

Finding Reference Points with the Model Car Demonstrator

# Reference Points

Supplies: Table or desk (rolling), chair (rolling), 15 feet of masking/duct tape string.

Instructions:

**Part 1** Place the table or desk at the front of the room to simulate the hood of vehicle.

* Place a chair behind and to the left of the table to simulates driver position in the vehicle
* Place the masking/duct tape on the floor to the right of the table to simulates a curb line. The tape must extend 15 feet beyond the front of the desk.

**Part 2** Have the students take turns sitting in the “driver’s seat” and explain their reference points to the curb line in relation to the desk. Move the tape or desk apart to simulate the distances for:

* 3-6 inches from a line to the right.
* Front bumper even with the curb line
* 3 feet from a line to the right
* 3-6 inches from a line to the left 6 feet from a line to the right.

Use string to show line of sight.



# Model Car Reference Points Demonstration

Supplies: 6-7 inch model car, ¼ inch diameter bolt, 3/8” tubing – about 1”, hot glue gun, 18” string.

Instructions:

* Glue the bolt to the driver’s seat or floor behind the steering wheel
* The top of the bolt should be no higher than the level of the dashboard
* Make a ¼ inch slit in one end of the plastic tube that will be the top, or drill a hole through the tube
* Tie a knot in one end of the string.
* Put the knot on the inside of the top of the tube, pull the string down into the slit in the tube, or pull the string through the hole
* Fill the top of the tube with glue

The tube should fit over the end of the bolt, and the string will be used to track/identify the reference points.

