Unit 3: Physics

Lesson 1: Colliders

Activity 3 (10' minutes): Gap text

Fill the gaps with the words you've heard in the video.

Colliders are a component that allows the GameObject to which they are attached to react to other colliders, provided that one of the GameObject has a Rigidbody component.

Colliders come in various shapes and types, and are denoted in the scene view by a green outline. They can have the following primitive shapes: a sphere, a capsule and a box. For more complex shapes you have two options: you can either combine several of these primitive shapes together by applying primitive colliders to different objects in our hierarchy; the other option is to use a mesh collider, which will fit the exact shape of the mesh that you specify.

Since it will fit the exact shape of the mesh, then it may be providing a too detailed collision mesh and affecting performance. This is the reason why it is often better to make a compound setup instead.

When collisions occur in the game engine, one collider strikes another and an event called *OnCollisionEnter* is called. When the colliders are still in contact *OnCollisionStay* is called, and it happens several times. As we continue to step through, eventually, *OnCollisionExit* is called when the two colliders are no longer in contact.