3.4 Add Car Batteries

The car batteries inserted into the scene

Activities:

Step 1: Insert the good and dead batteries into the scene

Step 2: Add a Cube for a Clamp Table

Length:	30 minutes
Overview:	Inserting the car batteries into the scene, and positioning them
Project Outcome:	Students will have both the good and dead battery, each under one of the car hoods.
Learning Objectives:	The students will be able to: - Add objects to the scene - Position the car object in the scene - Assign an object as a child of another object or folder
Prerequisite:	Downloaded and imported the car asset.
ISTE Student Standards	4a "...use a deliberate design process for...creating innovative artifacts"

Video https://vimeo.com/349056894

OR

Step 1: Insert the good and dead batteries into the scene

1. In the Project panel, under Assets > Models drag the good battery and dead battery into the scene.
2. Be sure to select objects in the Hierarchy before moving them, or you may only be moving *pieces* of the object.
3. Use the move tool and the Red, Yellow, and Blue arrows to place the Good Battery under the hood of the Good Car and the Dead Battery under the hood of the Dead Car.
4. In the Hierarchy, drop the Good Battery onto the Good Car, making it a child object. Do the same for the Dead Battery on the Dead Car.

- **Explain** Be sure to select the parent object in the hierarchy before moving an object. Otherwise, you might be moving *parts* of the object.

- **Explain** In step 4, assigning this parent-child relationship allows us to move the car object, and the battery comes with it. (Clicking the triangle expands and shows the indented children.)

Step 2: Add a Cube for a Clamp Table

(To access the compartment where the battery will go)

1. Under the GameObject menu, add a cube (to act as a table for setting jumper cables on) and place it beside the Good Car
2. Duplicate the first cube and place the duplicate beside the Dead Car.

- **Explain** These cubes will make it easier for the user to reach the clamps.

End of Lesson

Recap

Key concepts:

- Parent/Child Relationship

Key skills:

- Placing objects into the scene
- Assigning an object as a “child” of another object by dragging & dropping.

Key terms:

- **Parent Object:** An object that provides properties and organization structure to other objects (children).
- **Child Object:** An object that receives properties from its parent object (in Unity, the Child object is indented under the parent)