



Cars

Standard Connection:

ELA.L.PK4.1c
ELA.SL.PK4.2
M.MD.PK4.3
M.CC.PK4.4b
S.ES.PK4.3b
S.T.PK4.3
SS.OW.PK4.2
SS.FC.PK4.7
PD.SHS.PK4.3
PD.SHS.PK4.5
VA.CR3a.1.PK
VA.RE7a.2.PK

Enduring Understanding(s):

- People impact their environment in different ways.

Essential Question(s):

- What do systems need in order to function successfully?

Materials	Vocabulary	
<ul style="list-style-type: none"> <i>Make Way for Ducklings</i> How To Make A Car (see Resource 1) additional car images (see Resource 2) wheel template resource copied on cardboard or 4 washers 1.5 inches or larger (see Resource 3) Use templates provided or use Beautiful Stuff (plastic lids, spools, cardboard pieces, small boxes, rubber bands, pipe cleaners, straws, unsharpened pencils, wooden dowels, etc.) tape or mini clothespins (8 per car) paper towel tube, cut in half skewers or straws cut to 3.5 inches 	<p>axle: connects the wheels to a vehicle</p> <p>bumpers: protect a car from getting dented or scratched</p> <p>bustling: very busy</p> <p>chassis: the frame or body of a vehicle</p> <p>diagram: a picture to help the reader understand the text</p> <p>joints: where the wheels attach to a vehicle</p> <p>lug nuts: attach and hold a wheel to a vehicle</p> <p>tire: a ring of rubber that covers a wheel</p> <p>traffic: movement of something from one place to another, usually vehicles</p>	

Intro to Centers

Preparation: *Set up materials.*

"In <i>Make Way for Ducklings</i> , Mr. and Mrs. Mallard looked for a safe place to live. What do you notice?"	Show illustrations. Children respond.
"The city was bustling - very busy - with traffic . Officer Michael stopped the cars so they could cross the street."	
"Here are images of cars and city traffic . What do you notice?"	Show images. Children respond.
"Cars have bumpers , lights, and tires . Here is a diagram of a chassis - underneath the car body. What do you notice?"	Show diagram, pointing to chassis parts. Children respond.

<p>“Axles connect the wheels. Lug nuts and joints attach the wheels. Tires cover the wheels.”</p>	
<p>“Today in Creative Arts, you can create cars with these materials.”</p>	<p>Show materials.</p>

During Centers:

Encourage children to collaborate (one child creates the chassis, and another child creates the car body). Encourage children to follow the visual instructions. Compare and contrast children’s cars/chassis to the diagram/illustrations/images, etc. Encourage children to create descriptions/diagrams of their cars. Encourage children to use their cars in Blocks in the Boston Public Garden.

Guiding Questions During Centers:

- “How is your car similar to or different from your friend’s/the illustrations/images?”
- “How did you use the materials to construct your car?”
- “How are the instructions for building a car similar to or different from a recipe/diagram?”
- “How can you show the number of your cars’ wheels/headlights/bumpers/doors?”

Thinking and Feedback:

Invite children to share their processes. Encourage children to describe any challenges they might have encountered.

Documentation:

Collect samples of the children’s work as well as photographs of their process; use the documentation to launch a discussion during Thinking and Feedback.

Provocation:

Arrange and document a field trip to an auto body shop/auto supply store/car dealership. Invite a community/family member who is a mechanic, car salesperson, etc., to visit the classroom.

Differentiation/Accommodation:

For Intro to Centers, children with limited verbal skills can use a pre-programmed voice output device to answer questions about the story. (Keep in mind these will likely be closed-ended questions, as those are easiest to program into devices.) This can also be used to help children answer Guiding Questions. During Centers, provide a variety of materials to meet the children’s fine motor and sensory needs. Strategically partner children together for collaboration.