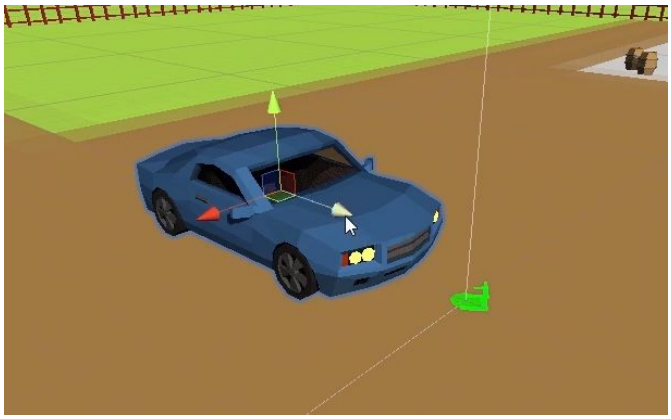
3.3 Add Cars to the Scene



Activities:

Step 1: Insert the car into the scene

Step 2: Raise the hood of the car

Step 3: Duplicate the Car and Move the Copy

Length:	30 minutes
Overview:	Inserting the car prefabs into the scene, and positioning them
Project Outcome:	Students will have two cars inserted into the scene, the hood raised, and positioned.
Learning Objectives:	The students will be able to: - Add prefabs into the scene - Manipulate the hood rotation transform - Position the car object in the scene
Prerequisite:	Downloaded and imported the car asset.
ISTE Student Standards	4a "...use a deliberate design process for...creating innovative artifacts"

Video https://vimeo.com/349055957

OR

Step 1: Insert the car into the scene

1. Inside Assets > Models > Car V1 drag the "car_v1" into the scene, placing it near the yellow arrows (you're starting point)
2. In the Inspector panel, rotate the car 180 degrees on the Y Axis

Step 2: Raise the hood of the car

(To access the compartment where the battery will go)

1. In the Hierarchy panel, expand the car_v1 to reveal the parts.
2. Select the hood and using the Inspector panel, rotate the hood up roughly 37 degrees on the X axis

- **Explain** The Transform component in the Inspector is a precise way to adjust Scale, Position, and Rotation.

Step 3: Duplicate the Car and Move the Copy

One car will serve as the "Dead Battery" car, the other as the "Good Battery" car.

1. Duplicate the car in the Hierarchy (right click > duplicate). Rename one "Good Car" and one "Dead Car".
2. With the Dead Car selected in the Hierarchy, use the blue movement arrow to slide the Dead Car in front of the Good Car, and rotate it 180 on the Y Axis (so the two cars are facing each other, on opposite sides of the yellow starting arrows)

End of Lesson

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Recap

Key concepts:

- Objects don’t exist in the hierarchy until they are added to the scene.

Key skills:

- Placing objects into the scene
- Adjusting Transform values
- Duplicating objects

Key terms:

- **Transform Component:** Used in the Inspector panel to adjust Scale, Rotation, and Position.