



## ? What are we learning about animation?

Animation is used in lots of ways, including in television and film to make cartoons. Stop motion animation is a process of taking a photo of objects, moving them slightly then taking another photo. This process is repeated until there are lots of photos (frames) and when they are played one after the other, it looks like the objects in the photos move. This is how films such as Wallace and Grommet were made and computer software makes it quicker to create animation digitally because we can use the same frame over and over again, changing small parts. We can create animations in animation software but also in presentation software, such as PowerPoint.



## National Curriculum Content

Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.



## Key knowledge

- Understand that stop-motion is a series of pictures that are slightly different and they appear to move when played one after other.
- Know how to create a stop-motion video by duplicating slides that include backgrounds and shapes.
- Know how to use transition and animation effects in presentation software.
- Know how to animation individual parts of objects to create realistic animation.
- How to create animated pixel animation and save it as GIF file (short animation on a loop).



## Important Vocabulary

<b>Frame</b>	Each picture or image created within the animation is called a frame.
<b>Clone</b>	We can copy or duplicate a frame to make an identical one, which speeds up the process of making the animation.
<b>Onion skin</b>	This shows where the objects were in the previous frame (a lighter version is shown like a see through onion skin), making it easier to move the objects in the new frame.
<b>Timeline</b>	The order the frames will be played. In presentation software this is the slides down the left side but in other software this is often at the bottom of the screen.
<b>Frame rate</b>	How quickly the frames will play, this is measured in frames per second. The higher the frames per second, the quicker the animation will be.
<b>Transition</b>	The effect of one slide (frame) moving to another.
<b>GIF</b>	An animated set of images that are played on a loop.

## Key Learning: Animation

- 1** **What is stop motion animation?** Look at some examples – Wallace and Gromit Introduce Powerpoint software and set background and insert image to animate. Duplicate slides moving image so show movement.
- 2** **Morph transitions** - Add and edit backgrounds, shapes and text in PowerPoint Use respective Morph tool to create animation of objects between slides.
- 3** **Motion paths** - take and edit screenshot then use motion path animations to create directions between two places on a map.
- 4** **Pulse animations** - use the pulse animations to show the rate of the human heartbeat. Apply this function to other animal heartbeats.
- 5** **Animate individual elements** - Animate individual elements of objects Clone frames to create stop-motion animation.
- 6** **Create Gif using pixels** - Pixels are the tiny squares of colour/light that you see on computer and tv screens. Create an animated GIF.