

Game Dev with Unity3D

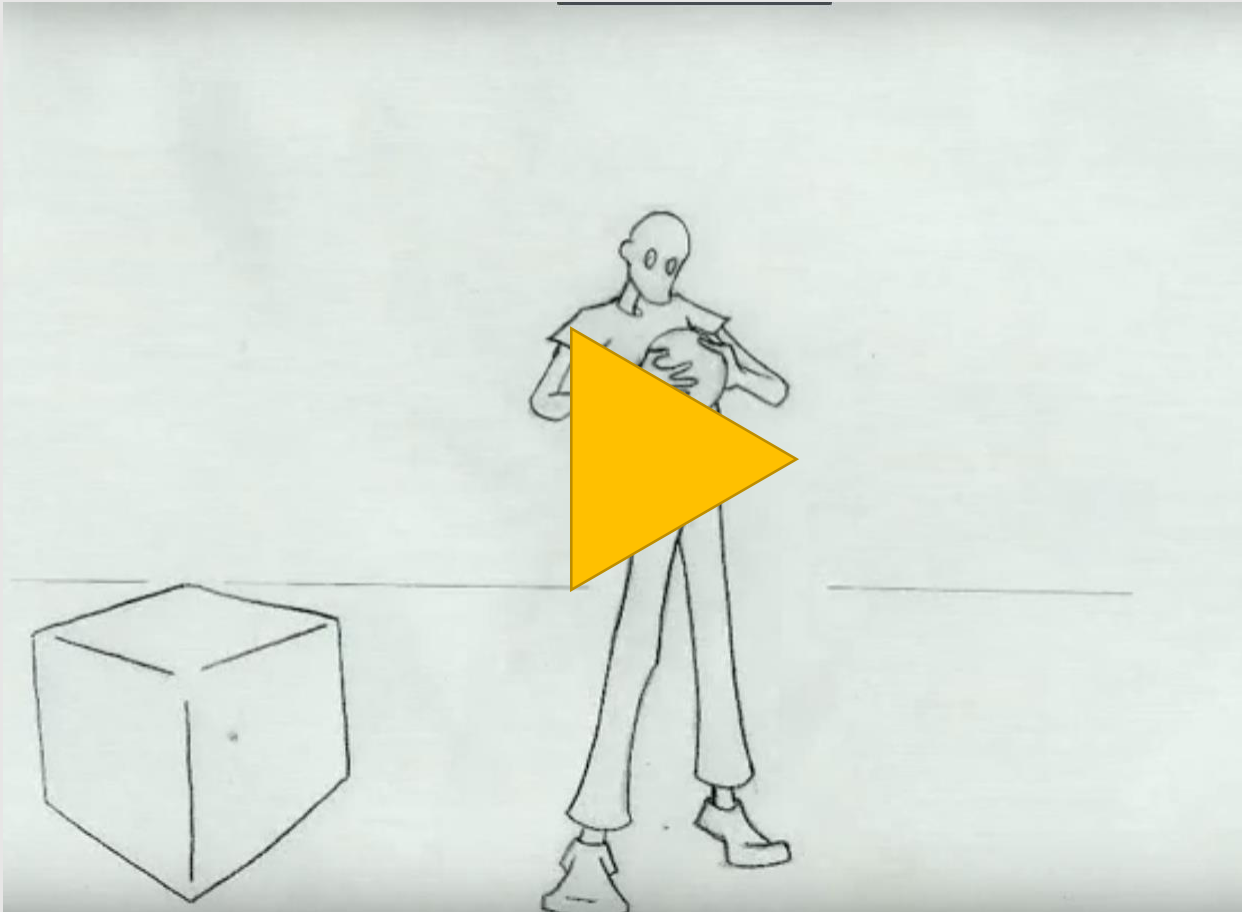
ANIMATIONS



Where Do We Use Animations?

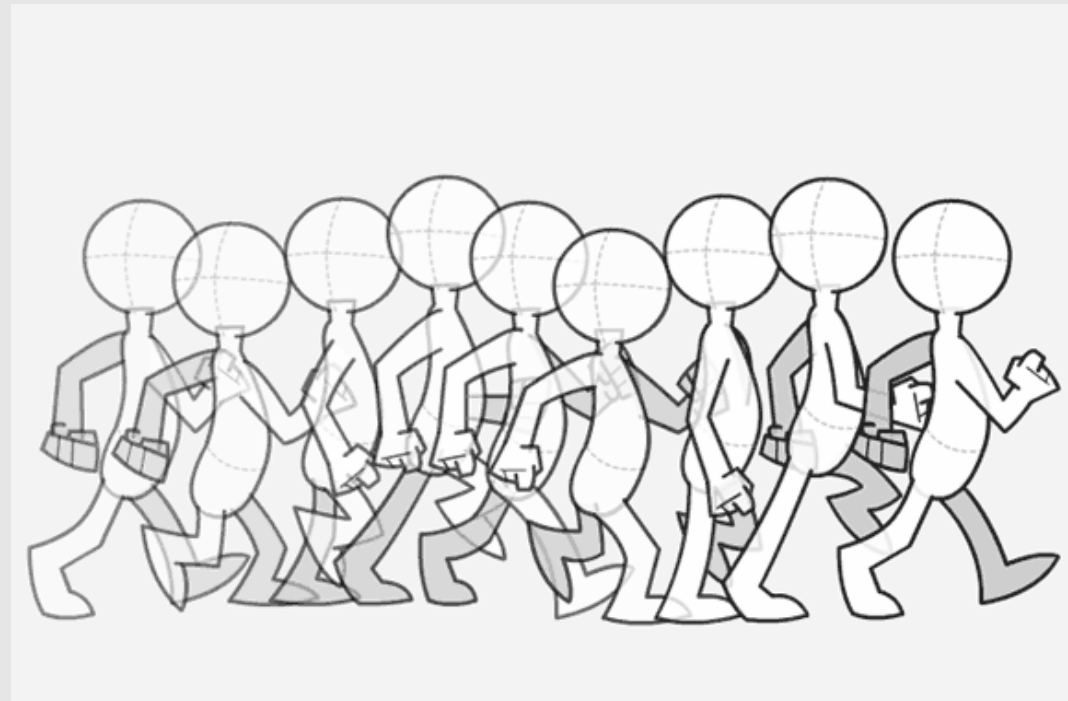
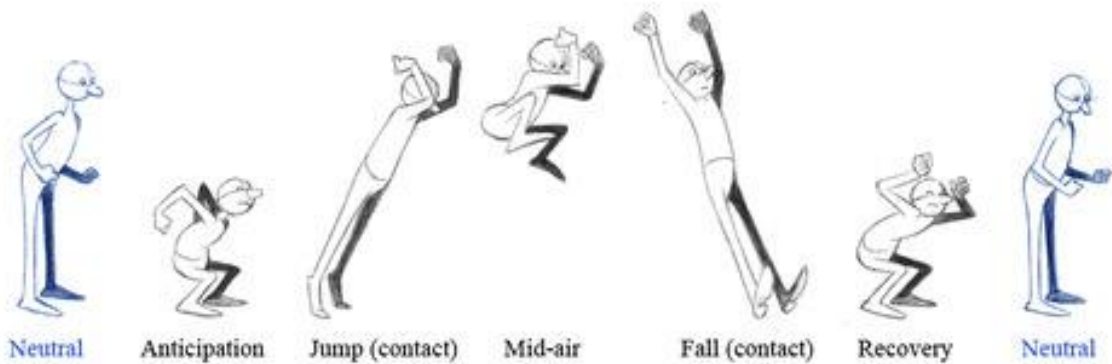
- Animations are everywhere. They are a very basic way of giving life into static objects. Even when something is still – it still has idle movement.
- Examples:
 - Pickup coins can rotate and float in the air until they are picked up (and disappear into the air)
 - Avatars and enemy characters move around in the scene
 - UI effects
 - Environment assets (wind on trees, water)

Traditional Keyframe Animations

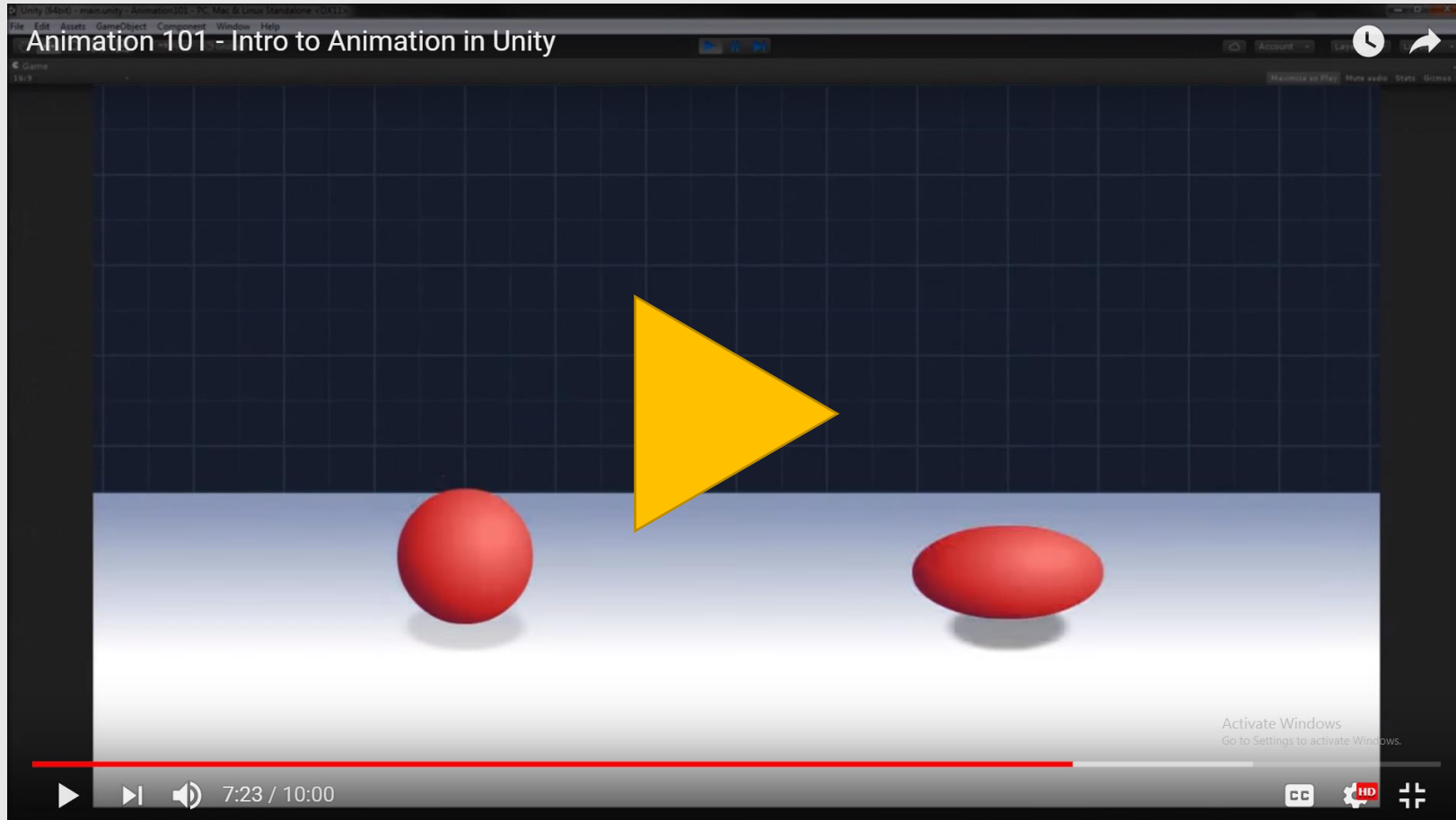


Traditional Keyframe Animations

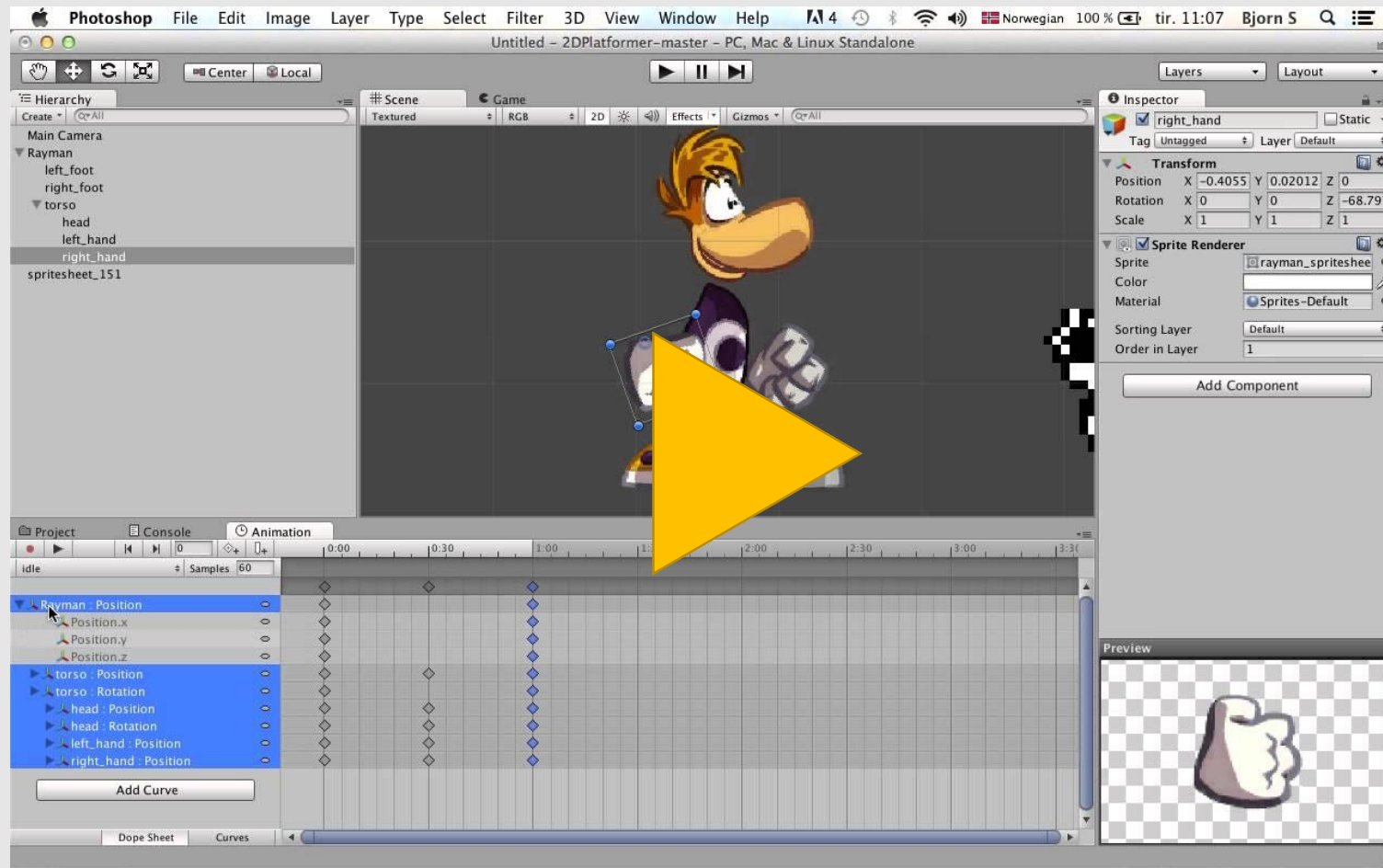
- Keyframe based animation means you set a situation, and the software would make the required transition in order for the animation to go nicely



Animations Tutorial

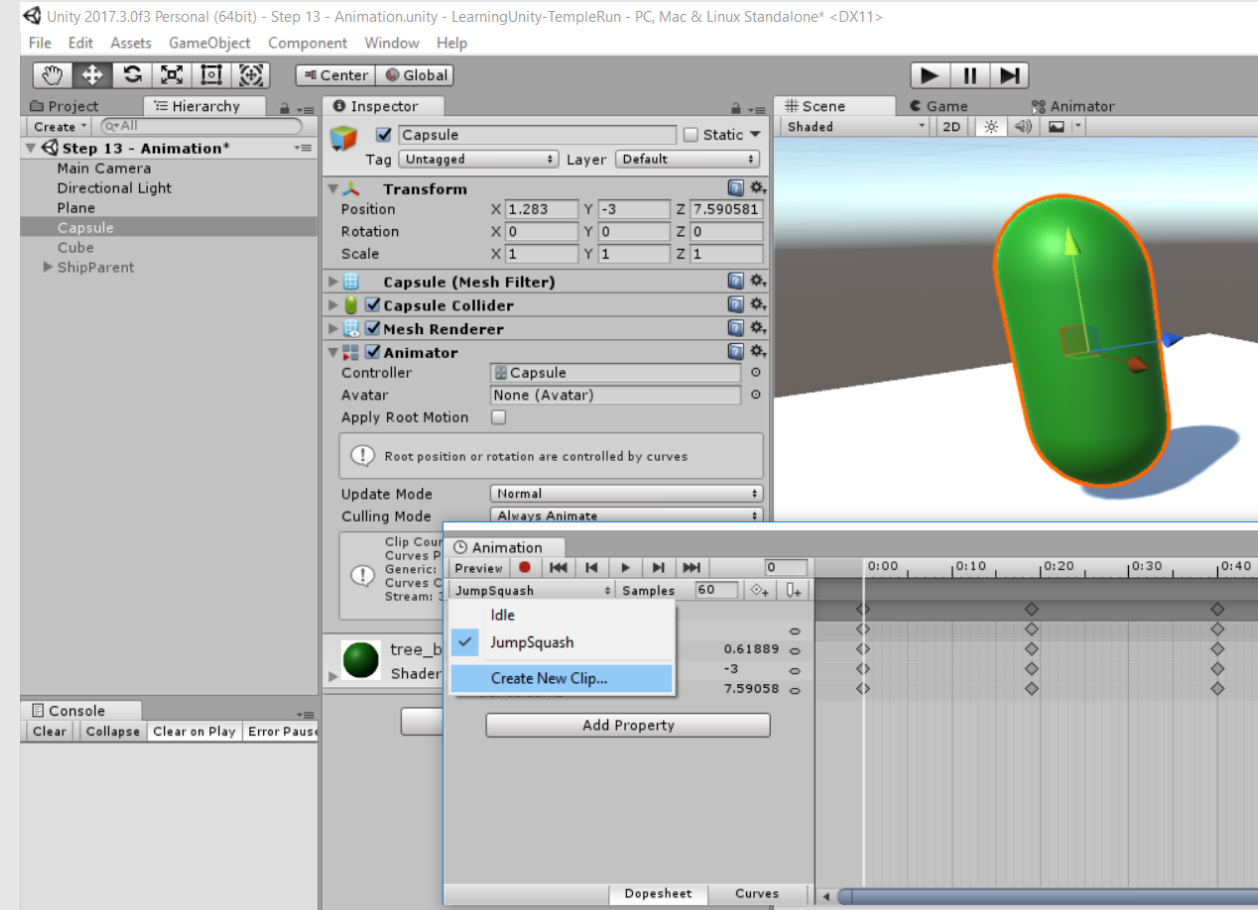


Keyframe Animation



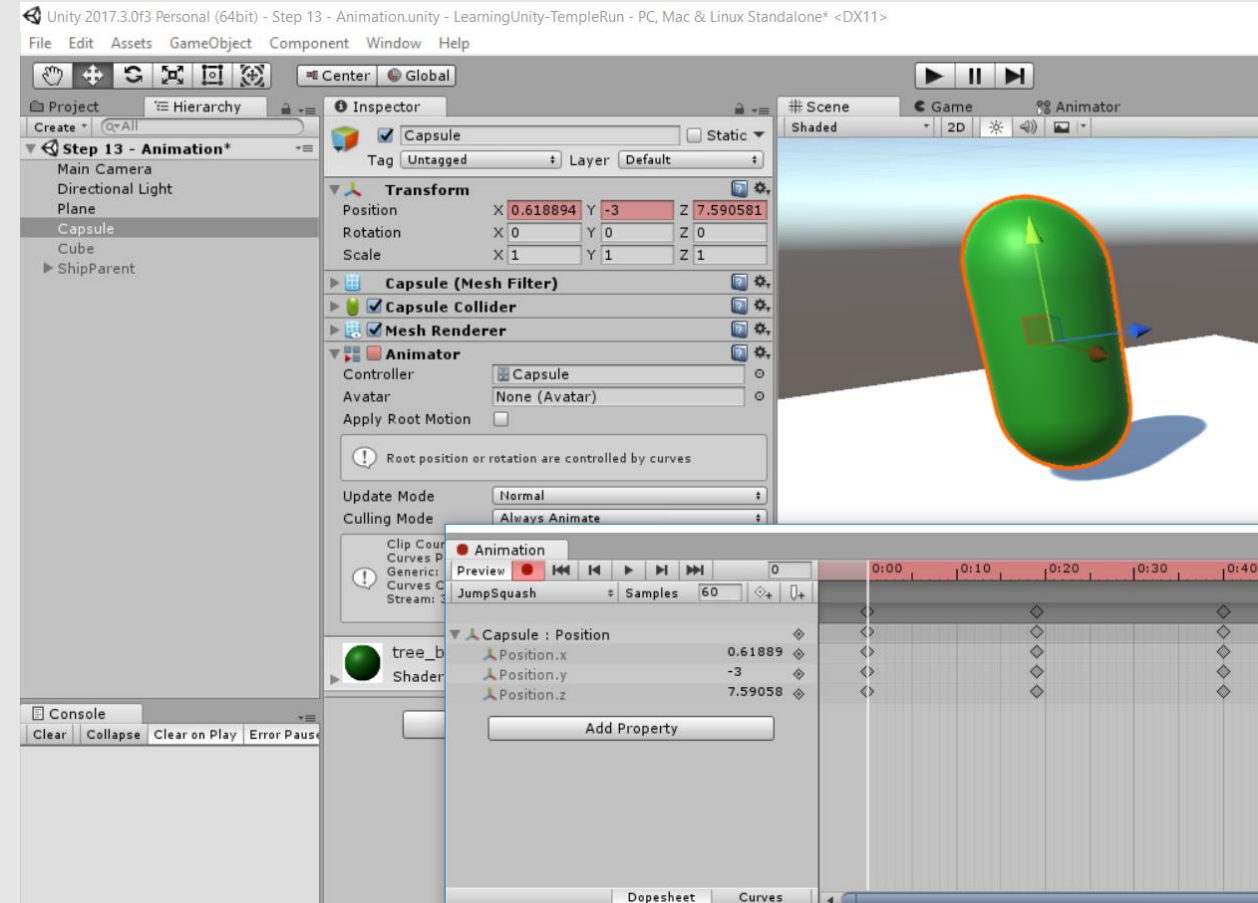
Animating in Unity

1. Click on a GameObject (in the hierarchy) you wish to animate
2. Open the Animation Window (Cntr+6 or from Windows menu)
3. Create a new Clip
4. Select the Property you wish to animate (position / scale / rotation / material / etc)
5. Go to a new keyframe position and set the values you wish to change



Animating Tips

- You can set values by:
 - changing the numbers directly
 - By using the Record button, and then change all the properties you wish to change. Unity will remember it for you



Things to Know

- Animations rely on the actual name of the GameObject they refer to and its place in the hierarchy. If you change either – the animation will break.

Best Practices for Animations

- For most cases, start and end all animations on the same element with the same values.
- Make sure you are confident with the hierarchy of your object before animating.

Questions and Exercises

(if you can answer this without testing, good job. otherwise, test it)

- Make a Jumping animation for a cube
- Make the cube squash when it hits the floor

More Resources

Tutorials > Animation

Animation

Get things moving! All you need to start animating in Unity.

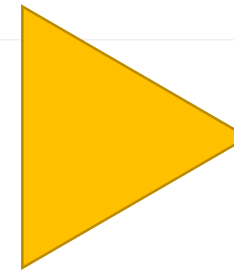
Animating

- 1. [The Animation View](#)
- 2. [Animation Properties](#)
- 3. [Animation Curves and Events](#)
- 4. [Animation Asset API](#)

Controlling Animation

- 1. [The Animator Component](#)
- 2. [The Animator Controller](#)
- 3. [Animator Controller Layers](#)
- 4. [Animator Scripting](#)
- 5. [Blend Trees](#)
- 6. [Animator Sub-state Machine hierarchies](#)

Character Animation



Activate Windows
Go to Settings to activate Windows.