

Computing- Year 5 Digital Photography

	Prior knowledge			Lesson Objectives	
Lesson Objectives	 Y4 Digital Art: Create a digital image usin variety of brush types, per tools and effects. Change brush size and typ Change opacity Use blending 	•Enha resize e Presei	a digital phot nce digital im tools and filte nting: ating:	o using appropriate camera so ages and photographs using c ers ork on the basis of content and a	crop, brightness, contrast &
Sson O	Saving and Retrieving	Typing mous	gand e skills	Research	Computer systems
1	 Upload work to cloud storage to create digital portfolio Air drop work to a teacher 	 Y5- Use keyl shortcuts for and delete 			 Describe that a computer system features inputs, processes, and outputs Recognise that data is transferred using agreed methods
Curriculum Drivers	1	Creative thinl Thinking ou box when li shots, trying things/ angl approaches	utside the ning up g different es/	 Emotional intelligence Discuss how photography can elicit emotional responses. Pupils deal with failure/ re taking and evaluating photos 	Community Discuss how photographs can build and develop sense of community historically and now.
Vocabulary	Depth of Field, leading line	s, sensor, tex	ture, rule of	thirds	

learning how to take better photos, more arty photos and more interesting photos. We will be working on this for a few weeks and some of the best photos will be chosen for display around the school! Mention links to Victorians and photography.
Watch video to see where photography has come from https://www.youtube.com/watch?v=XaGUL8B-BrE
Talk through thew concepts on taking at photo: Composition: rule of thirds Explain that by having something of interest in the crossing when splitting both the horizontal and vertical into thirds, it created a more natural,
interesting image. Demonstrate on example images on powerpoint
How to focus/ depth of field The ipad with automatically focus on whatever is in the middle of the screen, unless it detects a face. To force it to focus on something else, click the screen where you want to focus. When something is in focus near the camera, things further aware will become blurry- this is called depth of field. It makes what we want people to look at more prominent.
How to adjust exposure The computer will automatically try to guess itsself how bright an image should be, but we can override this. When focussing on an object, hold the finger and move up and down. This will show a sun icon and change how bright the image is.
Leading lines By having a linear object moving off into the distance 9like a road, line on playground, fence etc) this leads our eyes from the start of the line and into the picture. This can be useful to draw attention to something in the distance
Texture/ interest Explain that choosing repeating patterns either in nature, or man made like tyre treads or tiles can be effective at creating an interesting image. Remind the children that they might need to focus the camera when close up.
Children have time to go on a photo walk with the ipad to apply the skills taught. They will try to capture and keep 5 high quality images. (delete as they go)
Back in class, children review their photos and cull the poorer ones. They then create a folder in the files app with their name on to copy the pictures to.
Support/ access adaptions:
Offer suggestions and critical comments to ensure they effect is working for the children. Extension/ challenge: Create multiple versions to evaluate effectiveness and impact.
Children download pictures and choose best shot of each type to discuss.

n Two	Activate 5 mins	Remind the children of the skills we developed last week- what can they remember. Recap- were there things that were more tricky? How did you over come them?
Lesson	Teach Component knowledge 15 min	Show the children the montages on the slides. Discuss and evaluate both why the pictures work together and the skills and also how they chose the images that went together- eg. similar colours or contrasting colours, all black and white/ all colours boosted etc.

Apply

Children have 20-30 mins to capture more photos using last week's skills, thinking about the montage they might want to create and the skills taught.

Mini plenary-Teach

Back in class: Show the children how to use ipad to crop, colour, change other settings to enhance the image- play with different effects. See link for details: Edit photos and videos on iPad – Apple Support (UK) Choose best effects- make multiple versions to evaluate.

Adjust light and colour

1. Tap a photo thumbnail to view it in full screen.

Component knowledge

- 2. If you're editing a video or a photo shot in Portrait mode, tap on the left side of the screen.
- Tap Edit, then swipe up on the right side of the screen to view the effects you can edit such as Exposure, Brilliance, Highlights, and Shadows.
- 4. Tap the effect you want to edit, then drag the slider to make precise adjustments.
- 5. The level of adjustment you make for each effect is indicated by the outline around the button, so you can see at a glance which effects have been increased or decreased. Tap the effect button to toggle between the edited effect and the original.
- 6. Tap Done to save your edits, or if you don't like your changes, tap Cancel, then tap Discard Changes.

Tip: Tap to automatically edit your photos and videos with effects.

Apply filter effects

- 1. Tap Edit, then tap on the left side of the screen.
- 2. Tap a filter on the right side of the screen, then drag the slider to adjust the effect.

To compare the edited photo to the original, tap the photo.

3. Tap Done to save your edits, or if you don't like your changes, tap Cancel, then tap Discard Changes.

Crop, rotate, flip, or markup a photo

- 1. Tap Edit, tap on the left side of the screen, then do any of the following:
- o Crop manually: Drag the rectangle corners to enclose the area you want to keep in the photo, or you can pinch the photo open or closed.
- Crop to a standard preset ratio: Tap at the top of the screen, then choose an option at the bottom of the screen such as Square, 9:16, or 5:7.
- to rotate the photo 90 degrees.
- Flip: Tap to flip the image horizontally.
- 2. Tap Done to save your edits, or if you don't like your changes, tap Cancel, then tap Discard Changes.

Straighten and adjust perspective

- 1. Tap Edit, tap 👉 on the left side of the screen, then tap the effect button that you want to edit on the right side of the screen: Straighten, Vertical, or Horizontal.
- 2. Drag the slider to adjust the effect.

The level of adjustment you make for each effect is displayed by the outline around the button, so you can see at a glance which effects have been increased or decreased. Tap the button to toggle between the edited effect and the original.

Tap Done to save your edits, or if you don't like your changes, tap Cancel, then tap Discard Changes.

Undo and redo edits

As you edit a photo, tap and at the top of the screen to undo and redo multiple edit steps. **Tip:** You can tap the photo to compare the edited version to the original.

Copy and paste edits

You can copy the edits you made to one photo () and paste them onto another photo, or a batch or photos, all at once.

- 1. Open the photo that contains the edits you want to copy.
- 2. Tap , then tap Copy Edits. Tap to return to your library. Tap Select, then tap the thumbnails of the photos you want to paste the edits onto. Or, open a single photo . Tap at the bottom of the screen, then tap Paste Edits.



Apply Composite outcome	Children edit their phots, initially trying out a range or ideas or adjustments then becoming more discerning once they have found a style they like. Once the pictures are edited, open the Picollage EDU app. Choose 2:3 or 3:2 ratio on page size so it fits on A4 paper. They children can use as many pictures as they want. Work through the options for displaying, cropping the pictures, changing background, rounded the frame corners, swapping pictures. Encourage to experiment to get the best overall look. Add text for their name (small and in the corner) NO STICKERS- these should have the look of a professional art image.
	Support/ access adaptions: Offer suggestions and critical comments to ensure they effect is working for the children. Extension/ challenge: Create multiple versions to evaluate effectiveness and impact.
Assessment Opportunity	
Reflection	Share any learning about useful/ effective tools and effects.
	Share images and comment on what works and what does not

Retrieve the skills we have used so far (rule of thirds, etc Explain that we are going to capture high speed, action photography today- freezing action mid-air like jumping or kicking a ball. When the camera has to focus itself, it is often too slow to capture an image. Show via airserver with a pupil jumping. Count 3, 2, 1 and take photo and jump on go. You will find the pupil has landed before the camera took the photo. Demo how to focus lock to increase the speed of taking pictures Before you take a photo, the iPad camera automatically sets the focus and exposure, and face detection balances the exposure across many faces. To manually adjust the focus area and exposure setting. 1. Tap the screen to reveal the automatic focus area and exposure setting. 2. Tap where you want to move the focus area. 3. Next to the focus area, drag up or down to adjust the exposure. To lock your manual focus and exposure settings for upcoming shots, touch and hold the focus area until you see AE/AF Lock; tap the screen to unlock settings. Remind the children of composition skills covered previously- including lighting and background to compose pictures. Tip: get low down to get in lots of sky to make the jumping picturepicture look more effective. Demo how to use the live function to generate 2 types of image- freezing in time and ghostly motion pictures.
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 Children to work in small groups to take jumping/ leaping pictures. Emphasise sensible behaviour and safety. Ensure all pupils take their own photos to practise and apply the skills. Back in the class, discard pictures that didn't work and edit and save into Picollage as list week to making an action shot montage.
Support/ access adaptions: Review pictures throughout lesson and support as needed with the process. Extension/ challenge: Use persuasive devices and age appropriate language to share tips. Experiment with range of pictures/ orientations/ styles.
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Review some pictures to critique. Which ones were most effective- why?
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