

**Pioneer Federation**  
**Medium term plan**  
**Cycle B, Term 5**  
**ICT**



**Subject:** Purple Mash unit 4.6 Animation

**Key Concept/ Theme:** • To discuss what makes a good animated film or cartoon. • To learn how animations are created by hand. • To find out how animation can be created in a similar way using the computer. • To learn about onion skinning in animation. • To add backgrounds and sounds to animations. • To be introduced to ‘stop motion’ animation. • To share animation on the class display board and by blogging.

**Prior Learning links:**

	Cycle A	Cycle B
Year 1/2	Unit 1.1 Exploring purple mash • General use of Purple Mash • Design: avatar creation • Paint Projects: use of the simple paint tools  Unit 2.6 Creating pictures • 2Paint a Picture: art effects, collage effects  Unit 1.7 Coding Sequencing programs to create animation effects.  Unit 2.1 Coding Sequencing programs to create animation effects.	Unit 1.1 Exploring purple mash • General use of Purple Mash • Design: avatar creation • Paint Projects: use of the simple paint tools  Unit 1.6 Animated stories • 2Create a Story: Painting tool. • What animation is • Animating images using built in effects • Concept of background (static) and foreground (can move)
Year 3/4	Unit 3.1 Coding Sequencing programs to create animation effects.	

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**Key Vocabulary**

**Animation**

The process of adding movement to still objects.

**FPS (Frames Per Second)**

The number of frames played per second.

**Frame**

A single image in an animation.

**Onion Skinning**

A process where the shadow image of the previous frame is present to help you line up the objects of the animation correctly.

**Pause**

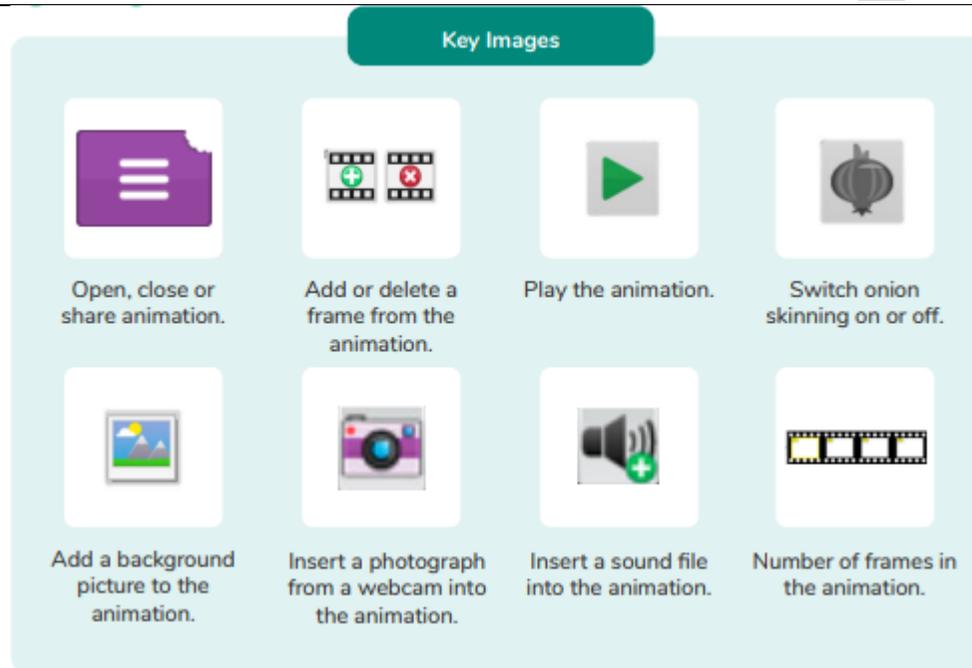
To temporarily stop the animation.

**Stop motion**

A technique whereby the camera is repeatedly stopped and started, for example to give animated figures the impression of movement.

**Vocabulary:**

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**Key Images:**

**Resources needed for each lesson – 2dos to set.**

Lesson 1:

- Sticky notes (such as post-its) and pens.
- Examples of paper animations such as flick books and Scanimation books would be useful but not essential.
- Access to a video sharing site such as YouTube to share examples of first animations (Not essential).
- 2Animate tool. This is found in the Tools area of Purple Mash.Lesson 2

Lesson 2

- 2Animate category – Example Animations (Squashing Playdough). Lesson 4
- Lesson 4 Worksheet: You may want to copy this for children or use it for your own reference.

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- 2Logo tool: This is found in the Tools area of Purple Mash.

Lesson 3

Access to the following link – Wallace and Gromit website: <http://www.wallaceandgromit.com/films/cracking-contraptions> The video clips ‘Cracking Contraptions’ are used in this lesson and these links are on YouTube. You will therefore need access to YouTube.

- Set up a class blog using 2Blog and give the children’s the ability to post and comment on this blog. A user guide that can show you how to do this quickly can be found in the Teacher’s Guides and Resources section.
- (Extension) Construction material such as Lego, K’nex that has a moveable feature.

1.  Unit 4.6  Lesson 1	<p><b>Deeper learning questions: What can producers do with animated films that can’t be done with actors in conventional filming?</b></p> <p><b>Reconnection:</b> Go over online safety. Discuss prior learning. What can they remember about using purple mash.</p> <p><b>LO:</b> To decide what makes a good, animated film or cartoon and discuss favourite animations. To learn how animations are created by hand. To find out how 2Animate animations can be created in a similar way using technology.</p> <p><b>Activity:</b> Go over new vocab for lesson</p> <p>Introduce animations to the children. Discuss the children’s favourite animation and probe with them how they think they are made. Children should be drawn to the fact that hand drawn animation is often a lot more time consuming than using software. <b>Note:</b> The animation in the slideshow is simply the appearance of the questions in turn.</p> <p>Go through the description of animation on the slide and support children with understanding how our brains ‘see’ animation. As a class, work out the number of pictures needed for the duration of different animations at 24FPS. Ask the children to create a simple drawn animation using Post-it note pads. Use this as an opportunity to share some of the earliest animations such as the first animated film created by Walt Disney (Well known video sharing sites like YouTube may have appropriate animations to share).</p> <p>Open 2Animate on your device by clicking the icon and ask the children to do so on theirs. Go through the steps of making a simple face animation.</p>
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	<p>Clicking reveals the steps one-by-one. Continue to show the steps for creating an animation and model. Let the children create their animations and if time, create a new animation linked to a topic.</p> <p>Go over vocab and success criteria.</p> <p><b>Extension:</b> Share the extension. Children should repeat the last few frames in order to give the appearance of a pause.</p>
2. Unit 4.6 Lesson 2	<p><b>Deeper learning question:</b></p> <p><b>Reconnection:</b> Go over online safety. Discuss prior learning. What can they remember about using purple mash. Go over prior vocab.</p> <p><b>LO:</b> To learn about onion skinning in animation. To add backgrounds and sounds to animations.</p> <p><b>Activity</b> Go over new vocab for lesson Recap the last lesson – click to reveal points for discussion. Share the Squashing Playdough example by clicking the icon and discuss how it appears to show the finger moving. Model the process of onion skinning. Clicking reveals the process. Children should open 2Animate on their devices and use the tool to create a moving ball animation. Model adding backgrounds to their ball animation. Allow the children to experiment on their animations with different backgrounds on individual frames or all frames. Demonstrate the steps for adding sound to frames. Children should try this on their animations. Ask the children to use what they have learnt today – Onion skinning, sound and backgrounds, to create their own animation.</p> <p>Go over vocab and Success criteria</p> <p><b>Extension</b> Share the extension activity. Children are challenged to create a dancing stick man which includes background, sound and animations to make the ball appear to glitter.</p>
3.	<p><b>Deeper learning question:</b> What are the differences and similarities between creating animations by using pictures and objects?</p>

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<p>Unit 4.6  Lesson 3</p>	<p><b>Reconnection:</b> Go over online safety. Discuss prior learning. What can they remember about using logos Go over prior vocab.</p> <p><b>LO:</b> Introducing ‘stop motion’ animation. To share animation the class blog.</p> <p><b>Activity:</b> Go over new vocab for lesson</p> <p>Share the ‘Cracking Contraptions’ video *A link to the site is on the resources section of the lesson plan, which we advise you view before sharing. Discuss with children the questions on the slide and summarise Stop Motion animation.</p> <p>Tell the children that they need to create their own cracking contraption. Go through the tips with the class. After they have created and saved their animation, ask them to share to class blog and comment on each other’s.</p> <p>Recap vocab and success criteria.</p> <p><b>Extension Explain that the children could create their own physical contraption from the materials you provide. They will need to have a moveable feature on it. Children to take photos of the model, moving it slightly for each image (2Animate has the photo button which applies an image taken on the device to an individual background. *You might need to use a digital camera if the position of the camera on the device isn’t easy to take images of the model with – Children could use the background button instead and import photos to individual backgrounds.</b></p>
	<p><b>End of unit quiz &amp; reflect on gaps from the unit:</b></p> <p>Unit 4.6 Quiz – found on unit page on PM</p> <p>Questions:</p> <p>Vocab match up from unit</p> <p>Label pictures from unit</p> <p>Fill in missing words to complete the paragraph</p> <p>Match icons to their description</p> <p>What are the benefits for animation companies of using computer animation software compared to traditional methods?</p> <p>What statements apply to Stop Motion Animation?</p>

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True or not true statements

To create the effect of a pause in 2Animate before it loops an animation again, what can an animator do?

**End Points:**

What is an animation? Animation is the process of giving the illusion of movement to drawings, models, or inanimate objects. Animated motion pictures and television shows are highly popular forms of entertainment.

What is meant by onion skinning? Onion skinning is a 2D computer graphics term for a technique used in creating animated cartoons and editing movies to see several frames at once.

What is meant by stop motion animation? Stop motion animation is a filming technique in which objects (such as clay models) are photographed in a series of slightly different positions so that the objects seem to move.

**Evaluation:** What have the end of unit quizzes, pupil self-reflections and termly work told you about what the children can remember and recall? What are the gaps? Ensure that the areas that need further reinforcement are documented in the next subject unit MTP. **Plan in time to revisit gaps within units, determined by the quizzes.**

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**Subject:** Purple Mash unit 4.7 Effective searching

**Key Concept/ Theme:** To locate information on the search results page. • To use search effectively to find out information. • To assess whether an information source is true and reliable.

**Prior Learning links:**

	Cycle A	Cycle B
Year 1/2	Unit 1.1 Online safety and exploring purple mash • Safe logins • Using Purple Mash search functionality  Unit 2.5 Effective searching • Exploration of what the Internet is • Accessing the World Wide Web • Digital Footprint • Searching and sharing	Unit 1.1 Online safety and exploring purple mash • Safe logins • Using Purple Mash search functionality  Unit 1.6 Technology outside of school • Developing ideas about the concept of technology that we are surrounded by and its purpose  Unit 2.2 Online safety • Sharing to a display board • Sharing online • Digital footprint
Year 3/4	Unit 3.2 Online safety • Reliability of information and spoof websites • Appropriate ratings • Reporting problems	Unit 4.2 Online safety • Phishing • Digital footprint • Malware and viruses • Plagiarism

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**Key Vocabulary**

**Balanced View**

Presenting opposing points of view fairly and without bias.

**Easter eggs**

An unexpected or undocumented feature in a piece of computer software or on a DVD, included as a joke or a bonus.

**Internet**

A global computer network providing a variety of information and communication facilities.

**Key words**

A word or a group of words an Internet user uses to perform a search in a search engine.

**Reliability**

The degree to which the result of something can be depended on to be accurate.

**Results page**

Where the answers to a search are displayed.

**Search engine**

A program that searches for and identifies items in a database. Used especially for finding sites on the World Wide Web.

**Vocabulary:**

**Resources needed for each lesson – 2dos to set.**

Lesson 1:

- Internet Recap Quiz • Lesson 1, Worksheet 1 – Finding Information with Google: Set this as a 2Do.

Lesson 2

- Lesson 2 – Worksheet 1 – Search Quiz: Set this as a 2Do.

Lesson 3

Lesson 3 – Information Cards. Print a copy for each child or display on the whiteboard.

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<p>1. Unit 4.7 Lesson 1</p>	<p><b>Deeper learning questions:</b></p> <p><b>Reconnection:</b> Go over online safety. Discuss prior learning. What can they remember about using purple mash.</p> <p><b>LO:</b> To locate information on the search results page.</p> <p><b>Activity:</b> Go over new vocab for lesson</p> <p>Explain to children we are going to be finding information using a search engine. Recap learning from the previous unit linking to this in year 2 and launch Internet Recap Quiz going through as a class. Elicit that we can answer much more than simple search queries using search engine e.g. weather, spelling, postcodes, answers to calculations, sports results etc.</p> <p>Children can try on their devices and using different search engines.</p> <p>Explain the activity. Children should find the answers to the questions using search queries techniques. Once complete, they should hand in the 2Do.</p> <p>Go over vocab and success criteria.</p> <p><b>Extension:</b> Share the extension with the children. Get them to look at the two images and discuss why the results might be different even with the same search query used. Elicit why it is important to use different search engines particularly when discerning the credibility of information. Some sources could be flawed or there might be some bias. Corroborating information is a good digital skill.</p>
<p>2. Unit 4.7 Lesson 2</p>	<p><b>Deeper learning question:</b> Why do we have to be careful when searching online? Is everything we see online true?</p> <p><b>Reconnection:</b> Go over online safety. Discuss prior learning. What can they remember about using purple mash. Go over prior vocab.</p> <p><b>LO:</b> To use search effectively to find out information.</p> <p><b>Activity</b> Go over new vocab for lesson</p>

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	<p>Explain that we will be practising ‘effective searching’ today. Reveal the search tips the children should consider before starting the main task.</p> <p>Children should use a search engine on their devices to answer the questions. Ask the children to compare their answers with their friends and identify if there are any differences and why. You might choose to have half the class using a different search engine to allow for more discussion around differences in results.</p> <p>Go over vocab and Success criteria</p> <p><b>Extension Share the extension. Children to think of questions to ask their classmates that involves using different units of measure (conversions). Children to test their answers to their questions first before sharing the questions with others.</b></p>
<p>3. Unit 4.7 Lesson 3</p>	<p><b>Deeper learning question: How would you check if something on the Internet is true?</b></p> <p><b>Reconnection:</b> Go over online safety. Discuss prior learning. What can they remember about using logos Go over prior vocab.</p> <p><b>LO:</b> To assess whether an information source is true and reliable.</p> <p><b>Activity:</b> Go over new vocab for lesson</p> <p>Launch 2Connect from the icon on the slide or take notes on children’s ideas of how we check if something is truthful? Reveal tips for checking if something is true on the Internet and continue to scribe ideas.</p> <p>Ask the children to read the True or False Information Card pairs and make informed judgements as to which is true, which is false. Ask them to share their initial conclusions. Then ask the children to fact check the cards using the Internet. Reinforce that not everything online is true and that they should use multiple sources to check they are correct. Ask the class to compare their results of what they found out. Were there discrepancies? Why?</p> <p><b>(Optional if time)</b> Explain that search engines are not always for searching. Introduce the idea of ‘Easter eggs’. Share the definition with the children. Children to then try out the listed phrases in Google. <b><u>*Check the listed phrases before delivering the lesson.</u></b></p> <p>Recap vocab and success criteria.</p> <p><b>Extension Share the extension activity. Children to read the hypothetical situation and then see if they can answer the associated questions. Reveal possible answers when children are ready. Ensure children understand possible bias and that it’s important to have a variety of sources.</b></p>

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**End of unit quiz & reflect on gaps from the unit:**

Unit 4.7 Quiz – found on unit page on PM

Questions:

What is a search engine?

www.google.co.uk is an example of \_\_\_\_\_

Which of these are examples of search engines?

What kind of information can you search for on a search engine?

True or False statements

What can you do to check if what you read online is true?

In computer software what is meant by an Easter egg?

If you only ever see results related to things you have an interest in or agree with, is that going to give you a balanced view?

**End Points:**

What is a search engine? A search engine is a piece of software that allows the user to find and display pages from the World Wide Web.

**Evaluation:** What have the end of unit quizzes, pupil self-reflections and termly work told you about what the children can remember and recall? What are the gaps? Ensure that the areas that need further reinforcement are documented in the next subject unit MTP. **Plan in time to revisit gaps within units, determined by the quizzes.**

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