



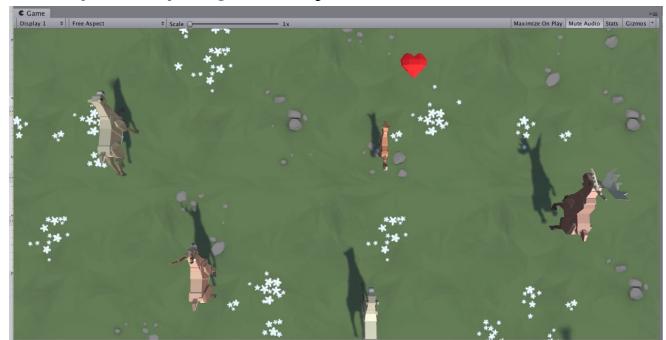
# Unit 5 Lab

## Swap out your Assets

**Steps:**

- Step 1: Import and browse the asset library
- Step 2: Replace player with new asset
- Step 3: Browse the Asset store
- Step 4: Replace all non-player primitives
- Step 5: Replace the background texture

*Example of progress by end of lab*



**Length:** 90 minutes

**Overview:** In this lab, you will finally replace those boring primitive objects with beautiful dynamic ones. You will either use assets from the provided course library or browse the asset store for completely new ones to give your game exactly the look and feel that you want. Then, you will go through the process of actually swapping in those new assets in the place of your placeholder primitives. By the end of this lab, your project will be looking a *lot* better.

**Project Outcome:** All primitive objects are replaced by actual 3D models, retaining the same basic gameplay functionality.

**Learning Objectives:** By the end of this lesson, you will be able to:
 

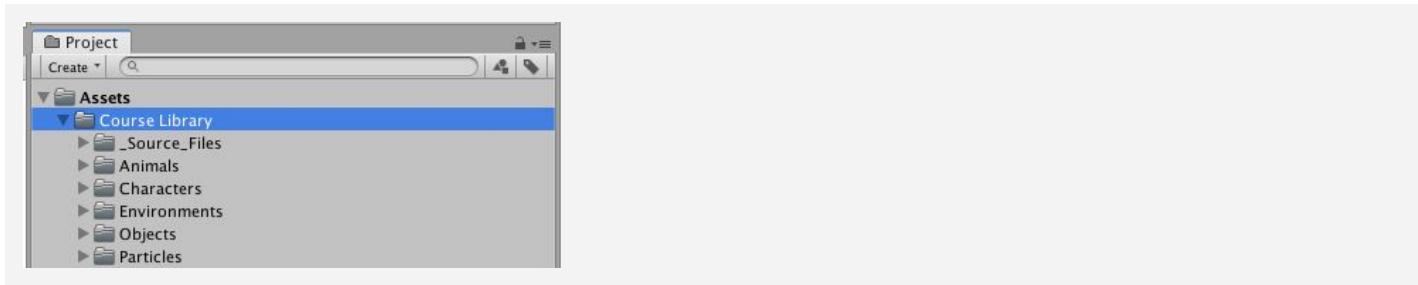
- Browse the asset store to find the perfect assets for your project
- Use Nested Prefabs to swap out placeholder objects with real assets
- Adjust material settings to get the resolution and look you want

## Step 1: Import and browse the asset library

If we are going to swap out our primitive shapes with cool new assets, we need to import those assets first.

1. Click on the **link** to download the **Course Library** asset files, then **import** them into your project
2. **Close** the **Asset Store** window
3. Browse through the library to find the assets you would like to replace your Player and non-player objects with

- **Don't worry:** It will take longer than normal to import these files because it's a lot more files
- **Don't worry:** Even if you don't think you're going to use one of these assets for your player, just choose something for now to get used to the process

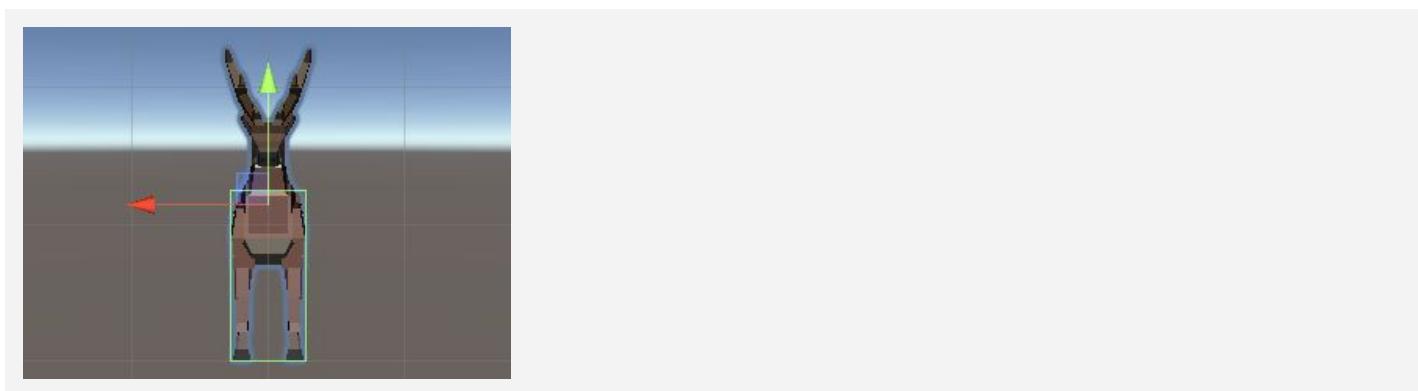


## Step 2: Replace player with new asset

Now that we have the assets ready to go, the first thing we'll do is replace the Player object

1. **Drag** the Player object into the "Prefabs" folder to make it a prefab, then **double-click** on it to open the prefab editor
2. **Drag** the asset you want into the **hierarchy** to make it a nested prefab of the Player, then **scale** and **position** it so that it is around the same size and location
3. On the parent **Player** object itself, either **Edit** the collider to be the size of the new asset or **replace** it with a different type of collider (e.g. Box)
4. **Test** testing to make sure it works, then **uncheck** the **Mesh Renderer** component of the primitive

- **New:** Nested Prefabs
- **Tip:** Notice how the asset updates automatically in game view
- **Tip:** Isometric view is useful when resizing and repositioning child objects

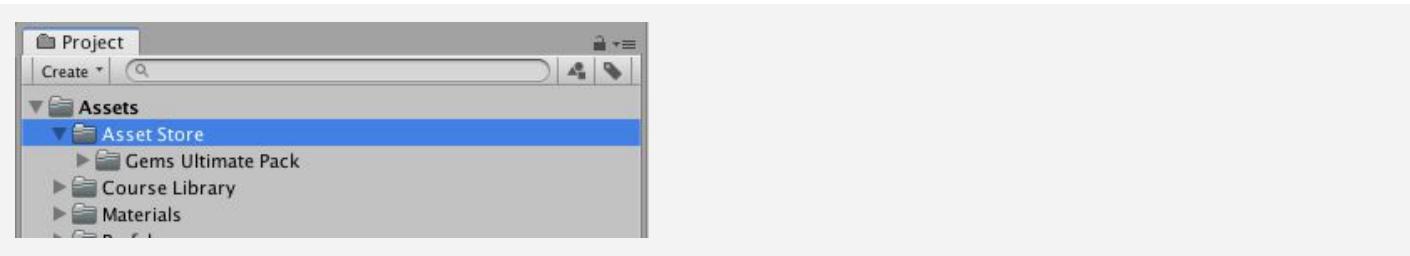


## Step 3: Browse the Asset store

Even though we have a *really great asset library*, there may be certain assets you want that aren't in there. In that case, it might be good to try and find assets in the Unity Asset Store.

1. From the top menu, click **Window > Asset Store** to open the Asset Store window in Unity, then right-click on the tab and **Maximize** it to make it easier to browse
2. In the **Publisher** filter, search for "Synty Studios", then browse some of their asset packs
3. In the **Pricing** filter, drag the right handle back to only view "Free" assets, **remove** the Synty Studios filter, and search for "Low Poly"
4. If you see something you want to include in your project, **download** and **import** it into your project
5. **Drag** the imported assets into a new folder called "Asset Store", then browse through the imported assets

- **Warning:** This will only be possible if you can sign into a Unity account
- **Explain:** The assets for this course were made by Synty Studios, which are really good - as you can see, you normally have to pay for them
- **New:** Unity Asset Store
- **New:** "Low Poly" assets
- **Warning:** Only download "Low Poly" assets or your project will become huge, then not web- or mobile-friendly
- **Don't worry:** Even if you think you have all the assets you need, it's still good to take a look



## Step 4: Replace all non-player primitives

Now that we know the basic concept of our project, let's figure out how we'll get it done.

1. Repeat the process you used to replace the player prefab with your other non-player objects
2. Test to make sure everything is working as expected

- **Warning:** Make sure that, if you are editing prefabs in the scene, to Override any changes you make

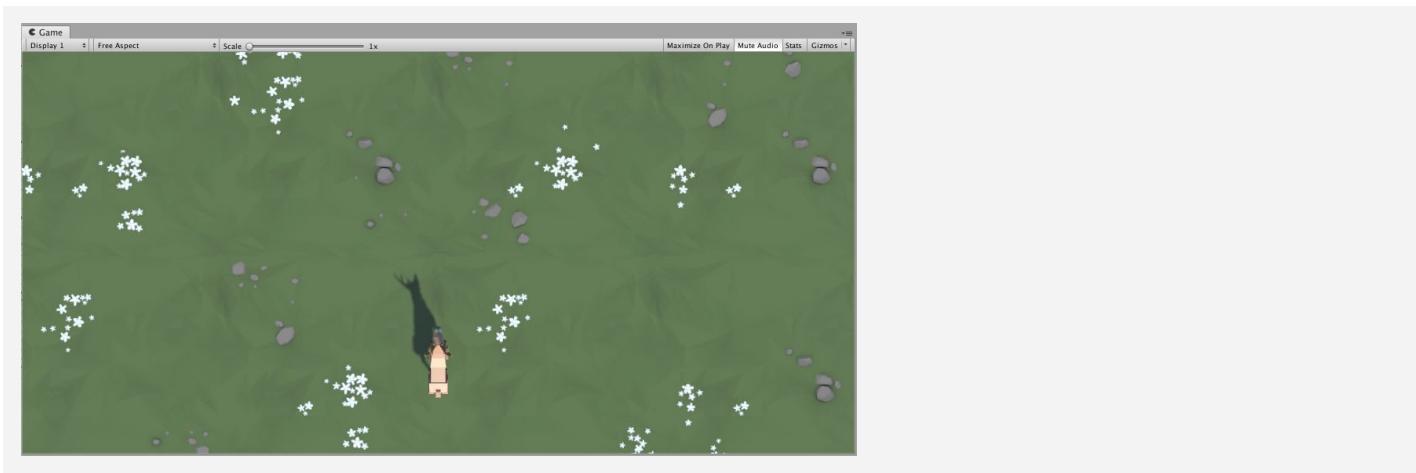


## Step 5: Replace the background texture

Now that our dynamic objects have a new look, we should update the ground / background too.

1. From the Course Library > **Textures**, (or from a Unity Asset Store package), drag a new material onto the Ground / Background object
2. To adjust the material's **resolution**, in the Material properties (with the sphere next to it), change the Main Map Tiling X and Y values
3. To make the material less shiny, in the Material properties, **unchecked** the "Specular highlights" and "Reflections" settings

- **Tip:** You might want to adjust the resolution/tiling of the material, depending on the scale of the objects
- **Tip:** Natural ground materials like grass or dirt do not tend to show highlights or reflections



## Lesson Recap

### New Progress

- Primitive objects replaced with new assets that function the same way

### New Concepts and Skills

- Art workflow
- High vs. Low Poly
- Asset Store
- Nested Prefabs
- Material properties