).</li> <li>Provide children with various solid objects (e.g., books, boxes, pencils, and pebbles) and have them determine the shape of the object.</li> <li>Provide children with glasses of water. Give them a square bowl, a circular bowl, and a cup. Let them pour the water from the glass to each container. Instruct them to pour the water onto the table or a tile floor. Have them determine the shape of the water and how it changes depending on the container.</li> <li>Provide children with baggies. Let them inflate the baggies. Tie them tightly. Now puncture the baggie. Let them feel the air that comes out through the small hole.</li> <li>Conduct experiments that use solids, liquids, and gas (e.g., melting an ice cube and re-freezing it, adding powdered drink mix to water).</li> <li>Ask for predictions about what might happen when one substance is combined with another.</li> <li>Encourage documentation of observations in journals with words and/or pictures.</li> <li>Encourage collaboration and discussion among peers about their questions and observations.</li> <li>Provide various types of matter to explore in science area or sensory table.</li> </ul>
<p><b>Matter can change depending on temperature.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Point out when a change in matter occurs.</li> <li>Observe differences in water (e.g., ice cube or snow melting and freezing).</li> <li>Notice changes in food substances during cooking.</li> <li>Experiment with changes in matter.</li> <li>Experiment with changes in substances when combined.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide materials for children to mix and combine (e.g., ice, snow, water).</li> <li>Cook with children and talk about the changes that occur when foods are combined.</li> <li>Ask questions to provoke discussion of observations.</li> <li>Talk about observable changes in matter (e.g., ice cream at room temperature, mixing baking soda and vinegar, shaking cream in a jar to make butter).</li> </ul>

## FORCES AND MOTION

**3.2 PK.A:** Participate in investigations to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Comment about the speed or direction of objects during play.</li> <li>• Demonstrate an understanding of fast, slow, back, forth, start and stop.</li> <li>• Use the five sense and simple equipment to gather data.</li> <li>• Experiment with objects or ideas to obtain a result.</li> <li>• Make predictions about an outcome (e.g., What might happen to a kite when the wind blows or slows down?).</li> <li>• Describe observations accurately.</li> <li>• Compare observations with others.</li> <li>• Push or pull objects with varying size, shape, and weights.</li> </ul> <p style="text-align: center;"><i>Reference 3.5.PK.M</i></p>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Describe the speed or direction of objects relating to pushing and pulling as children are engaged in play.</li> <li>• Encourage children to extend thinking by asking “why” and “what if” questions.</li> <li>• Encourage collaboration and discussion among peers about their questions and observations.</li> <li>• Encourage children to make predictions about simple experiments.</li> <li>• Encourage documentation of observations in journals with words and/or pictures.</li> <li>• Use center time as opportunities to explore and investigate the properties of a variety of materials.</li> <li>• Compare and contrast objects.</li> </ul>

## TYPES OF INTERACTIONS

**3.2 PK.B:** Participate in investigations to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Pushes and pulls can have different strengths and directions and when objects touch or collide, they push on one another and can change motion.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate an understanding of push and pull.</li> <li>• Participate in activities that involve changes in strength and direction in the pushing and pulling of objects and discuss the outcomes.</li> <li>• Make predictions about an outcome (e.g., What might happen to a car that is pushed up or down a hill?).</li> <li>• Describe observations accurately.</li> <li>• Compare observations with others.</li> <li>• Push or pull objects using varying strengths and directions.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Facilitate activities for children to engage with different strengths or directions of pushes and pulls on the motion of objects.</li> <li>• Describe the motion of objects relating to strengths and direction of pushing and pulling as children are engaged in play.</li> <li>• Intentionally use the words push, pull, strength, and directional words.</li> <li>• Encourage children to extend thinking by asking “why” questions.</li> </ul>

## CONSERVATION OF ENERGY AND ENERGY TRANSFER

**3.2 PK.C:** Recognize that light from the sun has an effect on the earth’s surface.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Sunlight warms the earth’s surface.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Understand the earth’s surface could include rocks, sand, soil, water.</li> <li>• Participate in investigations of the effect of the sun on the earth’s surface.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide experiences for children to observe ways the sun affects the earth’s surface.</li> <li>• Explicitly discuss how the sun affects the earth’s surface.</li> </ul>

**3.2 PK.D:** Participate in simple investigations that will reduce the warming effect of sunlight.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Placing an object between the sun and the earth’s surface will reduce the warming effect of the sunlight.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Comment on the impact an object has when placed between the sun and the earth’s surface (e.g., umbrellas, canopies, and tents).</li> <li>• Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.</li> </ul> <p><i>Reference 3.5.PK.M</i></p>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide materials and opportunities for children to brainstorm a problem and test solutions.</li> </ul>

### 3.3 Earth and Space Science

**BIG IDEAS:** The earth, which is part of a larger solar system, consists of structures, processes, and cycles which affect its inhabitants.  
**ESSENTIAL QUESTIONS:** What structures, processes, and cycles make up the earth? How do the various structures, processes, and cycles affect the earth’s inhabitants? How do we know the earth is part of a larger solar system?

#### WEATHER AND CLIMATE

**3.3 PK.A:** Identify seasons that correspond with observable conditions and identify how weather affects daily life.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Seasons correspond with observable conditions and weather affects daily life.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Name the four seasons and an observable condition for that season (e.g., falling leaves, snow, rain, buds on trees, or green grass).</li> <li>• Match types of clothing or activities to seasonal weather conditions (e.g., we use an umbrella when it is raining; we wear coats, hats, scarves, and mittens when it’s cold outside).</li> <li>• Use a thermometer as a tool for measuring temperature.</li> <li>• Talk about current weather events that affect the community.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Take nature walks to observe weather conditions.</li> <li>• Talk about the weather conditions daily.</li> <li>• Provide opportunities to sort pictures of activities, clothing, and toys according to the types of weather and season they would be connected to (e.g., sled with snow, bathing suit with sun).</li> <li>• Hang a thermometer outdoors and read it daily to determine the temperature.</li> <li>• Talk about the purpose of a thermometer.</li> <li>• Talk about and graph the changes in temperature and children’s dress (e.g., “How many wore their boots today?”).</li> <li>• Provide different types of seasonal clothing in the dramatic play area.</li> </ul>



## 3.4 Environmental Literacy and Sustainability

**BIG IDEAS:** People live in an environment. People share the environment with other living things. People are impacted and have impact on the environment.

**ESSENTIAL QUESTIONS:** How can I describe my immediate environment? In what ways can I use the environment? How does what I do (positive or negative) affect my environment?

### AGRICULTURAL AND ENVIRONMENTAL SYSTEMS AND RESOURCES

**3.4 PK.A:** Identify natural resources available to people in their daily lives.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Living things, including humans, need water, air, and resources from the land; and they live in places that have the things they need.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• State that living things need air, food, and water to survive.</li> <li>• Understand that the things we use can be made from things found in the environment.</li> <li>• Match simple items used by people to its natural resource (e.g., milk to cow, wood for building to tree, wool to sheep).</li> <li>• Understand that natural resources are materials that come from the environment and are used by people.</li> <li>• Discuss and use natural items collected from the immediate environment.</li> <li>• Label human needs as air, food, water, shelter, clothing.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide living things within the classroom that children actively care for (e.g., non-toxic plants, classroom pet).</li> <li>• Explicitly discuss what living things need to survive.</li> <li>• Use texts, including digital media, to explore how natural resources become items people use for survival.</li> <li>• Make connections for children between the items used in the classroom/home and the resources they come from.</li> <li>• Engage in gardening and use the food grown for meals and snacks.</li> <li>• Collect and use rainwater within the classroom.</li> <li>• Explicitly use “natural resource” and define using terms children will understand.</li> <li>• Use texts, including digital media, to explore how natural resources become items people use for survival.</li> <li>• Engage children in discussions about human needs.</li> </ul>

### SUSTAINABILITY AND STEWARDSHIP

**3.4 PK.D:** Engage in activities that reduce the impact of humans on the local environment.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Things people do impact the world around them. People can make choices that reduce those impacts.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Identify how litter can have a negative impact on the environment.</li> <li>• Participate in experiments that show how litter can impact the environment.</li> <li>• Identify ways that litter should be handled.</li> <li>• Sort waste into those things that can be recycled and those things that cannot.</li> <li>• Practice recycling as part of classroom routine.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Create experiments about litter’s impact on the environment.</li> <li>• Show pictures and videos about the impact of various types of pollution on the environment.</li> <li>• Model and encourage the cleanup of litter found in the immediate environment.</li> <li>• Provide recycling bins for children to use.</li> <li>• Encourage “reduce, reuse, and recycle” within the classroom.</li> </ul>



## 3.5 Technology and Engineering

**BIG IDEAS:** Technology impacts daily living and can be used as a tool for exploring and understanding the world, as well as communicating with one another. The media (e.g., music, books, maps, TV programming, newspapers, magazines, movies, Internet, applications, advertising) constructed with available technology conveys a message that can be read, interpreted, and evaluated.

**ESSENTIAL QUESTIONS:** How do I choose the correct technology for a task? Can I use various technologies appropriately? How do I read, interpret, and evaluate media?

### APPLYING, MAINTAINING, AND ASSESSING TECHNOLOGICAL PRODUCTS AND SYSTEMS

#### 3.5 PK.A: Identify and use everyday symbols.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions.</b></p> <p><i>Reference</i> 9.1.V PK.E</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Label symbols including road signs, symbols for persons with disabilities, and icons on a screen.</li> <li>Use symbols to represent or communicate an idea or a solution to a problem.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide opportunities to explore different everyday symbols in the classroom and school environment.</li> <li>Describe examples of symbols and their meanings.</li> </ul>

#### 3.5 PK.C: Identify various technologies used in everyday life.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Technology impacts daily living and can be used as a tool for understanding the world and communicating with others.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Label technology with appropriate vocabulary when using or shown (e.g., telephone, cell phone, computer, TV, camera, tablet, e-reader, Smart board).</li> <li>Discuss personal experiences with technology.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide technological equipment that children can use independently or with adult support.</li> <li>Display pictures that reflect technology in use.</li> <li>Use appropriate terms for technology and discuss how each can be used.</li> </ul>

#### 3.5 PK.E: Explain the helpful and harmful effects of technology.

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Use of technology impacts humans and the environment.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Label technology with appropriate vocabulary when using or shown (e.g., telephone, cell phone, computer, TV, camera, tablet, e-reader, Smart board).</li> <li>Discuss personal experiences with technology.</li> <li>Identify how technology affects daily lives.</li> <li>Describe different types of technology.</li> <li>Discuss how technology use could be helpful or harmful.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide examples of technology and how it impacts humans and the environment.</li> <li>Make charts to illustrate the difference between helpful and harmful uses of technology.</li> </ul>

**3.5 PK.K: Safely use tools to complete tasks.**

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Tools can be used to accomplish a task.</b></p> <p><b>Tools are anything used to extend human capability also referred to as technology.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Identify different tools.</li> <li>• Use tools for intended purpose.</li> <li>• Discuss the ways in which tools can be used safely.</li> <li>• Follow established rules (e.g., time limit, handling with care, putting away) when using tools.</li> <li>• Choose tools that are appropriate for an identified task.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide tools that children can use independently or with adult support (ex. Scissors, crayons, markers, computers, tablets, etc.).</li> <li>• Discuss the intended purpose of various tools.</li> <li>• Establish rules for use of tools using children’s input and be consistent when applying rules.</li> <li>• During class discussions, identify digital tools that could help learners find out more.</li> <li>• Use available digital tools to enhance instruction/learning, encouraging collaboration and interaction between adults and children, as well as between peers.</li> </ul>

**DESIGN AND DESIGN THINKING IN TECHNOLOGY AND ENGINEERING EDUCATION**
**3.5 PK.M: Demonstrate essential skills of the engineering design process.**

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>The Engineering Design Process has steps that should be followed.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Identify the steps of the engineering design process (Ask, Imagine, Plan, Create, Improve).</li> <li>• Participate in activities that use the steps of the engineering design process.                             <ul style="list-style-type: none"> <li>◦ Ask – Define the problem.</li> <li>◦ Imagine – Brainstorm possible solutions.</li> <li>◦ Plan – Research ideas and explore possibilities. Establish criteria and constraints. Consider alternative solutions and select an approach.</li> <li>◦ Create – Develop a design proposal. Make or model a prototype. Test and evaluate.</li> <li>◦ Improve – Refine the design, create the solution, communicate the results.</li> </ul> </li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide opportunities for students to use the engineering design process.</li> <li>• Teach the steps of the engineering design process.</li> <li>• Use students’ natural curiosity to initiate and guide the use of the engineering design process.                             <ul style="list-style-type: none"> <li>◦ Ask – Are responsive to the questions students ask and are able to distinguish when to seize opportunities to engage in the design process.</li> <li>◦ Imagine – Engage students in brainstorming opportunities and avoid judging ideas.</li> <li>◦ Plan – Encourage students to research their ideas and ask “what if” questions. Provide materials for representation of the plan.</li> <li>◦ Create – Provide materials.</li> <li>◦ Improve – Ask open ended questions and provide opportunities for students to reflect.</li> </ul> </li> </ul>

**3.5 PK.N: Participate in simple investigations to determine how things work.**

Core Ideas	Concepts and Competencies	Supportive Practices
<p><b>Asking questions, listening, discussing, and testing predictions assist in understanding how things work.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Engage in listening, questioning, and discussing.</li> <li>• Ask questions about how things work.</li> <li>• Observe and discuss how things work.</li> <li>• Take things apart and put them back together.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Be responsive to the questions that students ask.</li> <li>• Facilitate opportunities that allow students to safely explore how things work.</li> <li>• Provide resources such as books and digital media that explore how things work.</li> </ul>

**3.5 PK.S:** Apply design concepts, principles, and processes through play and exploration.

Core Ideas	Concepts and Competencies	Supportive Practices
There is always more than one possible solution to a problem. Play and exploration are important in testing multiple solutions.	<p><i>Reference 3.5.PK.M</i></p> <p><i>Reference AL1.PK.A, AL2.PK.C, AL3.PK.B, AL3.PK.C, AL4.PK.C.</i></p>	<p><i>Reference 3.5.PK.M</i></p> <p><i>Reference AL1.PK.A, AL2.PK.C, AL3.PK.B, AL3.PK.C, AL4.PK.C.</i></p>

**INTEGRATION OF KNOWLEDGE, TECHNOLOGIES, AND PRACTICES**

**3.5 PK.X:** Develop a plan in order to complete a task.

Core Ideas	Concepts and Competencies	Supportive Practices
Tasks can be broken into steps and completed one at a time.	<p><i>Reference AL2.PK.B</i></p>	<p><i>Reference AL2.PK.B</i></p>

**NATURE AND CHARACTERISTICS OF TECHNOLOGY AND ENGINEERING**

**3.5 PK.CC:** Discuss the roles of scientists, engineers, technologists, and others who work with technology.

Core Ideas	Concepts and Competencies	Supportive Practices
There are many careers that use technology.	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Act out roles’ scientists, engineers, technologists, and others who work with technology.</li> <li>Examine and explore different careers and discuss the similarities and differences in the way that those careers use technology.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Read books, both fiction and nonfiction, describing people’s jobs.</li> <li>Invite scientists, engineers, and technologists into the classroom to talk about their jobs.</li> <li>Organize field trips.</li> <li>Add props and clothing to play areas that represent scientists, engineers, technologists, and others who work with technology.</li> <li>Describe different careers and explain how these careers use technology.</li> <li>Provide examples of how people with different specialties can collaborate to design, create, build, and test a product or system.</li> </ul>



# Scientific Thinking Glossary

**Characteristic** – A feature or quality belonging typically to a person, place, or thing and serving to identify it.

**Climate** – The weather conditions prevailing in an area in general or over a long period.

**Energy** – The capacity of a body or system to do work.

**Energy Flow** – Flow of energy is the way energy flows through circuits or a food chain.

**Experiment** – A test done in order to learn something or to discover if something works or is true

**Fact** – Information that has been objectively verified.

**Force** – Strength or energy as an attribute of physical action or movement.

**Form** – The visible shape or configuration of something.

**Function** – An activity or purpose natural to or intended for a person or thing.

**Hypothesis** – An assertion subject to verification or proof as a premise from which a conclusion is drawn.

**Inquiry** – A systematic process for using knowledge and skills to acquire and apply new knowledge.

**Investigation** – The action of investigating something or someone; formal or systematic examination.

**Life Cycle** – The series of changes in the life of an organism, including reproduction.

**Matter** – The substance or substances of which any physical object consists or is composed.

**Model** – A description, analogy, or a representation of something that helps us understand it better (e.g., a physical model, a conceptual model, a mathematical model).

**Motion** – The action or process of moving or being moved.

**Organism** – An individual animal, plant, or single-celled life form.

**Patterns** – Repeated processes that are exhibited in a wide variety of ways; identifiable recurrences of the element and/or the form.

**Prediction** – To declare or indicate in advance; especially foretell on the basis of observation, experience, or scientific reason.

**Properties** – The characteristic that can be used to describe an object or substance.

**Science** – Search for understanding of the natural world using inquiry and experimentation.

**Scientist** – A person who is studying or has expert knowledge of one or more of the natural or physical sciences.

**Species** – A group of individual organisms that are capable of interbreeding to produce fertile offspring in nature.

**Substances** – Any type of matter or material.

**System** – A group of related objects that work together to achieve a desired result.

**Temperature** – The degree or intensity of heat present in a substance or object, especially as expressed according to a comparative scale and shown by a thermometer or perceived by touch.

# Environment and Ecology Glossary

**Adaptation** – Special, inherited characteristics that help an organism survive in its environment and which are developed over time.

**Ecosystem** – A biological community of interacting organisms and their physical environment.

**Litter** – Waste materials carelessly discarded or accidentally deposited in an inappropriate place. Littering is against the law.

**Natural Resources** – Those raw materials supplied by the Earth and its processes. Natural resources include nutrients, minerals, water, plants, animals, etc.

**Nonrenewable Resources** – Natural materials such as oil, gas, coal, etc. which are considered exhaustible because of their scarcity, the great length of time required for their formation, or their rapid depletion.

**Pollution** – Harmful substances deposited in the air, water, or land, leading to a state of dirtiness, impurity, or unhealthiness.

**Recycle** – To make materials such as glass, aluminum, paper, steel, and plastic into new products.

**Reduce** – To decrease the amount of waste we produce by buying only what we need, avoiding disposables, and buying products that are not over-packaged.

**Renewable Resource** – A naturally occurring resource that has the capacity to be replenished through natural processes; the sun, wind, trees, and animals are renewable resources.

**Reuse** – To extend the life of an item by using it again, repairing it, or creating new uses for it.

**Sustainable** – Conserving an ecological balance by avoiding depletion of natural resources.

**Waste Management** – The collection, transport, processing, recycling, or disposal, and monitoring of waste materials.

# Technology and Engineering Glossary

**Design Solution** – The process of creating a detailed blueprint or plan for the implementation of a specific solution to a problem or challenge.

**Engineer** – An engineer conceives, designs, and creates equipment or processes to solve economic, environmental, or social problems.

**Engineering Design Process** – The process is a set of steps that guide us - or any professional engineer, scientist, or mathematician - through solving a problem.

**Technologist** – An expert in modern technology, especially technology relating to a particular activity or industry

**Technology and Engineering** – The combined disciplinary study of the engineered (human-designed) world, the goal of which is to develop individuals with a breadth of knowledge and capabilities who see the interactions between technology, engineering, and society and can use, create, and assess current and emerging Technologies.

**Tools** – Anything used to extend human capability also referred to as technology.

**STEELS Hub: STEELS Standards - SAS ([pdesas.org](http://pdesas.org))**  
an-overview-of-state-developed-p-12-standards-for-technological-and-engineering-literacy-other (5).pdf



# Social Studies Thinking

## Connecting to Communities

- 5.1 Civics and Government – Principles and Documents of Government
- 5.2 Civics and Government – Rights and Responsibilities of Citizenship
- 6.1 Economics – Scarcity and Choice
- 6.3 Economics – Functions of Government
- 6.5 Economics – Income, Profit, and Wealth
- 7.1 Geography – Basic Geographic Literacy
- 7.2 Geography – Physical Characteristics of Places and Regions
- 8.1 History – Historical Analysis and Skills Development

### Inclusive Classrooms

**E**arly childhood classrooms should be inclusive ones where children with disabilities and developmental delays engage in classroom experiences alongside their typically developing peers. When teachers, specialists, and families work together to understand and adapt teaching strategies, materials, and/or environment to children's unique needs, every child can experience success. Adults must celebrate children's accomplishments and appreciate what children can learn and do.



**T**he foundation of social studies, economics, history, and the workings of government begin with children's personal experiences and their initial understanding of themselves in relation to their families, homes, and schools. Gradually, students expand their understanding to include communities and the larger world. As their perception grows, they further expand their scope to understand how systems work together. Adults facilitate children's social studies skill development by helping them engage in active investigations that build knowledge and understanding.

## Civics and Government

**BIG IDEA:** Learning to be a good citizen helps one contribute to society in a meaningful way.

**ESSENTIAL QUESTIONS:** What rules and consequences are important? Can I identify some American symbols?

### 5.1 PRINCIPLES AND DOCUMENTS OF GOVERNMENT

#### A. RULE OF LAW

Standard	Concepts and Competencies	Supportive Practices
<b>5.1 PK.A</b> <b>State rules and their consequences.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Describe classroom rules.</li> <li>Explain a consequence for breaking a classroom rule.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Discuss rules with children.</li> <li>Explain purpose of rules (safety, respect).</li> <li>Begin to introduce games that have rules.</li> <li>Read books that support following rules (fiction and nonfiction).</li> <li>Create a class rules chart.</li> </ul>

#### F. SYMBOLS

Standard	Concepts and Competencies	Supportive Practices
<b>5.1 PK.F</b> <b>Identify basic American symbols. (e.g., American flag)</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Discuss images, pictures or items that are symbols of America.</li> <li>Identify the American flag.</li> <li>Replicate the American flag using art materials.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Display the American flag in the classroom.</li> <li>Display pictures of American symbols.</li> <li>Read books that relate to symbols of America.</li> <li>Discuss holidays that relate to America.</li> </ul>

### 5.2 RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

#### A. CIVIC RIGHTS AND RESPONSIBILITIES

Standard	Concepts and Competencies	Supportive Practices
<b>5.2 PK.A</b> <b>Identify self-membership of a group such as the class or family.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Display awareness of role as member of a group.</li> <li>Participate in group decision-making.</li> <li>Participate in classroom and family responsibilities.</li> <li>Talk about responsibilities at home.</li> <li>Work cooperatively with other children to achieve an outcome.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Talk to children about their families.</li> <li>Create a class chart listing family members and the job each person does to help the family.</li> <li>Engage children in class meetings and decision-making.</li> <li>Give children classroom jobs and responsibilities.</li> <li>Provide activities that require cooperative play.</li> </ul>

#### B. CONFLICT AND RESOLUTION



Standard	Concepts and Competencies	Supportive Practices
<b>5.2 PK.B</b> <b>Identify a problem and discuss possible solutions with adult assistance.</b> <i>*See also 16.2 PK.D</i>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Identify one or two solutions to a problem.</li> <li>Attempt to solve a conflict with a peer.</li> <li>Work with a peer to develop a solution to a problem (e.g., ways to share the playdough when there isn't enough).</li> <li>Suggest simple solutions to conflict which are most often based upon own needs and desires.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Observe and encourage children's attempts to solve their own problems.</li> <li>Provide feedback on solutions that were attempted.</li> <li>Provide reinforcement for solutions that are successful.</li> <li>Hold group meetings to discuss ways to solve classroom problems or conflicts.</li> </ul>

**C. LEADERSHIP AND PUBLIC SERVICE**

Standard	Concepts and Competencies	Supportive Practices
<i>Emerging to ...</i> <b>Identify classroom projects/activities that support leadership and service.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Show interest in leadership opportunities.</li> <li>• Choose a leader for a classroom project.</li> <li>• Ask to be the line leader.</li> <li>• Request to help teacher.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Model positive leadership skills.</li> <li>• Provide positive feedback when children assume leadership roles.</li> <li>• Read books about people who are leaders.</li> </ul>

**5.3 HOW GOVERNMENT WORKS**

**C. GOVERNMENT SERVICES**

Standard	Concepts and Competencies	Supportive Practices
<b>5.3 PK.C</b> <b>Identify community workers through their uniforms and equipment.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Match descriptions of people’s work in a community with picture illustrating the job.</li> <li>• Act out roles of community workers in dramatic play.</li> <li>• Relay personal experiences to describe the work that community workers do.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>•  Read books, both fiction and nonfiction, describing people’s jobs.</li> <li>•  Invite community workers into the classroom to talk about their jobs.</li> <li>• Organize field trips to the firehouse, police station, and other community locations.</li> <li>• Add community worker props and clothing to play areas.</li> </ul>

**F. CONFLICT AND THE COURT SYSTEM**

Standard	Concepts and Competencies	Supportive Practices
<b>5.3 PK.F</b> <b>Identify appropriate behaviors for responsible classroom citizens.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Use inside voices while indoors and outside voices when outdoors.</li> <li>• Cooperate in both large and small group activities that are facilitated by adult.</li> <li>• Follow rules and routines in classroom.</li> <li>• Respond with empathy to others who are upset.</li> <li>• Recognize when someone needs help and offer assistance.</li> <li>• Respect another’s attempts to complete tasks independently.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Discuss what it means to be a responsible classroom citizen.</li> <li>• Model responsible behavior.</li> <li>• Provide consistent rules and expectations in classroom environment.</li> <li>• Encourage peers to help one another rather than offering adult assistance, as appropriate.</li> <li>• Read and discuss books about empathy.</li> <li>• Provide specific feedback on children’s efforts to be responsible citizens.</li> </ul>





## Economics

**BIG IDEA:** Money can be used to purchase goods and services, or can be saved. People make choices about how to spend money based on different influences.

**ESSENTIAL QUESTIONS:** How can I use money? What influences the choices I make about spending what I have earned?

### 6.1 SCARCITY AND CHOICE

#### A. SCARCITY AND CHOICE

Standard	Concepts and Competencies	Supportive Practices
<i>Emerging to ...</i> <b>Identify how scarcity influences choice.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Understand that some resources are limited.</li> <li>Notice when materials are running low (e.g., “We need more paper in the art area.”).</li> <li>Offer to share materials when materials are scarce (e.g., one shovel in sensory table).</li> <li>Show preference for one material/center, but choose a different material/center when materials are scarce or center is full.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Discuss how to resolve situations when there are not as many materials as needed.</li> <li>Use class meetings to brainstorm ways to obtain resources which are limited (e.g., paper for art, wood for construction area).</li> </ul>

#### B. LIMITED RESOURCES

Standard	Concepts and Competencies	Supportive Practices
<i>Emerging to ...</i> <b>Identify family wants and needs.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Identify what people need to survive.</li> <li>Demonstrates awareness of one’s own preferences.</li> <li>Identify personal wants.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Engage children in discussions about human needs.</li> <li>Encourage children to discuss their preferences.</li> <li>Explicitly differentiate between a need and a want.</li> </ul>

#### D. INCENTIVES AND CHOICE





Standard	Concepts and Competencies	Supportive Practices
<b>6.1 PK.D</b> <b>Identify a choice based on individual interest.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Make a choice and explain the reason for the choice.</li> <li>Provide a reason for choosing to play in a particular center that shows interest in specific materials or people.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide opportunities to make decisions and choices (e.g., create a token system where children collect tokens that can be traded in, choosing what to put in trail mix from options provided).</li> <li>Allow children to make own choice during center time and ask about why children choose a particular center.</li> <li>Share enthusiasm and describe child’s interest (e.g., “I see you chose building blocks again today. You must really like the blocks.”).</li> </ul>

### 6.2 MARKETS AND ECONOMIC SYSTEMS

#### C. ADVERTISING AND MEDIA




Standard	Concepts and Competencies	Supportive Practices
<i>Emerging to ...</i> <b>Identify advertisements that encourage us to buy things.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Recognize logos (environmental print) from local businesses.</li> <li>Discuss advertisements (e.g., radio, print, TV).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Discuss what an advertisement is and how they are messaged.</li> <li>Show and discuss examples of a variety of advertisements.</li> <li>Encourage children to share advertisements about products they want/need.</li> <li>Conduct an experiment using similar products with different advertising (e.g., one uses a familiar character) to spark discussion about the influence of advertisements.</li> </ul>

**D. PRICE DETERMINATION**

Standard	Concepts and Competencies	Supportive Practices
<b>6.2 PK.D</b> <b>Explain how money is used.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Identify that money is used to buy things.</li> <li>State that money can be saved.</li> <li>Use pretend money while engaging in dramatic play activities.</li> <li>Practice exchanging play money for goods.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li> Set up dramatic play opportunities that involve the use of pretend money (e.g., bank, grocery store, restaurant).</li> <li> Use names of coins and currency.</li> <li> Provide opportunities to handle real money.</li> <li> Introduce the purpose of a bank, creating opportunities for children to use banking in their classroom experience.</li> <li>Create a token system where children collect tokens that can be traded in for supplies or trinkets.</li> </ul>


**6.3 FUNCTIONS OF GOVERNMENT**

**D. GOVERNMENT’S ROLE IN INTERNATIONAL TRADE**




Standard	Concepts and Competencies	Supportive Practices
<b>6.3 PK.D</b> <b>Identify products produced locally.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Name items that come from farms, factories, and/or businesses within the community.</li> <li>Talk about products that can be found around their homes.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li> Invite local businesses to visit and share what products they produce.</li> <li> Take children on a field trip to a local farm, factory, or business and observe/discuss how local products are made.</li> <li> Bring in local products to use/display in classroom.</li> </ul>

**6.5 INCOME, PROFIT, AND WEALTH**

**A. FACTORS INFLUENCING WAGES**

Standard	Concepts and Competencies	Supportive Practices
<b>6.5 PK.A</b> <b>Differentiate between work and play.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Respond that adults work to earn money.</li> <li>Relate that work involves performing an activity that is chosen and directed by someone else, and has a specific goal.</li> <li>Relate that play is a self-selected activity that may or may not have a specific purpose.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li> Provide many opportunities for children to play with materials without a pre-determined purpose.</li> <li>Provide both child-directed and teacher-directed activities throughout the day.</li> <li>Discuss that people do many different kinds of jobs to earn money.</li> <li>Share personal hobbies and interests.</li> </ul>

**C. TYPES OF BUSINESS**

Standard	Concepts and Competencies	Supportive Practices
<b>6.5 PK.C</b> <b>Identify local businesses.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Participate in role-play that is related to a local business (e.g., pet store, hair salon, restaurant).</li> <li>Describe where customers go to acquire specific goods or services (e.g., food purchased at grocery store, hammer and nails purchased at hardware store).</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li> Engage local experts (e.g., business owners or workers) to visit classroom and share about the service or goods that are sold or performed.</li> <li> Take a field trip to or a virtual tour of a local business.</li> <li> Take a walk around the neighborhood to identify the businesses in the community.</li> <li>Provide materials from local businesses in dramatic play.</li> </ul>



# Geography

**BIG IDEA:** Location can be represented using a variety of tools.

**ESSENTIAL QUESTIONS:** What tools help me to understand the location of places and things? How can I represent the location of places and things?

## 7.1 BASIC GEOGRAPHIC LITERACY

### A. GEOGRAPHIC TOOLS

Standard	Concepts and Competencies	Supportive Practices
<b>7.1 PK.A</b> <b>Explain how a map is a representation of places.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Use a simple map.</li> <li>• Use available materials (e.g., blocks) to represent buildings, roads, or houses.</li> <li>• Include representations of roads, bodies of water, and buildings in play.</li> <li>• Discuss tools used to locate places.</li> <li>• Use the term “map.”</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>•  Display and discuss the purposes for various tools for locating places (e.g., maps, globes, evacuation charts).</li> <li>•  Discuss digital devices that assist in getting us from one place to another (e.g., GPS).</li> <li>• Talk about how to get from one place to another.</li> <li>• Engage children in play scenarios that use simple maps. (e.g., scavenger hunts, pirate treasure hunt)</li> </ul>

### B. LOCATION OF PLACES AND REGIONS

Standard	Concepts and Competencies	Supportive Practices
<i>Emerging to ...</i> <b>Describe the location of places in the home, school, and community to gain an understanding of relative location.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Describe the location of items/areas in the classroom and at home.</li> <li>• Use directionality, size, and position (e.g., left, right, first, last, little, big, top, bottom) to describe location.</li> <li>• Place pictures of common household items in the proper rooms of a floor plan.</li> <li>• Listen to directions and retrieve items.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Encourage children to move in various ways (e.g., climbing, jumping, and rolling) so they experience position in space.</li> <li>• Point out where things are located.</li> <li>• Use left and right and other directional terms.</li> <li>• Ask children to describe where specific items are located in the classroom, school, and home.</li> </ul>

## 7.2 PHYSICAL CHARACTERISTICS OF PLACES AND REGIONS

### A. PHYSICAL CHARACTERISTICS

Standard	Concepts and Competencies	Supportive Practices
<b>7.2 PK.A</b> <b>Describe the characteristics of home and frequently visited locations to gain an understanding of physical features.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Describe simple characteristics of home (e.g., type of dwelling, where located, what surrounds it).</li> <li>• Identify familiar places in the neighborhood.</li> <li>• Describe simple characteristics of business or community structures (e.g., type of dwelling, where located, what surrounds it).</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Ask children to describe their home and what’s close to their home.</li> <li>• Compare types of homes.</li> <li>• Discuss the term “address.”</li> <li>• Ask children questions about what places they visit in their community.</li> <li>• Display and discuss pictures of local businesses within the general vicinity.</li> <li>• Engage children in a project-based inquiry about their community.</li> </ul>

# History

**BIG IDEA:** Past experiences and ideas help us make sense of the world.

**ESSENTIAL QUESTIONS:** In what ways can events be sequenced? How do I use past experiences and events to understand the present?

## 8.1 HISTORICAL ANALYSIS AND SKILLS DEVELOPMENT

### A. CONTINUITY AND CHANGE OVER TIME

Standard	Concepts and Competencies	Supportive Practices
<b>8.1 PK.A</b> <b>Identify a sequence of events through a day.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Demonstrate an understanding of past, present, and future (e.g., today is ___, yesterday was ___, and tomorrow will be ___, recall information from the immediate past, sequence pictures of self from birth to present).</li> <li>• Describe the daily routine (e.g., what happens first, before lunch, after lunch, at end of day).</li> <li>• Show anticipation for regularly-scheduled events.</li> <li>• Use words to describe time (e.g., yesterday, today, tomorrow, o'clock).</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Talk about what is happening during the day and the week.</li> <li>• Explicitly use terminology to label events and routines (e.g., today, tomorrow, yesterday, next, later, long ago).</li> <li>• Establish and maintain a consistent routine.</li> <li>• Ask children to recall what happened last night or yesterday.</li> <li>• Post a picture schedule of the daily routine.</li> <li>• Use calendars to talk about what happened in the past and what will happen in the future.</li> <li>• Provide access to clock, timers, and watches.</li> <li>• Engage in intergenerational activities (e.g., visiting infant room, having grandparents visit).</li> </ul>

### C. RESEARCH

Standard	Concepts and Competencies	Supportive Practices
<b>8.1 PK.C</b> <b>Understand that information comes from many sources such as books, computers, and newspapers.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>• Label types of media and what information can be gained (e.g., recipes from a cookbook, prices from an advertisement).</li> <li>• Locate information on identified topics using media (e.g., music, books, maps, TV programming, newspapers, magazines, movies, Internet, applications, advertising).</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>• Provide a variety of resources on topics that interest children (e.g., books, pictures, authentic objects).</li> <li>• Model using resources to get information.</li> <li>• Support children (e.g., ask questions, encourage thinking) while children are working on a project based on research.</li> <li>• Talk about the resources you use to gain specific information (e.g., recipes from a cookbook, prices from an advertisement).</li> </ul>



# Social Studies Thinking Glossary

## CIVICS AND GOVERNMENT

**Authority**—Right to control or direct the actions of others, legitimized by law, morality, custom, or consent.

**Citizen**—Member of a political society who therefore owes allegiance to and is entitled to protection by and from the government.

**Civic Rights**—The rights belonging to an individual by virtue of citizenship.

**Community**—A group of people who share a common social, historical, regional, or cultural heritage.

**Conflict**—Inherent incompatibility between two or more people or two or more choices.

**Conflict Resolution**—Process by which issues arising from a disagreement or clash between ideas, principles, or people are settled.

**Country**—The acceptable political boundaries or borders recognized throughout the world.

**Decision-Making Process**—An organized approach to making choices.

**Government**—Institutions and procedures through which a territory and its people are ruled.

**Law**—The system of rules that a particular country or community recognizes as regulating the actions of its members.

**Leadership**—State or condition of one who guides or governs.

**Public Service**—Community service; a service that is performed for the benefit of the public.

**State**—A commonwealth; a nation; a civil power.

## ECONOMICS

**Community Helpers**—Any group or individual who plays a role in the community such as doctors, nurses, dentists, teachers, parents, firefighters, police officers, trash collectors, animal control officers.

**Competition**—The rivalry among people and/or business firms for resources and/or consumers.

**Consumer**—One who buys or rents goods or services and uses them.

**Cost**—What is given up when a choice is made; monetary and/or non-monetary.

**Demand**—The different quantities of a resource, good, or service that potential buyers are willing and able to purchase at various prices during a specific time period.

**Goods**—Objects that can satisfy people's wants.

**Household**—The group of people living together under one roof; a group of individuals whose economic decision-making is interrelated.

**Money**—A medium of exchange.

**Natural Resource**—Anything found in nature that can be used to produce a product. (e.g., land, water, coal)

**Price**—The amount people pay in exchange for a particular good or service.

**Producer**—One who makes goods.

**Profit**—Total revenue minus total costs.

**Scarcity**—A small and inadequate amount.

**Services**—Actions that are valued by others.

**Supply**—The different quantities of a resource, good, or service that potential sellers are willing and able to sell at various prices during a specific time period.

**Wage**—A fixed regular payment, typically paid on a daily or weekly basis by an employer.

**Wants**—Desires that can be satisfied by consuming goods, services, or leisure activities.

## GEOGRAPHY

**Climate**—Long-term patterns and trends in weather elements and atmospheric conditions.

**Culture**—The way of life of a group of people, including customs, beliefs, arts, institutions, and worldview. Culture is acquired through many means and is always changing.

**Environment**—Everything in and on earth's surface and its atmosphere within which organisms, communities, or objects exist.

**Geographic Tools**—Tools used by geographers to organize and interpret information. Tools range from the very simple (maps and globes) to the complex (Geographic Information Systems, population pyramids, satellite images, and climate graphs).

**Place**—An area with distinctive human and physical characteristics; these characteristics give it meaning and character and distinguish it from other areas.

**Resource**—An aspect of the physical environment that people value and use to meet a need for fuel, food, industrial product, or something else of value.

## HISTORY

**Document**—A formal piece of writing that provides information or acts as a record of events or arrangements.

**Media Sources**—Various forms of mass communication such as television, radio, magazines, newspapers, and Internet.

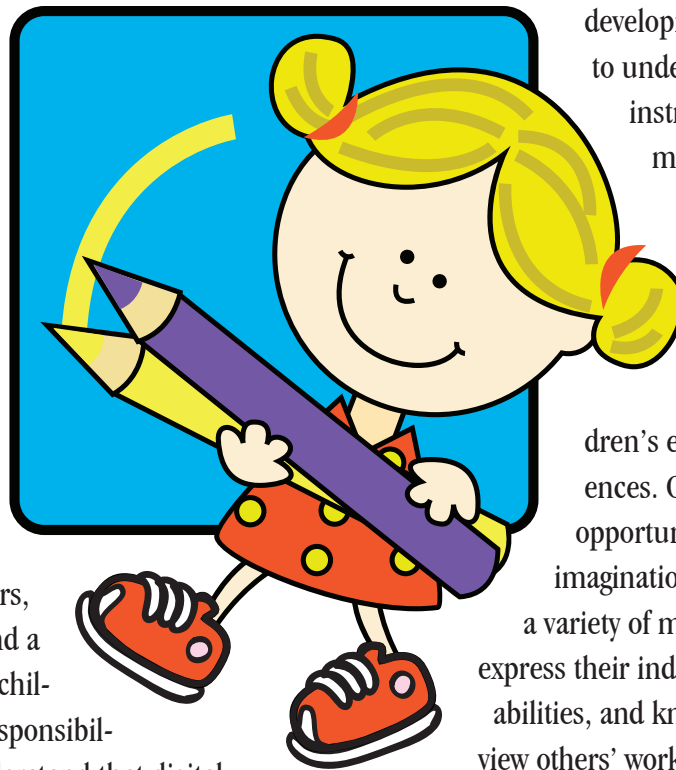
# Creative Thinking and Expression

## Communicating through the Arts

- 9.1.M Production and Performance – Music and Movement
- 9.1.D Production and Performance – Dramatic and Performance Play
- 9.1.V Production and Performance – Visual Arts
- 9.2 Historical and Cultural Context of Works in the Arts
- 9.3 Critical Response to Works in the Arts
- 9.4 Aesthetic Response to Works in the Arts

### Digital Media Literacy

**M**edia literacy includes competencies that enable people to analyze, evaluate, and create messages in a variety of forms. Children today are growing up in a digital age and are faced with increasingly new types of digital media and technology. Some current examples include electronic tablets, computers, digital cameras, video recorders, and a variety of assistive technologies for children with special needs. It is the responsibility of educators and families to understand that digital media can be a valuable instructional tool when used appropriately. Appropriate media use should not replace concrete experiences and personal interactions, but can be used to extend play and interactions. For example, use of video conferences can be used during the school day to connect a parent with his/her child. Educators and families are encouraged to engage in professional



development opportunities to understand the role and instructional uses of digital media.

**C**reative thinking and expression is an important component of children's early learning experiences. Children who are given opportunities to develop their imagination and creativity through a variety of media are learning to express their individuality in interests, abilities, and knowledge. When they view others' work, children are also learning to appreciate and respect differences in culture and viewpoint. Creative expression influences children's growing competence as creative problem-solvers and provides insight about their world around them. Teachers support creative learning by providing concrete, process-oriented play experiences that encourage children to use their imagination and to experiment with new ideas and materials.

## 9.1.M Production and Performance – Music and Movement

**BIG IDEA:** Music can be used to express and initiate aesthetic and physical responses.

**ESSENTIAL QUESTION:** How can I express my thoughts, feelings, and ideas through music and movement?

### A. ELEMENTS AND PRINCIPLES

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.1.M PK.A</b>  <b>Know and use basic elements and principles of music and movement.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Practice rhythms in different forms of music and dance.</li> <li>Explore rhythm instruments.</li> <li>Use rhythm instruments as intended.</li> <li>Participate in teacher-guided music and movement activities.</li> <li>Participate in group movement activities demonstrating an awareness of shared space.</li> <li>Demonstrate an understanding of “fast,” “slow,” “loud,” and “soft.”</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Explicitly use vocabulary for elements and principles of music and movement (e.g., rhythm, space, tempo, pitch).</li> <li>Model appropriate use of instruments.</li> <li>Call attention to the changes in music as children are listening.</li> <li>Provide experiences through large and small group activities that focus on movement elements and principles.</li> </ul>

### B. DEMONSTRATION

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.1.M PK.B</b>  <b>Respond to different types of music and dance through participation and discussion.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Participate in teacher-guided music and movement activities.</li> <li>Sing familiar songs, chants, and finger plays.</li> <li>Dance to different types of music.</li> <li>Discuss music and movement experiences.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Play a variety of music types for listening and participation.</li> <li>Introduce children to a variety of songs, finger plays, and rhythms.</li> <li>Encourage children to discuss experiences.</li> <li>Provide large and small group activities that focus on movement and music participation.</li> </ul>

### E. REPRESENTATION

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.1.M PK.E</b>  <b>Use imagination and creativity to express self through music and dance.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Initiate music and movement activities.</li> <li>Select music and movement area during free choice.</li> <li>Improvise songs and rhythmic patterns.</li> <li>Change words or tune of familiar songs to make new songs.</li> <li>Use body to represent form in space, finger plays, or stories.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Create opportunities for children to express themselves through a variety of music forms and through dance or body movements.</li> <li>Encourage children to be creative during singing by changing words and song endings.</li> <li>Use finger plays and stories that children can represent using their bodies.</li> </ul>

J. TECHNOLOGIES

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.1.M PK.J</b> Use a variety of technologies for producing or performing works of art.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Explore musical instruments.</li> <li>• Use instruments to accompany music.</li> <li>• Use instruments as intended.</li> <li>• Use age appropriate digital media applications to create music.</li> <li>• Use a variety of props to enhance movement activities (e.g., scarves, beanbags, ribbons).</li> <li>• Use recording devices (e.g., voice recorder, video recorder) to capture music and/or movement performances.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide opportunities for children to explore a variety of musical instruments.</li> <li>• Provide a variety of props for musical expression and movement.</li> <li>• Engage a local expert (e.g., high school music student, college professor, musician, dance instructor) as a guest speaker.</li> </ul>

9.1.D Production and Performance – Dramatic and Performance Play



**BIG IDEA:** Dramatic and performance play is a way to act out reality and fantasy.

**ESSENTIAL QUESTION:** How can I express my thoughts, feelings, and ideas through dramatic play?

B. DEMONSTRATION

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.1.D PK.B</b> Recreate a dramatic play experience for an audience.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Create various voice inflections and facial expressions in play.</li> <li>• Change voice inflections when recreating various characters.</li> <li>• Direct peers or follow peers' instructions about dramatic play schemes.</li> <li>• Act out stories with guidance of the adult.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Model the use of various voice inflections and facial expressions during read-aloud.</li> <li>• Provide props and costumes associated with favorite stories.</li> <li>• Participate in dramatic play events as the audience, providing praise and applause.</li> <li>• Develop teacher-guided dramatic activities (e.g., acting out a story, performing a short play for a special event).</li> </ul>

E. REPRESENTATION

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.1.D PK.E</b> Use imagination and creativity to express self through dramatic play.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Use nonconforming objects to create representations of real-life objects or activities.</li> <li>• Represent fantasy and real-life experiences through pretend play.</li> <li>• Imitate roles of people, animals, or objects observed in life experiences.</li> <li>• Use props and costumes during dramatic play.</li> <li>• Create props from available materials.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Create situations where children can role-play familiar roles or situations (e.g., home living, grocery store, restaurants).</li> <li>•  Ask questions and make suggestions to extend children's play in new directions.</li> <li>• Provide dramatic play opportunities both inside and outside.</li> <li>• Provide clothing, materials, and props that facilitate pretend play.</li> </ul>



## 9.1.V Production and Performance – Visual Arts

**BIG IDEA:** Visual arts allow expression of interests, abilities, and knowledge.

**ESSENTIAL QUESTION:** How can I express my thoughts, feelings, and ideas through visual arts?




### A. ELEMENTS AND PRINCIPLES

Standard	Concepts and Competencies	Supportive Practices
<b>9.1.V PK.A</b> <b>Know and use basic elements of visual arts.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Participate in teacher-guided visual arts activities.</li> <li>Choose art center during free choice.</li> <li>Demonstrate an understanding of “color,” “shape,” and “line.”</li> <li>Create a picture using different colors, varying the intensity of strokes and combining colors.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Explicitly use vocabulary for elements of visual arts (e.g., color, shape, line).</li> <li>Make art materials accessible to children throughout the day.</li> <li>Provide a variety of art materials.</li> <li>Model appropriate use of art materials.</li> <li>Point out basic elements of visual arts in a variety of artworks.</li> <li>Provide experiences through large and small group activities that focus on the elements of visual arts.</li> </ul>


### B. DEMONSTRATION

Standard	Concepts and Competencies	Supportive Practices
<b>9.1.V PK.B</b> <b>Combine a variety of materials to create a work of art.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Participate in teacher-guided visual arts activities.</li> <li>Choose art center during free choice.</li> <li>Use a variety of materials (e.g., chalk, paint, crayons, pencils, markers, wood, playdough).</li> <li>Draw to explore and extend themes in the classroom.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Make art materials accessible to children throughout the day.</li> <li>Provide a variety of art materials.</li> <li>Rotate art materials to provide a variety of experiences.</li> <li>Provide opportunities for children to use three-dimensional materials (e.g., clay, playdough, wood).</li> <li>Allow for individual or group projects to extend over several days.</li> <li>Display children’s artwork.</li> </ul>

### E. REPRESENTATION

Standard	Concepts and Competencies	Supportive Practices
<b>9.1.V PK.E</b> <b>Use imagination and creativity to express self through visual arts.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Participate in teacher-guided visual arts activities.</li> <li>Choose art center during free choice.</li> <li>Draw self-portrait.</li> <li>Create a work of art to represent a real or imagined object, animal, or person.</li> <li>Use a growing number of details and make more realistic representations.</li> <li>Choose different art materials to represent different types of thoughts or feelings.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li> Allow for individual or group projects to extend over several days.</li> <li> Relate art activities to other classroom experiences.</li> <li> Encourage children to talk about their artwork.</li> <li>Make art materials accessible to children throughout the day.</li> <li>Provide a variety of art materials.</li> <li>Rotate art materials to provide a variety of experiences.</li> <li>Provide multicultural art materials for use in self-representation.</li> <li>Encourage children to use materials for individual expression of feelings or thoughts.</li> <li>Display children’s artwork.</li> </ul>

J. TECHNOLOGIES

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.1.V PK.J</b> Use a variety of technologies for producing works of art.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Explore a variety of art materials and tools.</li> <li>• Participate in teacher-guided visual arts activities.</li> <li>• Choose art center during free choice.</li> <li>• Use art materials and tools as intended.</li> <li>• Manipulate materials in a variety of ways (e.g., pounding, squeezing, cutting, rolling).</li> <li>• Use age-appropriate digital media applications to create works of art.</li> <li>• Use recording devices (e.g., digital camera, video recorder) to capture works in progress and finished works of art.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>•  Use recording devices (e.g., digital camera, video recorder) to capture and share the creative process and finished works of art.</li> <li>• Make art materials accessible to children throughout the day.</li> <li>• Provide a variety of art materials.</li> <li>• Rotate art materials to provide a variety of experiences.</li> <li>• Engage a local expert (e.g., artist, sculptor, museum curator) as a guest speaker.</li> <li>• Take a field trip to an art museum.</li> </ul>

## 9.2 Historical and Cultural Context of Works in the Arts

**BIG IDEA:** Every culture has its own art forms.

**ESSENTIAL QUESTION:** Can I identify instruments and/or art forms from another culture?

D. PERSPECTIVE

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.2 PK.D</b> Explain that instruments or art forms represent cultural perspectives.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Explore instruments from different cultures.</li> <li>• Participate in discussions about where various instruments and art forms originate.</li> <li>• Identify cultures represented by various art forms.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Display many types of artwork.</li> <li>• Share a variety of music and movement forms, explicitly using appropriate vocabulary to label the forms. (e.g., jazz, classical, hip-hop, folk)</li> <li>• Play many types of music.</li> <li>• Discuss the cultures represented by art forms and instruments [e.g., hieroglyphics (Egyptian), maracas (Spanish)].</li> <li>• Read books about a variety of cultures, pointing out similarities and differences in art forms.</li> </ul>

## 9.3 Critical Response to Works in the Arts

**BIG IDEA:** People evaluate art based upon a variety of characteristics.

**ESSENTIAL QUESTIONS:** Can I explain how I feel about a particular art form? Can I provide reasons that explain my feelings about a particular art form?

F. IDENTIFICATION

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.3 PK.F</b> Recognize and name a variety of art forms.</p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Identify a photo, painting, drawing, dance, and songs.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Display children’s and professional art throughout the classroom at the child’s eye level.</li> <li>• Discuss the various types and characteristics of photography, painting, dance, performance.</li> </ul>

G. CRITICAL RESPONSE

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.3 PK.G</b>  <b>Formulate and share an opinion about others' art products.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Observe, applaud, or comment on the works of others.</li> <li>• Share an opinion about artwork when asked, "What do you think this is about?"</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide opportunities for children to work on creative activities in groups or individually.</li> <li>• Model and encourage children to comment on others' work.</li> </ul>

9.4 Aesthetic Response to Works in the Arts

**BIG IDEA:** Artwork can mean different things to different people.  
**ESSENTIAL QUESTION:** How do I express my response to a work of art?

B. EMOTIONAL RESPONSE

Standard	Concepts and Competencies	Supportive Practices
<p><b>9.4 PK.B</b>  <b>Demonstrate an emotional response to viewing or creating various works of art.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Respond through body language, facial expression, or oral language.</li> <li>• Respond through humming, swaying, tapping foot to others' work.</li> <li>• Respond at appropriate times (laugh, sigh) at others' performance.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Ask children how the artwork makes them feel.</li> <li>• Display children's and professional art throughout the classroom.</li> <li>• Provide a wide variety of art materials for children's use throughout the day.</li> <li>• Ask children how the music or movement makes them feel.</li> <li>• Provide a wide variety of music and movement materials for children's use throughout the day.</li> <li>• Provide a wide variety of dramatic and performance play materials for children's use throughout the day.</li> </ul>

# Creative Thinking and Expression Glossary

**Aesthetics**—A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts, and the inquiry processes and human responses they produce.

**Aesthetic Response**—A philosophical reply to works of art.

**Artistic Choices**—Selections made by artists to convey meaning.

**Arts Resource**—An outside community asset. (e.g., performances, exhibitions, performers, artists)

**Assess**—To analyze and determine the nature and quality of the process/product through means appropriate to the art form.

**Community**—A group of people who share a common social, historical, regional, or cultural heritage.

**Create**—To produce works of art using materials, techniques, processes, elements, principles, and analysis.

**Culture**—The way of life of a particular social, ethnic, or age group of people which includes beliefs, customs, arts, and behaviors.

**Elements**—Core components that support the principles of the arts.

**Genre**—A type of category. (e.g., music – opera, oratorio; theater – tragedy, comedy; dance – modern, ballet; visual arts – pastoral, scenes of everyday life)

**Humanities**—The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment.

**Multimedia**—The combined use of media, such as movies, CD-ROMs, television, radio, print, and the Internet, for entertainment and publicity.

**Original Works of Art**—Dance, music, theatre, and visual arts pieces created by performing or visual artists.

**Style**—A distinctive or characteristic manner or expression.

**Technique**—Specific skills and details employed by an artist, craftsperson, or performer in the production of works of art.

**Timbre**—A unique quality of sound.

**Visual Arts**—Art forms which are primarily visual in nature, such as ceramics, drawing, painting, sculpture.

# Health, Wellness, and Physical Development

## Learning about My Body

10.1 Concepts of Health

10.2 Healthful Living

10.3 Safety and Injury Prevention

10.4 Physical Activity – Gross Motor Coordination

10.5 Concepts, Principles, and Strategies of Movement – Fine Motor Coordination

### Get Up and Move!



Obesity is a growing concern even for very young children. Research indicates that even young toddlers are eating inappropriate foods with too many calories. Early childhood programs have a unique opportunity to influence children's

healthy eating and physical activity habits. Teachers need to plan adequate opportunities for children to exercise and engage in active play. In addition to engaging children in outdoor play, including active movement games and songs as part of the indoor routine can also extend the amount of time children are exercising each day. Providers must carefully plan menus that offer healthy foods and limit snacks and extras, like dessert, to



nutritionally-appropriate selections. Teachers who work with their program administrators and their families to introduce and sustain healthy choices and habits influence children's ongoing development and school success.

**T**eachers should model healthy and safe practices and promote

healthy lifestyles for children. In addition, opportunities to experience active indoor and outdoor play in which children use their bodies provide a foundation for life-long healthy habits. Children's health, safety, and ability to learn are inextricably linked. Health and safety activities, integrated throughout the day, provide a means to support children's cognition.

## 10.1 Concepts of Health

**BIG IDEA:** Awareness of health concepts provides a foundation for healthy decision-making.

**ESSENTIAL QUESTIONS:** Do I have a basic understanding of my body? Can I identify basic health concepts that help my body develop?

### B. INTERACTION OF BODY SYSTEMS

Standard	Concepts and Competencies	Supportive Practices
<b>10.1 PK.B</b> <b>Identify and locate body parts.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Participate in body identification games and songs (e.g., Hokey Pokey).</li> <li>Point to specific body parts when asked.</li> <li>Draw pictures that include some body parts.</li> <li>Participate in discussions about the functions of specific body parts.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide opportunities to point to body parts when asked.</li> <li>Provide dolls and puzzles with body parts.</li> <li>Make outlines of body and add details to body parts.</li> <li>Provide experiences that highlight the functions of body parts (e.g., add turkey baster to water table and discuss how a heart pumps, play a smell-identification game).</li> </ul>

### C. NUTRITION

Standard	Concepts and Competencies	Supportive Practices
<b>10.1 PK.C</b> <b>Identify foods that keep our body healthy.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Identify healthy and unhealthy foods.</li> <li>Classify foods by their food groups (e.g., fruits, vegetables, dairy).</li> <li>Make healthy food choices.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide a variety of healthy choices at snack or meal time.</li> <li>Create a healthy/not healthy picture sort game.</li> <li>Label storage bins in home center by food group classification to encourage food classification.</li> <li>Discuss the importance of making healthy food choices.</li> <li>Model healthy eating.</li> <li>Display <i>MyPlate</i> near mealtime area to encourage healthy portioning of food.</li> <li>Provide a variety of foods and pictures including ethnic foods (e.g., tortillas, lasagna, black-eyed peas, bagels, or chili) for children to classify.</li> <li>Provide examples of healthy meals.</li> <li>Participate in <i>Color Me Healthy</i> or other nutrition-specific professional development.</li> </ul>

### D. ALCOHOL, TOBACCO, AND CHEMICAL SUBSTANCES

Standard	Concepts and Competencies	Supportive Practices
<b>10.1 PK.D</b> <b>Identify and discuss the purposes of medicine.</b>	<b>The learner will:</b> <ul style="list-style-type: none"> <li>Identify that medicine can be used to stay healthy.</li> <li>Discuss times when medicine may be needed.</li> <li>Discuss safety practices related to proper medicine use.</li> </ul>	<b>The adult will:</b> <ul style="list-style-type: none"> <li>Provide opportunities for children to discuss what happens when we are sick and what we do to feel better.</li> <li>Discuss positive and negative points of medicine use.</li> <li>Remind children to only take medicine from a trusted adult.</li> <li>Discuss the purposes of safety caps on medicine.</li> <li>Discuss what children should do if they come across unattended medicine.</li> <li>Model proper use of medicine (e.g., proper storage in first aid kits, double checking medicine is going to appropriate child).</li> </ul>

## E. HEALTH PROBLEMS AND DISEASE PREVENTION


Standard	Concepts and Competencies	Supportive Practices
<b>10.1 PK.E</b> <b>Identify and discuss common health problems.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Participate in discussions about infectious (e.g., colds, flu, chicken pox, pink eye) and non-infectious illnesses (e.g., asthma, allergies).</li> <li>Discuss the concept of “germs.”</li> <li>Participate in activities that exemplify the spread of germs.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Use teachable moments (e.g., when many children are absent due to flu, children needing an inhaler) to discuss different types of illnesses.</li> <li>Discuss illness prevention.</li> <li>Engage children in hands-on experiences that exemplify the spread of germs.</li> <li>Read books about specific illnesses and illness prevention.</li> </ul>

## 10.2 Healthful Living



**BIG IDEA:** Children need to make healthy choices to optimize their learning potential.

**ESSENTIAL QUESTION:** What are things I can do to keep myself healthy?

## A. HEALTH PRACTICES, PRODUCTS, AND SERVICES

Standard	Concepts and Competencies	Supportive Practices
<b>10.2 PK.A</b> <b>Identify fundamental practices for good health.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Practice basic hygiene routines with adult reminders (e.g., hand washing, tooth brushing, cover nose and mouth when sneezing).</li> <li>Explain that we need to eat well, get rest, and exercise to stay healthy.</li> <li>Identify people that help keep us healthy (e.g., doctor, nurse, or dentist; gym teacher).</li> <li>Identify specific practices that support body development and function (e.g., exercise, good nutrition, rest).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li> Invite local health experts (e.g., dentist, doctor, nurse, physical trainer) to the classroom to discuss how they help to keep us healthy.</li> <li>Provide opportunities in daily schedule to practice hygiene routines.</li> <li>Create learning centers that support healthy practices.</li> <li>Display <i>MyPlate</i> near mealtime area to encourage healthy portioning of food.</li> <li>Encourage children to rest to help their bodies stay healthy.</li> <li>Model and encourage exercise and active play.</li> <li>Read books about staying healthy.</li> </ul>

## E. HEALTH AND THE ENVIRONMENT

Standard	Concepts and Competencies	Supportive Practices
<b>10.2 PK.E</b> <b>Identify environmental factors that affect health.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Discuss plants, insects, and animals that could be harmful; share personal experiences when relevant.</li> <li>Identify harmful substances.</li> <li>Discuss how we protect our bodies in different seasons (e.g., use sunscreen in summer, wear warm clothing in winter).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li> Read books about plants, insects, and animals that might be harmful.</li> <li> Engage a local expert (e.g., pest control professional, high school or college professional, florist) as a guest speaker.</li> <li>Explicitly label plants within the classroom as “nontoxic” and explain what this means.</li> <li>Talk with children about harmful substances and objects.</li> <li>Recognize and use teachable moments (e.g., avoiding insect nest on playground, avoiding stray dog, applying sunscreen, locking up cleaners) to discuss how to stay safe in the natural environment.</li> </ul>

## 10.3 Safety and Injury Prevention

**BIG IDEA:** Awareness of safe and unsafe practices provides a foundation for healthy decision-making.

**ESSENTIAL QUESTION:** What are things I can do to keep myself and others safe?

### A. SAFE AND UNSAFE PRACTICES

Standard	Concepts and Competencies	Supportive Practices
<b>10.3 PK.A</b> <b>Recognize safe and unsafe practices.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Identify and follow basic safety rules (e.g., on playground, in classroom, on field trip, crossing street).</li> <li>Identify the consequence of an unsafe behavior.</li> <li>Identify and avoid unsafe practices (e.g., playing with matches, talking to strangers).</li> <li>Explain how community helpers (e.g., firefighters, police officers) can keep us safe.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Discuss basic rules (e.g., crossing street, stranger danger, car seat safety, water safety, bike safety).</li> <li>Read books about safe and unsafe practices.</li> <li>Discuss consequences of unsafe behavior.</li> <li>Engage a local expert (e.g., police officer, firefighter, emergency management personnel) as a guest speaker.</li> <li>Provide safety worker props for dramatic play area.</li> </ul>

### B. EMERGENCY RESPONSES

Standard	Concepts and Competencies	Supportive Practices
<b>10.3 PK.B</b> <b>Recognize emergency situations and discuss appropriate responses.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Identify procedures for a variety of emergencies (e.g., fire, tornado, intruder, medical emergency).</li> <li>Participate in discussions that differentiate between emergencies and non-emergencies.</li> <li>Practice emergency procedures.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Practice making 911 calls.</li> <li>Demonstrate and practice “STOP, DROP, ROLL” and other emergency procedures.</li> <li>Practice fire and emergency evacuation procedures.</li> <li>Read books about emergency situations.</li> <li>Engage a local expert (e.g., police officer, firefighter, emergency management personnel) as a guest speaker.</li> <li>Offer specific feedback after practicing emergency procedures.</li> </ul>

## 10.4 Physical Activity – Gross Motor Coordination

**BIG IDEA:** Children gain control over their bodies and body movements through active experiences and exploration.

**ESSENTIAL QUESTION:** How do I control and coordinate my body during large motor activities and games?

### A. CONTROL AND COORDINATION

Standard	Concepts and Competencies	Supportive Practices
<b>10.4 PK.A</b> <b>Demonstrate coordination of body movements in active play.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Combine large motor movements with the use of equipment (e.g., ride a tricycle, using feet to pedal; catch a ball; throw a beanbag or ball overhand with aim; kick a ball).</li> <li>Move and stop with control.</li> <li>Use outdoor gross motor equipment.</li> <li>Run with control and direction.</li> <li>Engage in gross motor games (e.g., Hokey Pokey, London Bridge, Simon Says).</li> <li>Perform a variety of movement alongside and with a partner.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide light balls that easily fit in a hand. Encourage child to throw with one hand while stepping forward.</li> <li>Provide targets for children to throw toward (e.g., hula hoops or baskets).</li> <li>Include toys and equipment that encourage active play (e.g., three- or four-wheeled steerable vehicles, balls, climbers and slides, ramps).</li> <li>Provide outside time daily.</li> <li>Create opportunities for children to participate in large motor movement games that involve partners.</li> <li>Incorporate movement activities from <i>I Am Moving, I Am Learning</i> or other physical activity professional development.</li> <li>Engage in physical activity with the children.</li> </ul>

**B. BALANCE AND STRENGTH**

Standard	Concepts and Competencies	Supportive Practices
<b>10.4 PK.B</b> <b>Exhibit balance while moving on the ground or using equipment.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Engage in large motor activities that require strength and balance (e.g., marching, hopping, running, jumping, dancing, walking tip-toe).</li> <li>Walk on a balance beam.</li> <li>Climb stairs using alternating feet.</li> <li>Participate in an obstacle course going through tunnels, over or under equipment.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Provide space and opportunities for children to walk, run, and climb.</li> <li>Provide opportunities for children to engage in gross motor activities inside (e.g., dancing and moving to music, beanbag toss).</li> <li>Include large motor movements during transitional times. (e.g., hop to the table, jump five times while you wait to wash your hands)</li> <li>Include motor games and songs (e.g., <i>Skip to my Lou</i> and <i>The Farmer in the Dell</i>).</li> <li>Create obstacle courses to practice gross motor movements.</li> </ul>

**10.5 Concepts, Principles, and Strategies of Movement – Fine Motor Development**

**BIG IDEA:** Fine motor practice helps children develop eye-hand coordination, strength, and controlled use of tools.

**ESSENTIAL QUESTIONS:** How do I use my hands and fingers to manipulate objects? How do I develop eye-hand coordination?

**A. STRENGTH, COORDINATION, AND MUSCLE CONTROL**

Standard	Concepts and Competencies	Supportive Practices
<b>10.5 PK.A</b> <b>Use hands, fingers, and wrists to manipulate objects.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Practice manual self-help skills (e.g., zipping, snapping, buttoning).</li> <li>Practice using scissors.</li> <li>Use tongs or tweezers to pick up objects.</li> <li>Manipulate smaller objects (e.g., pegs into a pegboard, puzzle pieces, stringing beads).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Encourage and allow the time for children to dress independently.</li> <li>Provide opportunities to use scissors.</li> <li>Supply tweezers and tongs to grasp objects.</li> <li>Provide a variety of smaller objects to manipulate.</li> </ul>

**B. EYE/HAND COORDINATION**

Standard	Concepts and Competencies	Supportive Practices
<b>10.5 PK.B</b> <b>Coordinate eye and hand movements to perform a task.</b>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>Act out finger plays with hands and fingers.</li> <li>Use scissors to cut on a straight line.</li> <li>Complete self-help skills such as zip, snap, or button.</li> <li>Manipulate smaller objects (e.g., pegs into a pegboard, puzzle pieces, stringing beads).</li> <li>Use tools to pour (e.g., funnels, basters, and pitchers).</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>Teach and encourage children to participate in finger plays.</li> <li>Provide opportunities to use scissors to cut lines.</li> <li>Encourage and allow the time for children to dress independently.</li> <li>Supply tweezers and tongs to grasp objects.</li> <li>Provide a variety of smaller objects to manipulate.</li> <li>Provide opportunities for children to pour water or milk and to serve their own foods.</li> </ul>



## C. USE OF TOOLS

Standard	Concepts and Competencies	Supportive Practices
<p><b>10.5 PK.C</b>  <b>Use tools that require use of fingers, hands, and/or wrists to accomplish a task.</b></p>	<p><b>The learner will:</b></p> <ul style="list-style-type: none"> <li>• Use writing and drawing implements with functional grasp (pincer grasp).</li> <li>• Use a variety of art tools (e.g., glue sticks, paintbrushes, scissors) for a specific purpose.</li> <li>• Use tools (e.g., broom, dust pan brush, gardening tools) to complete classroom jobs.</li> <li>• Use utensils for eating appropriately.</li> <li>• Use cup or glass for drinking.</li> </ul>	<p><b>The adult will:</b></p> <ul style="list-style-type: none"> <li>• Provide many opportunities for children to write and draw.</li> <li>• Maintain an art center with a variety of art tools that are accessible to the children.</li> <li>• Provide child-sized tools for classroom jobs.</li> <li>• Encourage children to use utensils and drinking cups appropriately during snack and mealtimes.</li> </ul>



# Health, Wellness, and Physical Development Glossary

**Agility**—A component of physical fitness that relates to the ability to rapidly change the position of the entire body in space with speed and accuracy.

**Balance**—A skill-related component of physical fitness that relates to the maintenance of equilibrium while stationary or moving.

**Body Systems**—A group of organs that work together to perform a certain task.

**Coordination**—A skill-related component of physical fitness that relates to the ability to use the senses together with body parts in performing motor tasks smoothly and accurately.

**Developmental Differences**—Learners are at different levels in their motor, cognitive, emotional, social, and physical development. The learners' developmental status will affect their ability to learn or improve.

**Developmentally Appropriate**—Motor skill development and change that occur in an orderly, sequential fashion and are age- and experience-related.

**Directions**—Forward, backward, left, right, up, down.

**Fine Motor**—Action involving the small muscles of the hands and wrists.

**Flexibility**—A health-related component of physical fitness that relates to the range of motion available at a joint.

**Health**—A state of complete physical, mental, and social well-being; not merely the absence of disease or infirmity.

**Health Education**—Planned, sequential PK-12 program of curricula and instruction that helps students develop knowledge, attitudes, and skills related to the physical, mental, emotional, and social dimensions of health.

**Gross Motor**—The abilities required to control the large muscles of the body for walking, running, sitting, crawling, and other activities.

**Locomotor Movement**—Movements producing physical displacement of the body, usually identified by weight transference via the feet. Basic locomotor steps are the walk, run, hop, and jump, as well as the irregular rhythmic combinations of the skip, slide, and gallop.

**Manipulate**—Handle or control, typically in a skillful manner.

**Motor Skills**—Non-fitness abilities that improve with practice and relate to one's ability to perform specific sports and other motor tasks (tennis serve, shooting a basketball).

**Movement Skills**—Proficiency in performing non-locomotor, locomotor, and manipulative movements that are the foundation for participation in physical activities.

**My Plate**—A visual cue to help consumers adopt healthy eating habits by encouraging them to build a healthy plate, consistent with the 2010 dietary guidelines for Americans.

**Non-Locomotor Movement**—Movements that do not produce physical displacement of the body.

**Nutrition**—The sum total of the processes involved in the taking in and the use of food substances by which growth, repair, and maintenance of the body are accomplished.

**Physical Activity**—Bodily movement produced by the contraction of the skeletal muscle and which substantially increases energy expenditure.

**Physical Education**—Planned, sequential, movement-based program of curricula and instruction that helps students develop knowledge, attitudes, motor skills, self-management skills, and confidence needed to adapt and maintain a physically active life.

**Physical Fitness**—A set of attributes that people have or achieve that relate to their ability to perform physical activity.

**Strength**—The quality or state of being strong; bodily or muscular power; vigor.

**Safety Education**—Planned, sequential program of curricula and instruction that helps students develop the knowledge, attitudes, and confidence needed to protect them from injury.

# Resources

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