

---

*PASA –MATH*  
TIER 1  
PERFORMANCE LEVEL  
DESCRIPTORS

---

### GRADE 3 – TIER 1 – EMERGING

A third grade Tier 1 student performing at the *Emerging* Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying the appropriate measurement tool for a given context,
- ✓ identifying time on a digital clock to the hour,
- ✓ identifying the concept of addition,
- ✓ identifying a simple polygon.

### GRADE 3 – TIER 1 – NOVICE

A third grade Tier 1 student performing at the *Novice* Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying the denominator of a unit fraction that matches a representation (halves or fourths),
- ✓ identifying the area of a rectangle by counting squares or tiling,
- ✓ selecting an object that extends a simple pattern,
- ✓ identifying the concept of subtraction,
- ✓ selecting a set of pictures to be added to a pictograph based on given information.

### GRADE 3 – TIER 1 – PROFICIENT

A third grade Tier 1 student performing at the *Proficient* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying which number is closer when given support and a quantity greater than 10,
- ✓ counting up to five pennies or one-dollar bills,
- ✓ identifying numbers ordered from smallest to largest with support,
- ✓ identifying the perimeter of a rectangle as distance around the outside,
- ✓ identifying the solution to a one step, real-world addition problem using quantities and visual support,
- ✓ selecting a visual representation that models a simple addition or subtraction problem with small quantities and support,
- ✓ identifying similar, simply polygons based on the number of sides with support.

### GRADE 3 – TIER 1 – ADVANCED

A third grade Tier 1 student performing at the *Advanced* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying the length/width of an item with an affixed ruler with one-inch markings up to five inches,

- 
- ✓ identifying a simple pattern,
  - ✓ identifying a unit fraction that matches a representation,
  - ✓ identifying equivalent fractions using simple visual representations with support,
  - ✓ identifying the solution to a one step, real world subtraction problem using quantities and support,
  - ✓ identifying the representation that matches a simple multiplication situation with small quantities and support.

---

## GRADE 4 – TIER 1 – EMERGING

A fourth grade Tier 1 student performing at the *Emerging* Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ selecting a two-dimensional shape with the same number of sides as a given shape,
- ✓ identify the solution to a two-step, real-world addition problem with small quantities and visual support,
- ✓ identifying the line that divides a two-dimensional shape into two parts that are the same size and shape.

## GRADE 4 – TIER 1 – NOVICE

A fourth grade Tier 1 student performing at the *Novice* Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ selecting a pictograph that shows data displayed in a table with small quantities and support,
- ✓ identifying the solution to a two-step, real-world subtraction problem with small quantities and visual support,
- ✓ adding or subtracting quantities.

## GRADE 4 – TIER 1 – PROFICIENT

A fourth grade Tier 1 student performing at the *Proficient* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying the solution to a real-world multiplication problem using a multiplication model and support,
- ✓ identifying the area of a shape as what covers when given a model,
- ✓ identifying the perimeter of a rectangle by demonstrating the distance around the outside,
- ✓ identifying equivalent fractions,
- ✓ identifying multiples of 10 to 100,
- ✓ comparing small quantities to determine greater than, less than, or equal,
- ✓ identifying an appropriate unit of measure in a real-world problem using visual supports.

## GRADE 4 – TIER 1 – ADVANCED

A fourth grade Tier 1 student performing at the *Advanced* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ selecting a representation of a multiplication or division problem using small quantities,
- ✓ identifying the small set of objects that extends a simple pattern when given a rule,

- 
- ✓ identifying the solution for adding fractions in representational form using small common denominators and visual support,
  - ✓ determining the reasonableness of the results of an addition problem with visual support,
  - ✓ identifying the decimal that is equivalent to a fraction with a denominator up to 10 with a visual model.

---

## GRADE 5 – TIER 1 – EMERGING

A fifth grade Tier 1 student performing at the *Emerging* Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ selecting a two-dimensional shape when given a specific attribute,
- ✓ counting objects representing two single-digit whole numbers less than 10 to determine a product.

## GRADE 5 – TIER 1 – NOVICE

A fifth grade Tier 1 student performing at the *Novice* Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying the sum of two fractions with simple, common denominators and visual model,
- ✓ identifying the place value in a three-digit number using a visual model,
- ✓ identifying the volume of a simple shape using manipulatives.

## GRADE 5 – TIER 1 – PROFICIENT

A fifth grade Tier 1 student performing at the *Proficient* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying and extending the set of objects that continues a simple pattern,
- ✓ identifying the sum or difference of two decimals with answers less than one and a visual model,
- ✓ identifying the numerator in subtraction problems of fractions with like denominators (halves, thirds, or fourths) and visual support,
- ✓ comparing two numbers up to the hundredths place using greater than, less than or equal with visual support,
- ✓ identifying the solution to a division problem using fair and equal shares and modeling.

## GRADE 5 – TIER 1 – ADVANCED

A fifth grade Tier 1 student performing at the *Advanced* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying a point in the first quadrant of a graph,
- ✓ using a conversion table to identify small, equivalent measures,
- ✓ rounding a decimal to the tenths place using visual support.

---

## GRADE 6 – TIER 1 – EMERGING

A sixth grade Tier 1 student performing at the *Emerging* Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ locating a positive number on a number line,
- ✓ selecting a multiple of ten using visual support.

## GRADE 6 – TIER 1 – NOVICE

A sixth grade Tier 1 student performing at the *Novice* Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ locating a negative number on a number line,
- ✓ identifying a mathematical expression using visual supports that matches a one-step, real-world addition problem with whole numbers,
- ✓ solving a problem using two, two-digit whole numbers and any four operations with support,
- ✓ identifying the volume of a simple shape by counting unit cubes in order to solve a real-world problem,
- ✓ identifying the ratio that matches a given representation using a small number set and visual model,
- ✓ identifying the mode in set of data presented with a visual model.

## GRADE 6 – TIER 1 – PROFICIENT

A sixth grade Tier 1 student performing at the *Proficient* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying similarities or differences by making comparisons on a number line,
- ✓ identifying the product (up to 100) using single-digit whole numbers less than 10 and a visual model/supports,
- ✓ identifying the solution to a unit rate problem with a visual model,
- ✓ identifying a mathematical expression using visual supports that matches a one-step, real-world subtraction problem with whole numbers,
- ✓ identifying a percent as a portion out of 100.

## GRADE 6 – TIER 1 – ADVANCED

A sixth grade Tier 1 student performing at the *Advanced* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying the quotient of two single-digit whole numbers up to 10 with a visual model,

- 
- ✓ locating the opposite of a given positive/negative number on a number line,
  - ✓ identifying the median from a small data set presented with a visual support,
  - ✓ identifying the solution of a three-digit whole number problem using addition,
  - ✓ identifying relationships between variables in an equation using a visual model,
  - ✓ identify a point in any of the four quadrants on a graph,
  - ✓ matching three-dimensional shapes based on attributes.

---

## GRADE 7 – TIER 1 – EMERGING

A seventh grade Tier 1 student performing at the *Emerging* Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying the product of two positive, small whole numbers using a visual model,
- ✓ comparing two simple, visually represented data sets to determine similarities or differences.

## GRADE 7 – TIER 1 – NOVICE

A seventh grade Tier 1 student performing at the *Novice* Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying three-dimensional figures with a given attribute,
- ✓ identifying sums less than one when given two decimals to the tenths place,
- ✓ identifying the probability of a familiar event as possible/impossible or likely/unlikely when given visual supports,
- ✓ identifying what is the same or different between two sets of data given a pictograph,
- ✓ selecting a percentage to solve a real-world problem when given context and support,
- ✓ comparing figures to determine scaling when given a simple, familiar model.

## GRADE 7 – TIER 1 – PROFICIENT

A seventh grade Tier 1 student performing at the *Proficient* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying a relationship on a line graph when given support,
- ✓ identify the meaning of a point on a graph given a specific context and support,
- ✓ identifying the difference (less than one) between two decimals to the tenths place when given a visual model,
- ✓ identifying the small sum of two fractions with visual support,
- ✓ identifying the expression used to find the volume of a two-dimensional shape using a formula and visual support,
- ✓ identifying the expression used to find the area of a two-dimensional shape using a formula and visual support,
- ✓ identifying the difference between two numbers using a number line,
- ✓ determining the reasonableness of a solution to a real-world problem using addition or subtraction and visual support.

## GRADE 7 – TIER 1 – ADVANCED

---

A seventh grade Tier 1 student performing at the *Advanced* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying the equation that matches a one-step addition or subtraction problem with whole numbers using a visual model,
- ✓ identifying the quotient of two positive whole numbers up to 10 using a visual model,
- ✓ identifying unit rate in a real-world problem with visual support,
- ✓ identifying a characteristic of a right angle when given a model,
- ✓ finding the median within a set of data using visual representation.

## GRADE 8 – TIER 1 – EMERGING

An eighth grade Tier 1 student performing at the *Emerging* Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying the 2-dimensional figure that has been rotated, reflected, or translated when given a model,
- ✓ identifying an equation that matches a two-step, real-world addition problem with whole numbers and visual supports.

## GRADE 8 – TIER 1 – NOVICE

An eighth grade Tier 1 student performing at the *Novice* Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying the completed equation used to calculate the volume of a 3-dimensional figure given dimensions and a formula,
- ✓ identifying the 3-dimensional figure that has been rotated, reflected, or translated,
- ✓ identifying a data element within a two-way table.

## GRADE 8 – TIER 1 – PROFICIENT

An eighth grade Tier 1 student performing at the *Proficient* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying the approximate location of a non-terminating decimal on a number line,
- ✓ identifying the meaning of a squared or cubed number with a visual model,
- ✓ identifying an equation that matches a two-step, real-world subtraction problem with visual support,
- ✓ identifying the length/distance of the longest side of a right triangle in a real-world problem given visual supports/model.

## GRADE 8 – TIER 1 – ADVANCED

An eighth grade Tier 1 student performing at the *Advanced* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying the solution to a two-step, real-world addition or subtraction problem with visual support,
- ✓ identifying the relationship between a fraction and a decimal to the hundredths place using visual supports,
- ✓ comparing two proportional relationships on a graph to determine similarities or differences,

- 
- ✓ identifying the length/distance of the longest side of a right triangle in a real-world problem,
  - ✓ identifying where the line crosses the y axis.

---

## GRADE 11 – TIER 1 – EMERGING

An eleventh grade Tier 1 student performing at the *Emerging* Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying the inter-relatedness of two and three-dimensional figures using models or visual supports,
- ✓ identifying the appropriate unit of measurement given a familiar, real-world context and visual support.

## GRADE 11 – TIER 1 – NOVICE

An eleventh grade Tier 1 student performing at the *Novice* Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying the unknown attribute for the area of a familiar shape when given one of the attributes and a visual model,
- ✓ identifying a missing coordinate given a table of ordered pairs, and teacher modeling,
- ✓ identifying the value of an unknown dimension in a simple shape given the formula for the volume of a two of the dimensions and a visual model.

## GRADE 11 – TIER 1 – PROFICIENT

An eleventh grade Tier 1 student performing at the *Proficient* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying the solution of addition/subtraction/multiplication/division expression using visual supports that corresponds to a real-world problem,
- ✓ identifying the one variable equation that represents a real-world problem using small numbers and visual support,
- ✓ answering a question about data presented in a 2-way table given visual support,
- ✓ identifying the scaling factor used in a familiar, real-world problem,
- ✓ comparing the area of two simple shapes with one equivalent attribute.

## GRADE 11– TIER 1 – ADVANCED

An eleventh grade Tier 1 student performing at the *Advanced* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identify the connection between a decimal and a fraction in a real-world problem given visual support,
- ✓ interpreting the mean or median of two simple datasets with visual supports,

- 
- ✓ interpreting the effect of changing one variable on another when using a visual model,
  - ✓ identifying the conditional probability of a familiar, real-world event given visual supports,
  - ✓ identifying the relationship between 2 variables in a function.

---

*PASA –MATH*  
TIER 2  
PERFORMANCE LEVEL  
DESCRIPTORS

---

### GRADE 3 – TIER 2 – EMERGING

A third grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying the appropriate measurement tool for a given context,
- ✓ selecting the time shown on an analog clock to the hour with picture support.

### GRADE 3 – TIER 2 – NOVICE

A third grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ determining the length or width of an object using a ruler with one-inch marking,
- ✓ identifying two similar, simple polygons with picture support,
- ✓ selecting the time shown on an analog clock to the half hour with picture support,
- ✓ selecting the representation that models an addition or subtraction problem using small numbers.

### GRADE 3 – TIER 2 – PROFICIENT

A third grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ selecting the set of data to be added to a graphical representation based on information presented in a table,
- ✓ identifying the area of a rectangle by counting squares, tiling, or adding,
- ✓ counting coins/one-dollar bills,
- ✓ rounding to the nearest 10,
- ✓ identifying the denominator of a unit or a proper fraction that matches a representation,
- ✓ identifying the solution to a one step, real-world addition problem with small numbers,
- ✓ selecting a representation that models a multiplication problem using small numbers.
- ✓ ordering numbers smallest to largest or largest to smallest.

### GRADE 3 – TIER 2 – ADVANCED

A third grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying the number that extends a numeric pattern,
- ✓ identifying equivalent fractions using representations,
- ✓ identifying the perimeter of a rectangle by counting or adding,

- 
- ✓ identifying the solution to a one-step, real-world subtraction problem with small numbers.

---

## GRADE 4 – TIER 2 – EMERGING

A fourth grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying the solution to two-step, real-world addition problem using small numbers,
- ✓ identifying area of a shape as what covers the shape.

## GRADE 4 – TIER 2 – NOVICE

A fourth grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ selecting the bar graph or line plot that corresponds to data in a table supported with pictures,
- ✓ identifying the solution to two-step, real-world subtraction problem using small numbers,
- ✓ identifying multiples of 5 to 100,
- ✓ comparing small numbers to determine greater than, less than, or equal,
- ✓ identifying equivalent fractions with denominators of 3, 4, or 8.

## GRADE 4 – TIER 2 – PROFICIENT

A fourth grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying the differences between two whole numbers with numbers up to 20,
- ✓ identifying the appropriate unit of measurement in a real-world problem,
- ✓ sorting three shapes into groups based on the number of sides with picture support,
- ✓ identifying the sums of or differences between two whole numbers,
- ✓ comparing two fractions with like denominators using greater than, less than or equal and visual support,
- ✓ identifying the number that extends a pattern when given a rule,
- ✓ identifying the perimeter of a rectangle when provided with model and small numbers,
- ✓ identifying the solution for adding or subtracting fractions with common denominators given picture support,
- ✓ selecting the representation that matches a multiplication or division problem,
- ✓ determining the reasonableness of an addition or subtraction problem.

## GRADE 4 – TIER 2 – ADVANCED

A fourth grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

---

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying a decimal that is equivalent to a fraction (tenths),
- ✓ decomposing a fraction into multiple copies of a unit fraction (denominators 3, 4, or 8),
- ✓ identifying the line of symmetry in a 2-dimensional figure,
- ✓ determining the reasonableness of the results of an addition or subtraction problem,
- ✓ organizing data into a graph or chart for the given information.

---

## GRADE 5 – TIER 2 – EMERGING

A fifth grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying the product of two single-digit whole numbers less than 10,
- ✓ identifying the sum of two fractions with common denominators and visual support.

## GRADE 5 – TIER 2 – NOVICE

A fifth grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying two different graphs representing the same information,
- ✓ selecting a 2-dimensional shape based upon one or more given attributes,
- ✓ identifying the solution to a division problem using fair and equal shares, and
- ✓ finding the volume using a formula and supports.

## GRADE 5 – TIER 2 – PROFICIENT

A fifth grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ converting units to an equivalent unit given a conversion table,
- ✓ identifying the point in the first quadrant of graph that matches a given ordered pair,
- ✓ identifying the place value in a three-digit number,
- ✓ comparing two numbers up to the hundredths place using greater than, less than, or equal,
- ✓ rounding a decimal from the tenths place to the nearest whole number.

## GRADE 5 – TIER 2 – ADVANCED

A fifth grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying and extend the numbers that extend a pattern,
- ✓ identifying the volume of a given shape using multiplication,
- ✓ finding the sum or difference of two decimals with answers less than one.

---

## GRADE 6 – TIER 2 – EMERGING

A sixth grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying multiples of 5, 10, 25, or 100,
- ✓ solving a problem using two, three-digit whole numbers and any four operations with support.

## GRADE 6 – TIER 2 – NOVICE

A sixth grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ sorting three-dimensional shapes based on attributes,
- ✓ identifying similarities or differences by making comparisons on a graph,
- ✓ locating a given positive/negative integer, or its opposite, on a number line,
- ✓ identifying the median or mode with visual support,
- ✓ identifying the mathematical expression that matches a one-step, real-world addition problem with whole numbers.

## GRADE 6 – TIER 2 – PROFICIENT

A sixth grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying the mathematical expression that matches a one-step, real-world subtraction problem with whole numbers,
- ✓ identify specific points within the four quadrants on a graph,
- ✓ identifying the product (up to 100) using single-digit whole numbers less than 10,
- ✓ identifying the ratio that matches a given representation,
- ✓ identifying the volume of a shape to solve a real-world problem using a formula and visual model,
- ✓ identify the solution to a unit rate problem,
- ✓ identifying a percent given a number out of 100,
- ✓ identifying relationships between variables in an equation using a visual model,
- ✓ identifying the area given the formulas and a visual representation.

## GRADE 6 – TIER 2 – ADVANCED

A sixth grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

---

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying the solution to a real-world problem presented as a one-step addition or subtraction expression with whole numbers, support and small numbers.,
- ✓ identifying the median in a small data set,
- ✓ identifying the quotient of two numbers with two-digit dividends and one-digit divisors when provided visual.

---

## GRADE 7 – TIER 2 – EMERGING

A seventh grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying a three-dimensional figure with a given attribute,
- ✓ identifying the small sum of two decimals to the tenths place,
- ✓ identifying what is the same or different between two sets of data given a visual representation,
- ✓ comparing two data sets to determine similarities or differences.

## GRADE 7 – TIER 2 – NOVICE

A seventh grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying the meaning of a point on a graph given a specific context,
- ✓ identifying the area of a two-dimensional figure given a formula,
- ✓ identifying an equation that matches a one-step addition problem with positive/negative whole numbers.

## GRADE 7 – TIER 2 – PROFICIENT

A seventh grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying a small sum (up to 1) of two fractions (halves, thirds, fourths, or eighths),
- ✓ identifying the solution to a real-world problem using percentages,
- ✓ identifying a line graph that matches a proportional relationship,
- ✓ identifying a mathematical equation that matches a one-step subtraction problem with positive/negative whole numbers,
- ✓ identifying the volume of a three-dimensional figure given three dimensions and a formula,
- ✓ identifying the probability of an event as possible/impossible or likely/unlikely,
- ✓ identifying the difference between two decimals to the tenths place,
- ✓ identifying the product of two small positive/negative whole numbers with visual support,
- ✓ identifying the unit rate in a real-world problem,
- ✓ identifying a right angle,
- ✓ finding the median within a set of data containing an odd number of elements.

## GRADE 7 – TIER 2 – ADVANCED

A seventh grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

---

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying the difference between two negative numbers on a number line,
- ✓ identifying the quotient of two positive/negative whole numbers up to 10.

---

## GRADE 8 – TIER 2 – EMERGING

An eighth grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying a 2-dimensional figure that has been rotated, reflected, or translated,
- ✓ identifying an equation that matches a two-step, real-world addition problem with whole numbers.

## GRADE 8 – TIER 2 – NOVICE

An eighth grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying the 3-dimensional figure that has been rotated, reflected, or translated,
- ✓ identifying data by reading a two-way table,
- ✓ identifying an equation that matches a two-step, real-world problem subtraction with whole numbers,

## GRADE 8 – TIER 2 – PROFICIENT

An eighth grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying the solution to two-step, real-world addition or subtraction problems with visual support,
- ✓ identifying where the line crosses the y axis,
- ✓ identifying the meaning of a squared or cubed number in exponential form,
- ✓ identifying the length/distance of the longest side of a right triangle in a real-world problem,
- ✓ identifying the approximate location of a non-terminating decimal on a number line,
- ✓ comparing two proportional relationships on a graph to determine similarities or differences,
- ✓ identifying the volume of a three-dimensional shape given a formula and visual model.

## GRADE 8 – TIER 2 – ADVANCED

An eighth grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying a decimal to the hundredths place and the equivalent fraction,
- ✓ identifying a statement that describes the relationship between variables displayed on a scatterplot,
- ✓ identifying data that represents a cross-section of a two-way table.

---

## GRADE 11 – TIER 2 – EMERGING

An eleventh grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

- ✓ identifying a missing coordinate given a table of ordered pairs, and teacher modeling,
- ✓ identifying the solution of addition/subtraction expression using visual supports that corresponds to a real-world problem,
- ✓ identifying the appropriate units of measure given a real-world context.

## GRADE 11 – TIER 2 – NOVICE

An eleventh grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by

- ✓ identifying the solution of multiplication/division expression using visual supports that corresponds to a real-world problem,
- ✓ identifying the inter-relatedness of two and three-dimensional figures,
- ✓ identifying the conditional probability of a familiar, real-world event,
- ✓ answering an inferential question about data presented in a 2-way table,
- ✓ identifying the scaling factor used in a real-world problem,
- ✓ comparing the area of two simple shapes with one equivalent attribute.

## GRADE 11 – TIER 2 – PROFICIENT

An eleventh grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by

- ✓ identifying equivalency between a decimal and a fraction in a real-world problem,
- ✓ identifying the one variable equation that represents a real-world problem,
- ✓ identifying the effect of a change in one variable on another variable in a linear equation,
- ✓ identifying the value of an unknown attribute of a rectangle when given a formula for area and one attribute,
- ✓ identifying the value of an unknown dimension in a shape given a formula for volume and two dimensions.

## GRADE 11 – TIER 2 – ADVANCED

An eleventh grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by

- ✓ identifying the missing coordinate in an ordered pair given a linear equation and a table,

- 
- ✓ solving an equation by identifying the step that completes the sequence,
  - ✓ selecting the algebraic equation representing any of the four operations that will solve a real-world problem.