

Unit 2: Scripting

Lesson 3: The Game cycle

Activity 3 (🕒 10' minutes): Gap text

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

Awake and Start are two functions that are called automatically when a script is **loaded**. Awake is called first, even if the script component is not enabled and is best used for setting up any **references** between scripts and initialisations.

Start is called after Awake, immediately before the first **Update**, but only if the script component is **enabled**. This means you can use Start for anything you need to occur when the script component is enabled.

Start and Awake are only called once in the **lifetime** of a script attached to a GameObject, so you cannot repeat the Start function by disabling and re-enabling a script.

Update it's called once per **frame** on every script that uses it. Almost anything that needs to be changed or adjusted regularly happens here: the movement of **non-physics** objects, simple timers and the detection of **input**, for example. Note that Update is not called on a regular timeline, if one frame takes longer to process than the next the time between Update calls will be different.

FixedUpdate is a similar function to Update but it has a few important differences. FixedUpdate is called on a regular timeline and will have the same time between calls. Immediately after FixedUpdate is called, any necessary physics calculations are made. As such anything that affects a rigidbody (meaning a physics object) should be executed in FixedUpdate rather than Update.