

Foundation Subject Medium Term Planning

Subject: Computing	Concept/Theme: Creating Media: Stop Motion	Year Group: Year 2	Term: Summer 1
---------------------------	---	---------------------------	-----------------------

Vocabulary:		End of Unit Milestones: <ul style="list-style-type: none">• I know what animation is.• I know what stop motion animation is.• I know and use animation vocabulary.• I can plan a stop motion animation of 10 frames or more.• I can create my own stop motion animation of 10 frames or more.• I know what onion skinning is.• I can use onion skinning to make small changes.
animation	A number of images to create moving images.	
still images	A photograph, drawing or painting.	
moving images	A picture that moves.	
flip book	A small book that has a series of images that give the illusion of movement when the edges of the pages are flipped quickly.	
frames	A structure that surrounds something.	
stop motion	Where a camera is repeatedly stopped and started to give animated figures the impression of movement.	
digital device	An electronic device that can create, send, share, communicate, receive, store, display, or process information.	
background	The part of a picture that forms a setting for the main figures or objects.	
object	Something that can be seen and touched.	
onion skinning	Allows the last frame to be seen when creating the next frame.	
Prior Learning: Year 1 Term: Summer 1 Creating Media: Digital Imagery <ul style="list-style-type: none">• To create a sequence of pictures• To take a clear photograph• To know that a photograph can be changed and to be able to edit their own photographs.• To use a search engine to search for and add images to their photographs.		Future Learning: Year 3 Term: Summer 1 <ul style="list-style-type: none">• I know how to describe the purpose of a book trailer and plan a book trailer.• I know how to frame shots differently to create the effect I want to tell a story.• I know how to import videos and photos into film editing software and edit it appropriately.• I know how to add appropriate text and transitions to a video

Foundation Subject Medium Term Planning

- | | |
|--|--|
| <ul style="list-style-type: none"> To create a photo collage using Keynote. | <ul style="list-style-type: none"> I know how to evaluate a video editing I know how the internet can be used to share beliefs, opinions and facts |
|--|--|

Week One- What is Animation?

Objective:

- To understand what animation is

Success Criteria:

- I understand and explain what animation means
- I understand how to create a short animation using a flip book
- I can talk about how animation began

Learning And Teaching

Outcomes

(what is in books, any computing/photo/video evidence etc and where it is to be saved)

Before the lesson watch:

Teacher video: Introduction to stop motion [KS1 Y2: Computing: What is Animation? - Tablets - Kapow Primary](#)

Have ready

- Presentation: What is animation? (see Attention grabber)
- Link: 'Paper cutout stop motion animation' on VideoLink
- Link: 'Pencil flipbook: Constellation prize' on VideoLink
- Post-it notes – nine/ten per pupil (optional)

Print

Activity: Flip book template (see Classroom resources) – one per pupil

Display slide 2 of Presentation: What is animation? to discuss the Learning objective and Success criteria.

Presentation: What is animation?

Slides 3: introduce animation to the children and discuss the key vocabulary 'still images' and 'animation'.

Slides 4: watch the video 'Paper cutout stop motion animation' and discuss with the children how they think the animation was made.

Individual paper flip books
Pupils needing extra support: Help them to make small, simple movements. Encourage them to make mistakes and discuss what they could do to improve.

Pupils working at greater depth: Look at increasing the complexity of their images. Can they add a written 'POP' as the balloon explodes.

Explain that the objects appear to move because they are carefully adjusted between photographs.

Slides 5: introduce the children to the term '**flip books**' Discuss with the children that the first flip book appeared in 1868 when it was patented by John Barnes Linnett, under the name kineograph.

Watch the video '[Pencil flipbook: Constellation prize](#)' to show how one works. Discuss how a flip book is made up of a **sequence** of still images with slight movement between each page (also known as a **frame** in animation), which gives the illusion of a moving image just like the previous animation they watched.

Key questions

- What is animation?
- Have you ever played with a flip book?
- How do small movements help the animation?

Slide 6: show the children a series of '**still images**' of a ball. Pose the question: What do you think happens to the ball in this flip book? Allow children time to predict.

Slides 7-9: play the videos and discuss how the ball appears to be moving across the page. Emphasise the importance of the ball being the same size.

Slide 10: introduce the *Activity: Flip book template* to the class. Tell the children they will be creating their own flip book animations and to number each page (frame). Discuss potential animations the children could create. (Still with the ball)

Extension: change the ball into a balloon which could be popped by a pin.

Slide 11: discuss top tips on how they can make an effective flip book animation.

Using the *Activity: Flip book template*, demonstrate an animation drawing by pressing on lightly with your pencil and amending a drawing to ensure a fluid movement between images. Emphasise using small movements across each of the frames. Once created, show the children how to assemble the flip book.

Allow children time to create and assemble their flip books. Alternatively, a set of post-it notes stuck together will also work as a flip book.

Slide 12: ask children to swap their flip book with another child and consider the following questions:

- Were the movements small?
- Did the ball look like it was moving?

Foundation Subject Medium Term Planning

<ul style="list-style-type: none"> Did the animation seem smooth? <p>Slide 13: finally, ask the children to discuss their experience of creating a flip book:</p> <ul style="list-style-type: none"> Was it easy to make the movements small? How did you ensure the ball was in the correct position each time? What other problems did you encounter? 	
<h2>Week Two- What is Stop Motion?</h2>	
Objective: <ul style="list-style-type: none"> To understand what stop motion animation is 	<ul style="list-style-type: none"> I can explain what 'stop motion' means I understand how to create a short animation using animation software I understand what 'onion skinning' is and how animators use it I can use onion skinning to make small changes to my object to make my animation smooth
<h3>Learning And Teaching</h3>	<h3>Outcomes</h3> <p><i>(what is in books, any computing/photo/video evidence etc and where it is to be saved)</i></p>
<p>Assessment: What is animation? How do you make an object appear like it is moving?</p> <p>Watch</p> <ul style="list-style-type: none"> Teacher video: How to use J2E animation KS1 Y2: Computing: Stop Motion for Tablets: Lesson - Kapow Primary Pupil video: Onion skinning Pupil video: Adding an object to my project <p>Have ready</p> <ul style="list-style-type: none"> Presentation: What is stop motion? Link: 'J2E's JIT5 - Animate' _ Share this to all iPads for children to access. <p>Display slide 2 of <i>Presentation: What is stop motion?</i> to discuss the Learning objective and Success criteria.</p> <p>Presentation: What is stop motion?</p>	<p>Pupils needing extra support: Help them with using onion skinning to make small changes. Reduce the number of frames in the animation. Encourage them to make mistakes and discuss what they could do to improve.</p> <p>Pupils working at greater depth: Look at adding additional objects into their animation.</p>

Slide 3: recap what the children already know about animation with a flip book. A stop motion animation is made in the same way, but instead of a paper-based version it is made using a camera; a '**digital device**'.

Can you think of any other digital devices that could be used to take a photo? (digital cameras, mobile phones, tablets)

Slide 4: explain how each shot of an animation film is made by taking a photo of an object, making a tiny adjustment to that object and then taking another photo.

Slide 5: introduce the vocabulary **frame** to the children. Each picture taken is called a **frame** similar to each page of the flipbook they created last week. State that animators can take hundreds of photos for just three seconds of film.

Key questions

- What is stop motion animation?
- What digital devices can be used to take a photograph?
- What is a 'frame'?
- How is stop motion animation different from the flip books we created during the last lesson?

Slide 6: discuss issues some children may have encountered in the previous lesson – ensuring their ball was in the correct place on each page of their flip book.

Introduce the term '**onion skinning**' to the children. Explain how the onion skinning feature in stop motion software allows the last frame to be seen when creating the next frame. This way, the animators can see how far they need to move or position the object from the last frame.

Slide 7: *Pupil video: Onion skinning*. Use the video to show the children how the onion skinning feature works in the J2E animation software.

Slide 8: introduce the task to the children. Explain that they will be creating a space scene with an astronaut in, but they can choose which astronaut character they would like to animate.

Slide 9: Have the software ready on your children's devices.

Slides 10-12: Either live demonstrate or use these slides to guide the children through how to choose their space background and astronaut.

Slide 13: *Pupil video: Adding an object to my project.* Show children how to create a basic animation. This example only uses 8 frames, but you need to see at least 10 frames to get a lengthy animation.

Give the children at least 15 minutes to create their animation. If needed, demonstrate on the board how to delete or add frames in to ensure a smooth animation is created.

Key questions

- What problems did we have in the previous lesson week with our flip book animations?
- How easy was it to make sure our ball was the same size on each page/frame?
- How does 'onion skinning' help the animators?
- How do I select my background?
- How do I select my object?
- How to add a new frame?

Slide 14: once the animations have been created, get the children to swap their devices. Use the question prompts to discuss the animation:

- Were the movements small?
- Was the animation fluid?
- Were the frames clear?

Slide 15: finally, ask the children to discuss their experience of using the software: J2E – animate. Use the following questions as a prompt for discussion:

- Was it easy to make the movements small?
- Did you like the onion skinning feature?
- What problems did you encounter?
- Which method did you prefer for creating an animation?

Slide 16: end by posing the question: Is using a digital device an easier way to create an animation? Give children time to discuss with their partner before sharing with the class.

Key questions

- Were the movements small?
- Was the animation fluid?
- Were the frames clear?

Foundation Subject Medium Term Planning

- Was it easy to make the movements small?
- Did you like the onion skinning feature?
- What problems did you encounter?
- Which method did you prefer for creating an animation?
- Is using a digital device an easier way to create an animation?

Week Three- My First Animation

Objective:

- To create a stop motion animation

Success Criteria:

- I understand how to create a short animation using Stop Motion Studio
- I can use onion skinning to make small changes to my object to make my animation smoother

Learning And Teaching

Outcomes

(what is in books, any computing/photo/video evidence etc and where it is to be saved)

Assessment: 'J2E's JIT5 - Animate' Show me how to make a stop motion animation (On whiteboard. children to guide you)
Which way do you prefer to make an animation? Why?

Watch

- Teacher video: How to use Stop Motion Studio [KS1 Y2: Computing: My First Animation - Tablets - Kapow Primary](#)

Have ready

- Presentation: My first animation (see Attention grabber)
- Stop Motion Studio app

Print

- Activity: Space backgrounds (see Classroom resources) – one per pupil
- Activity: Space crafts (see Classroom resources) – one per pupil

Display slide 2 of Presentation: My first animation to discuss the Learning objective and Success criteria.

Presentation: My first animation

Pupils needing extra support: Use a tripod or books to keep the tablet still between the frames. Look at decreasing frames for the animation and using larger movements between each frame.

Pupils working at greater depth: Look at increasing frames for the animation and using smaller movements between each frame.

Slide 3: recap 'Lesson 2' with children and introduce today's lesson. The children will be creating another space-themed animation, this time using Stop Motion Studio. This lesson will work better if the children can work together in pairs.

Slide 4: show the *Activity: Space backgrounds* to the children and let them choose which background they would like. You could print these out onto A3 paper to showcase to the class.

Slide 5: show the three different space crafts on the *Activity: Spacecrafts*. Let the children choose the spacecraft they wish to animate. These space crafts could be cut out for those children who need extra support.

Slide 6: give the children time to prepare their working space for the activity.

Key questions

- Which background are you going to choose?
- Which spacecraft will you use?
- How will you make sure your background does not move?
- How will you keep your tablet still?

Slide 7 and 8: show the children how to navigate the Stop Motion Studio app.

Slide 9: demonstrate or use the video in the presentation to show the children how to create a stop motion animation. If you are demonstrating, emphasise the importance of keeping the tablet steady, having all the background in the shot and making sure no hands are in the shot.

Slide 10: introduce the challenge to the children and discuss the tips on how to create a successful stop motion animation.

Slide 11: once the children have created their animations, get them to swap their device with another pair. Use the questions below as a prompt for discussion:

- Were the movements small?
- Was the animation fluid?
- Were the frames clear?

Key questions

- How do we get on the app?

Foundation Subject Medium Term Planning

- How do we take a frame?
- How can we check our work?
- How can we delete a frame?
- How will your spacecraft object move?
- How can you work together to create a fluid animation?
- Were the movements small?
- Was the animation fluid?
- Were the frames clear?

Slide 12: use the questions on the slide to discuss how they found using the app.

- Was it easy to keep the camera still?
- Was it easy to make the movements small?
- Was it easy to use the onion skinning feature?
- What problems did you encounter?

Week Four

Objective:

- To plan my stop motion animation

Success Criteria:

- I can work collaboratively with others to plan an animation
- I can think carefully about keeping my idea simple and easy to animate
- I can decompose my story into smaller parts

Learning And Teaching

Outcomes

(what is in books, any computing/photo/video evidence etc and where it is to be saved)

Assessment: Ask children to compare 'Stop Motion Studio' and 'J2E animate' software. Which do they prefer and why?

Have ready

- *Presentation: Planning my project* (see Attention grabber) [KS1 Y2: Computing: Planning my Project - Tablets - Kapow Primary](#)

Plan of stop motion animation

Pupils needing extra support: Work as a whole

Foundation Subject Medium Term Planning

<ul style="list-style-type: none"> • Stop Motion Studio app <p>Print</p> <ul style="list-style-type: none"> • <i>Activity: Planning sheet 1</i> (see Classroom resources) – children animate one object – number of copies based on teacher judgement • <i>Activity: Planning sheet 2</i> (see Classroom resources) – children animate two object – number of copies based on teacher judgement • <i>Activity: Backgrounds</i> (see Classroom resources) – one per pupil • <i>Activity: Objects – colour version</i> (see Classroom resources) – one per pupil • <i>Activity: Objects – black and white version</i> (see Classroom resources) – one per pupil (optional) <p>Display slide 2 of <i>Presentation: Planning my project</i> to discuss the Learning objective and Success criteria.</p> <p>Presentation: Planning my project</p> <p>Slide 3: recap the previous lesson with children and introduce today's lesson. In pairs, the children will plan their own space-themed animation, using a range of backgrounds and objects.</p> <p>Slide 4: show the children the objects they can choose from via the <i>Activity: Objects – colour version</i>. You can choose to stick to one object to animate or extend children by having two available. You also have the option of having these in black and white (<i>Activity: Objects – black and white version</i>), so the children can decorate them.</p> <p>Slide 5: show children the <i>Activity: Space backgrounds</i> – they can choose to use any of these for their animation.</p> <p>Slide 6: put the children in pairs and ask them to discuss what their animation might be, for example, scene one could have a shooting star flying past. At this point, ask pairs to discuss the object(s) they will be animating. Share ideas with the class.</p> <p>Key questions</p> <ul style="list-style-type: none"> • What might your animation look like? • Which object and background will work best? • Will you animate more than one object? <p>Slide 7: hand out the differentiated planning sheets (<i>Activity: Planning sheet 1 or 2</i>) to the children, depending on how many objects you want the pairs to focus on (see Print for more information). Demonstrate how to complete the <i>Activity: Planning</i></p>	<p>group to plan out and create their animation.</p> <p>Pupils working at greater depth: Think about moving objects back and forth across the scene.</p>
--	---

Foundation Subject Medium Term Planning

sheet using one of the ideas the pairs has come up with (keep this as you may want to create your own animation in the next lesson).

Key questions

- Which object shall I animate?
- Shall I make it move across my scene or up and down?

How many frames might I need?

Slide 8: give children time to share their ideas.

Key questions

- What will your animation look like?
- How many frames will you need?
- Who will use the tablet and take the photos?
- Who will move the object(s)?

Week Five and Six- Creating My Project

Objective:

- To create my stop motion animation

Success Criteria:

- I can use my planning sheet to structure my animation
- I can work collaboratively
- I can create an animation of at least 10 frames

Learning And Teaching

Outcomes

(what is in books, any computing/photo/video evidence etc and where it is to be saved)

Have ready

- *Presentation: Creating my project* (see Attention grabber) [KS1 Y2: Computing: Creating my Project - Tablets - Kapow Primary](#)

Stop motion animation

Pupils needing extra support: Work as a whole

Foundation Subject Medium Term Planning

- Stop Motion Studio app
- Children's completed *Activity: Planning sheet* from 'Lesson 4: Planning my project'

Print

- *Activity: Criteria grid sheet* (see Classroom resources) – one grid per pair of pupils
- *Activity: Planning sheet 1* (see Classroom resources) – children animate one object – if additional copies are required
- *Activity: Planning sheet 1* (see Classroom resources) – children animate two object – if additional copies are required
- *Activity: Backgrounds* (see Classroom resources) – if additional copies are required
- *Activity: Objects – colour version* (see Classroom resources) – if additional copies are required
- (Optional) *Activity: Objects – black and white version* (see Classroom resources) – if additional copies are required

Display slide 2 of *Presentation: Creating my project* to discuss the Learning objective and Success criteria.

Presentation: Creating my project

Slide 3: ask children to get into the same pairs from 'Lesson 4: Planning my project'. Hand out the pairs *Activity: Planning sheets* from 'Lesson 4: Planning my project' and their chosen background and object(s). Give the children time to look through their planning and remind themselves of their animation.

Slides 4 and 5: ask the pairs to label themselves Partner A and Partner B. Use these slides to discuss how the pairs can work effectively together to produce their animation.

Partner A – you must ensure:

- The tablet is still when taking a photo.
- All the background is in the photo.
- There are no hands or other objects present.
- The shots are in focus.

Partner B – you must ensure:

- You use only small movements between each frame.
- Use onion skinning to make sure the object is in the correct place.
- Refer to your plan to ensure you have the correct movement.

If children are working in small groups then split these tasks further.

group to plan out and create their animation.
Pupils working at greater depth: Think about moving objects back and forth across the scene.

Key questions

- What will happen in your animation?
- Do you need to debug anything in your plan?

Who will have which role?

Slide 6: discuss tips for creating a successful animation. If you wish, refer back to the *Activity: Planning sheet* you created last lessons as a class and demonstrate creating a successful animation using the tips discussed.

Handout the *Activity: Criteria grid sheet* to each pair and encourage children to use this while creating their animation.

Slide 7: give children time to create their stop motion animation. Pause at regular intervals to ensure children are referring to their plans. Highlight good examples of teamwork.

Slide 8: once the children have finished their animation, give them time to think critically about their animation and to look back at the *Activity: Criteria grid sheet* to check that they have completed everything.

Key questions

- Is your animation sticking to your plan?
- Do you need to debug anything?
- How can you make those movements more fluid?
- Is your background filling the whole frame?
- Have you kept your tablet still?
- Do you need to delete any frames?

Slide 9: let the children share their animations with the rest of the class. If you have a blog or school website you could also share these with the wider community.

Key questions

- Which objects have been animated?
- What is successful about this animation?
- How could it be improved to make it even better?

Foundation Subject Medium Term Planning

--	--