# Using Prefab Objects

In this lesson, students learn about prefabs and use them to create and enhance a scene. Students complete a prefab tutorial in Unity to learn the basics of modifying prefab GameObjects and component parameters to change the scene’s output in game view.

## Objective

Students will be able to:

* Understand the difference between GameObjects and prefabs
* Add prefabs to a scene and modify their properties
* Download a prefab from the Asset Store and add it to their scene.

[Using Prefab Objects](https://youtu.be/SnE3-uBVWDY)

1. Find the project attached
2. Once downloaded, unzip the file into your Unity project folder on your computer, then rename the folder to include your name, for example Car Tutorial - Karel.  
   Note: Your downloaded project folder should be unzipped into the Unity folder on a local drive or your desktop. This Unity folder is typically autogenerated by Unity and found within your My Documents (Windows) or Documents (Mac) folder.
3. Next, open the Unity Hub and select the project tab. Under the projects, click ‘Add’ and then select the root folder for the project you just downloaded.

## Tutorial 1: Using a Prefab Scene

Complete Tutorial 1 from the Car Project. Once completed, answer the following questions:

1. What is the name of your project?
2. What was easy about using the prefab track? What was challenging?
3. What changes did you make to the prefab to customize it?

## Tutorial 2: Create Your Own Scene

Complete Tutorial 2 from the Car Project. Answer the following questions:

1. What are the advantages of using a prefab versus building the track from the model? What are the disadvantages?
2. What changes did you make to the prefab track to customize it?

## Tutorial 3: Added Elements From the Asset Store

Complete Tutorial 3 from the Car Project. Once completed, answer the following questions:

1. What are the advantages of building a car from the model versus using a prefab? What are the challenges to doing this?
2. What changes did you make to the prefab car to customize it?

## Make Your Own Car Game

Now it is time to make your own Car Game!

Using the prefab objects that you have used so far, create a racing game that will challenge users. Feel free to add different types of obstacles, alter the car setup, change the scale and material of objects, etc. You can even alter the track by blocking parts of it and forcing the user to go off road!

While you can make it your own, there are a few requirements that you must meet:

* Your project should have some sort of defined path for the car to follow. This can either be using a prefab track or using obstacles such as rocks to define a path.
* In addition to the track and car, you need to use at least 5 other game objects, including at least one ramp, one speed bump, and one rock.
* At least one of your game objects needs to be scaled either larger or smaller.