



Year 3 – Stop-frame animation

Unit introduction

Learners will use a range of techniques to create a stop-frame animation. Next, they will apply those skills to create a story-based animation. This unit will conclude with learners adding other types of media to their animation, such as music and text. This unit uses the context of Romans, but this can be adapted to suit your curriculum topics.

Software and Hardware requirements

A tablet is recommended for this unit to allow pupils to take photos and create animations on a single device. This unit uses screenshots from iMotion, an iPad app. Stop Motion Studio, an alternative app, can be used across most devices.

If you've adapted this unit to better suit your school, please [share your adapted resources](#) with fellow teachers in the STEM community. Alternatively, if this unit isn't quite right for your school, why not see if an adapted version which better suits has already been shared?

Overview of lessons

Lesson	Brief overview	Learning objectives
1 Can a picture move?	Learners will discuss whether they think a picture can move. They will learn about simple animation techniques and create their own animations in the style of flip books (flick books) using sticky notes.	To explain that animation is a sequence of drawings or photographs

		<ul style="list-style-type: none"> • I can draw a sequence of pictures • I can create an effective flip book—style animation • I can explain how an animation/flip book works
2 Frame by frame	In the previous lesson, learners created their own flip book—style animations. In this lesson, they will develop this knowledge and apply it to make a stop-frame animation using a tablet.	<p>To relate animated movement with a sequence of images</p> <ul style="list-style-type: none"> • I can predict what an animation will look like • I can explain why little changes are needed for each frame • I can create an effective stop-frame animation
3 What's the story?	<p>In this lesson, learners will be introduced to the job of an animator and will start to think like one in planning their creations.</p> <p>Remind the learners of the animations that we created last week and tell them that next week we will use tablets to animate some of our own stories. Tell the learners that during this lesson they will create a storyboard showing the characters, settings and events that they would like to include in their own stop-frame animation next week.</p>	<p>To plan an animation</p> <ul style="list-style-type: none"> • I can break down a story into settings, characters and events • I can describe an animation that is achievable on screen • I can create a storyboard

4 Picture perfect	In the previous lesson, learners planned out their own stop-frame animations in a storyboard. This lesson, they will use tablets to carefully create stop-frame animations, paying attention to consistency.	<p>To identify the need to work consistently and carefully</p> <ul style="list-style-type: none"> • I can use onion skinning to help me make small changes between frames • I can review a sequence of frames to check my work • I can evaluate the quality of my animation
5 Evaluate and make it great!	Last lesson, learners created their own stop-frame animations. This lesson, they will evaluate their animations and try to improve them by creating a brand-new animation based on their feedback.	<p>To review and improve an animation</p> <ul style="list-style-type: none"> • I can explain ways to make my animation better • I can evaluate another learner's animation • I can improve my animation based on feedback
6 Lights, camera, action!	Last lesson, learners perfected their stop-frame animations. This lesson, they will add other media and effects into their animations, such as music and text.	<p>To evaluate the impact of adding other media to an animation</p> <ul style="list-style-type: none"> • I can add other media to my animation • I can explain why I added other media to my animation • I can evaluate my final film

Request a computing ambassador

This unit is ideal for linking to the world of careers, and a computing ambassador can support this. Through the [STEM ambassador platform](#), you can search for a computing ambassador. If you cannot find a computing ambassador with an offer to support this unit, then the following request will help to match you with the right person. You will need to edit the areas in red to ensure the request is right for your school.

*Year 3 (ages 7-8) are learning about stop-frame animation through the [Teach Computing Curriculum unit of six lessons](#). Within these lessons, pupils will learn techniques to create a short stop frame animation. Our lessons are taking place from *date* to *date* and we would appreciate someone with skills in this area to offer some real-world experience to this unit. The unit uses *insert software* animation software on *insert devices* and focuses on the following areas:*

- *using storyboards to plan animations*
- *understanding animation specific skills such as onion skinning*
- *taking photographs and sequencing frames for animations*
- *developing animations by adding media and text to the projects*

*We require an ambassador who can support in any of these areas. We are hoping for an ambassador who would be willing to join us *in the classroom/virtually* to support our learning by *providing some handy hints and tips for our projects/giving us constructive feedback on our final projects/discussing how stop-frame animation is used within their profession and in the real-world.**

Subject knowledge and CPD opportunities

Teachers will need to understand that animations are a series of still images stitched together to create a motion video. Teachers need to understand how to create a simple off-screen flipbook (see lesson 1 for support) and how to use software to create an on-screen animation (support is provided in the lessons). Within their chosen software, teachers will need to be aware of 'onion skinning' (showing a part transparent photo to demonstrate the previous frame to make small movements more consistent), deleting frames and saving.

Continual Professional Development

Enhance your subject knowledge to teach this unit through the following free CPD:

- [Getting started in Year 3 – short course](#)
- Introduction to primary computing [remote](#) or [face to face](#)

Teach primary computing certificate

To further enhance your subject knowledge, enrol on the [teach primary computing certificate](#). This will support you to develop your knowledge and skills in primary computing and gain the confidence to teach great lessons, all whilst earning a nationally recognised certificate!

Progression

This unit progresses learner's knowledge and understanding of using digital devices to create media, exploring how they can create stop-frame animations. It builds on learners previous understanding of images from the [Digital Photography Year 2](#) unit. Following this unit, learners will further develop their video editing skills in Year 5.

Please see the learning graph for this unit for more information about progression.

Common Misconceptions

Learners may believe the objects in the animations they watch are moving, or that it is a live video, however, stop motion is a filming technique which involves taking several pictures, as objects are moved in small increments. When the pictures are put together, it makes the objects appear to be moving. Animations take a long time to produce, with even a short clip.

Misconceptions relative to the software chosen should be considered. When recording, explain the importance of clicking the correct button to get to the right place in the animation before resuming and taking more photos (otherwise it will start adding photos into different parts of the animation).

Curriculum links

Computing

- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

English

- Pupils should be taught to: draft and write by: in narratives, creating settings, characters and plot
- Pupils should be taught to: proof-read for spelling and punctuation errors

History

- The Roman Empire and its impact on Britain

Assessment

Formative assessment

Assessment opportunities are detailed in each lesson plan. The learning objectives and success criteria are introduced in the slide decks at the beginning of each lesson and then reviewed at the end. Learners are invited to assess how well they feel they have met the learning objective using thumbs up, thumbs sideways, or thumbs down.

Summative assessment

Please see the assessment rubric document for this unit. The rubric can be used to assess student's work from lessons 3 to 6.

Attribution statement

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