



# 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

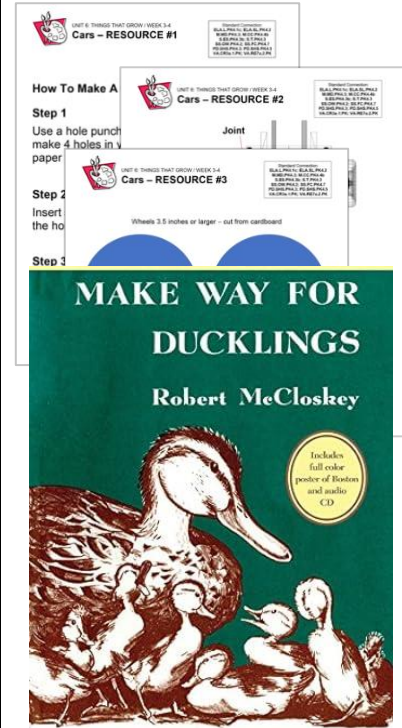
## Enduring Understanding(s):

- 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"> <li>• <i>Make Way for Ducklings</i></li> <li>• How To Make A Car (see Resource 1)</li> <li>• additional car images (see Resource 2)</li> <li>• wheel template resource copied on cardboard or 4 washers 1.5 inches or larger (see Resource 3)</li> <li>• Use templates provided or use Beautiful Stuff (plastic lids, spools, cardboard pieces, small boxes, rubber bands, pipe cleaners, straws, unsharpened pencils, wooden dowels, etc.)</li> <li>• tape or mini clothespins (8 per car)</li> <li>• paper towel tube, cut in half</li> <li>• skewers or straws cut to 3.5 inches</li> </ul>	<p><b>axle:</b> connects the wheels to a vehicle</p> <p><b>bumpers:</b> protect a car from getting dented or scratched</p> <p><b>bustling:</b> very busy</p> <p><b>chassis:</b> the frame or body of a vehicle</p> <p><b>diagram:</b> a picture to help the reader understand the text</p> <p><b>joints:</b> where the wheels attach to a vehicle</p> <p><b>lug nuts:</b> attach and hold a wheel to a vehicle</p> <p><b>tire:</b> a ring of rubber that covers a wheel</p> <p><b>traffic:</b> 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. <b>Children respond.</b>
“The city was <b>bustling</b> - very busy - with <b>traffic</b> . Officer Michael stopped the cars so they could cross the street.”	
“Here are images of cars and city <b>traffic</b> . What do you notice?”	Show images. <b>Children respond.</b>
“Cars have <b>bumpers</b> , lights, and <b>tires</b> . Here is a <b>diagram</b> of a <b>chassis</b> - underneath the car body. What do you notice?”	Show diagram, pointing to chassis parts. <b>Children respond.</b>

<p>“<b>Axles</b> connect the wheels. <b>Lug nuts</b> and <b>joints</b> attach the wheels. <b>Tires</b> 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.