

# Animation

There are many different types of animation.

They all use **frames**.

**Frames** are still images that appear as a moving image when they are shown one after another at high speed.

# Animation

Types of animation include:

- Traditional animation – each frame is hand drawn then shown in quick succession.
- Stop motion – many photos are taken. Each photo is a frame and changes slightly. The photos are then shown in quick succession.
- Clay animation – similar to stop motion but uses clay models.
- 2D animation – animating images made in painting or drawing software.
- 3D animation - animating 3D models made in 3D software.

# Animation

The frame rate is the number of individual images displayed per second

Professional animation usually plays at 24 **frames per second (fps)**. This means 24 images are shown every second.

This is enough to fool the viewer into thinking that the animation is the same as real movement

# Animation

Some animation uses a lower frame rate, for example 12 fps. This makes the animation jumpier, but also makes it a lot quicker to make and the movie file much smaller

High definition animation uses a higher frame rate, for example 60 fps. This makes the animation smoother and more realistic, but takes longer to make and the file size becomes bigger which causes streaming problems