

Film a stop-motion animation

Become an animator whizz with this simple project.

What you need

- Card or paper to create a background (we made a space scene, but you can do whatever you want)
- A phone or tablet with a camera
- A phone stand (or you could make one using some books)

How does it work?

Stop motion is a type of animation that is captured one still image (or frame) at a time. In between frames, characters and physical objects are moved. You can use this technique to make films with almost any object – early Disney movies were essentially stop-motion animation made with hand-drawn pictures. Today, filmmakers often use models made out of clay, moved around in a mini world. *Wallace & Gromit* and *Postman Pat* are examples of films and TV show made using the technique. Stop motion is one of the hardest and most time-consuming forms of animation. In 2005, Aardman Animations released *Wallace & Gromit: The Curse of the Were-Rabbit*. The film took five years to make, with animators producing just three seconds of usable footage every day.



1 Create your backdrop (background scene), using a coloured card or paper. Arrange it on a flat surface. Make your film's subject (rocket ship) and any other scenery you might need, such as smoke and fire.



2 Hold your phone, or tablet, directly over the background and focus it so that the backdrop fits in the frame. This is your "stage". Set up a stand to keep the phone fixed in the same spot or hold it still with books.



3 Start by shooting a few frames (shots) of the background. This sets the scene, and establishes where the action is taking place. When objects start moving across it, the viewer will know what's going on.



SLOW PROCESS

Each character moves 12 times a second in *Wallace & Gromit*. If Gromit wags his tail for 30 seconds, that's 360 photos.

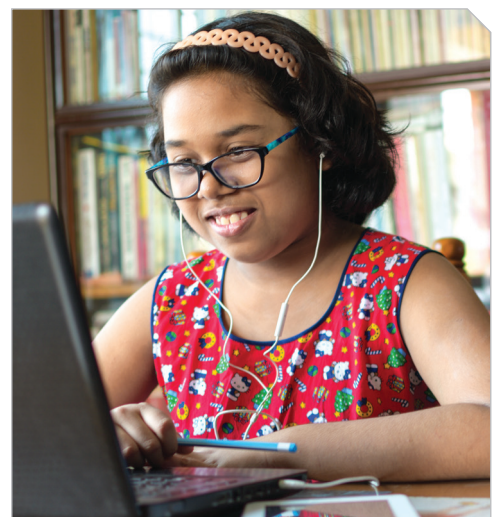
Wallace & Gromit is a famous stop-motion animation.



4 Here comes the rocket! Start with just the nose cone (tip) showing and take a photo. Slowly, move the rocket onto the background, shooting more frames each time you move it. You may need 10–20 images to make the action look smooth.



5 As the base of the rocket comes into view, add the fire blasting out of the engine. As it climbs higher, add lots of smoke clouds. You could finish your film by having billowing smoke fill the screen, obscuring the background stars.



6 Turn your still images into a stop-motion movie. There are lots of free apps available, such as Film Maker Pro – Movie Maker. Load your frames in order and adjust the playback speed. Send your films to hello@science-nature.co.uk