purple mash

Computing Scheme of Work

Unit 4.6 – Animation

Contents

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Introduction

For these sessions, the children will need to have their own individual logins to Purple Mash.

If you are currently using a single login per class or group and would like to set up individual logins yourself, then please see our guide to doing so at Create and Manage Users. Alternatively, please contact support at support@2simple.com or 0208 203 1781.

This series of three lessons will provide the children with the knowledge and understanding to create simple and more complex animations using 2Animate on Purple Mash.

A user guide to 2Animate is available in the Guides and Resources section of Purple Mash.

Medium-Term Plan

Lesson	Title	Success Criteria
1	Animating an Object	• Children have put together a simple animation using paper to create a flick book. • Children understand animation frames. • Children have made a simple animation using 2Animate.
2	2Animate Tools	• Children know what the Onion Skin tool does in animation. • Children can use the Onion Skin tool to create an animated image. • Children can use backgrounds and sounds to make more complex and imaginative animations.
3	Stop Motion Animation	• Children know what 'stop motion' animation is and how it is created. • Children have used ideas from existing 'stop motion' films to recreate their own animation. • Children have shared their animations and commented on each other's work using display boards and blogs in Purple Mash.

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Lesson 1 – Animating an Object

Aims

- 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.

Success criteria

- Children have put together a simple animation using paper to create a flick book.
- Children understand animation frames.
- Children have made a simple animation using 2Animate.

Resources

- 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.

Activities

Introduction	Display **slide 2** and outline the lesson aims.
	Display **slide 3** and outline the success criteria.
Introduction: Animation	Use **slide 4** to 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. **Note**: The animation in the slideshow is simply the appearance of the questions in turn.
	Display **slide 5**. 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.
Activity 1: Flick Book	**Use slide 6.** 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).
Activity 2: Using 2Animate	Display **slide 7.** 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.
	Clicking reveals the steps one-by-one.
	Display **slide 8.** 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.
Extension: Incorporating 'Pauses'	Use **slide 9** to share the extension. Children should repeat the last few frames in order to give the appearance of a pause.
Review Success Criteria	Display **slide 10.** Review the success criteria from **slide 3.** Children could rate how well they achieved this using a show of hands.

Lesson 2 – 2Animate Tools

Aims

- To learn about onion skinning in animation.
- To add backgrounds and sounds to animations.

Success criteria

- Children know what the Onion Skin tool does in animation.
- Children can use the Onion Skin tool to create an animated image.
- Children can use backgrounds and sounds to make more complex and imaginative animations.

Resources

- 2Animate category – Example Animations (Squashing Playdough).

Activities

Introduction	Display **slide 2** and outline the lesson aims.
	Display **slide 3** and outline the success criteria.
Introduction: 2Animate Tools	Use **slide 4** to 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.
Onion Skinning	Use **slide 5.** Model the process of onion skinning. Clicking reveals the process.
Activity 1: Onion Skinning	Display **slide 6**. Children should open 2Animate on their devices and use the tool to create a moving ball animation.
Activity 2: Backgrounds	Use **slide 7** to model adding backgrounds to animations. Allow the children to experiment on their animations with different backgrounds on individual frames or all frames.
Activity 3: Adding Sounds	Use **slide 8** to demonstrate the steps for adding sound to frames. Children should try this on their animations.
Activity 4: Getting Creative	Display **slide 9**. Ask the children to use what they have learnt today – Onion skinning, sound and backgrounds, to create their own animation.

Activity 5: Extension	Use **slide 10** to 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.
Review Success Criteria	Display **slide 10.** Review the success criteria from **slide 3.** Children could rate how well they achieved this using a show of hands.

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Lesson 3 – Stop Motion Animation

Aims

- Introducing 'stop motion' animation.
- To share animation on the class blog.

Success criteria

- Children know what 'stop motion' animation is and how it is created.
- Children have used some of the ideas from existing 'stop motion' films to recreate their own animation.
- Children have shared their animations and commented on each other's work using blogs in Purple Mash.

Resources

- 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.

Activities

Introduction	Display **slide 2** and outline the lesson aims.
	Display **slide 3** and outline the success criteria.
Introduction: Cracking Contraptions	Use **slide 4** to share the 'Cracking Contraptions' video *A link to the site is on the resources section of the lesson plan and on the slide, which we advise you view before sharing. Discuss with children the questions on the slide and summarise Stop Motion animation.
Activity 1: Creating an Animation	Share **slide 5**. 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.
Activity 2: Extension	Display **slide 6.** 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.
Review Success Criteria	Display **slide 7.** Review the success criteria from **slide 3.** Children could rate how well they achieved this using a show of hands.

Assessment Guidance

The unit overview for year 4 contains details of national curricula mapped to the Purple Mash Units. The following information is an exemplar of what a child at an expected level would be able to demonstrate when completing this unit with additional exemplars to demonstrate how this would vary for a child with emerging or exceeding achievements.

Assessment Guidance	
Emerging	With support throughout, children will use a pencil and paper flip book to understand the basics of stop motion animation (Unit 4.6 Lesson 1). Children begin to transfer this knowledge and create their own basic animation using 2Animate (Unit 4.6 Lesson 3). This animation may lack detail and lack smoothness of transition. Children share their learning by displaying their animation on a blog or display board (Unit 4.6 Lesson 3).
Expected	Initially children will use a pencil and paper flip book to understand the basics of stop motion animation (Unit 4.6 Lesson 1). Children transfer this knowledge and create their own animation using 2Animate (Unit 4.6 Lesson 3). Children know, understand, and use the onion skin animation tool within 2Animate to show movement across the screen (Unit 4.6 Lesson 2). Furthermore, they select backgrounds and sounds to make their animation more immersive (Unit 4.6 Lesson 2). Children share their learning by displaying their animation on a display board or blog (Unit 4.6 Lesson 3).
Exceeding	Children demonstrating greater depth create their own detailed animation using 2Animate (Unit 4.6 Lesson 3) utilizing all the features of the software e.g., onion skin animation tool (Unit 4.6 Lesson 2) select backgrounds and sounds (Unit 4.6 Lesson 2). Children share their learning by displaying their animation on a display board or blog (Unit 4.6 Lesson 3). Children will demonstrate greater depth understanding when they suggest novel ways to solve difficulties that other children are having in making their animations effective.

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