



Year 2 – Digital photography

Unit introduction

Learners will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos. Finally, they will use this knowledge to recognise that images they see may not be real.

Software and Hardware requirements

It is recommended that you use digital cameras to take photographs in these lessons, so that learners can experience a range of devices. However, tablets or other devices with cameras will also work. Lesson 5 of this unit uses screenshots from Windows Photo, but the inbuilt photo editing tools in most photo apps will work, for example photos on iPads, or Google photos on Chromebooks.

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 Taking photographs	This lesson introduces the concept that many devices can be used to take photographs. In the lesson, learners begin to capture their own photographs.	To use a digital device to take a photograph <ul style="list-style-type: none">I can recognise what devices can be used to take photographs

		<ul style="list-style-type: none"> • I can talk about how to take a photograph • I can explain what I did to capture a digital photo
2 Landscape or portrait?	A photograph can be taken in either portrait or landscape format. In this lesson, learners explore taking photographs in both portrait and landscape formats and explore the reasons why a photographer may favour one over the other.	<p>To make choices when taking a photograph</p> <ul style="list-style-type: none"> • I can explain the process of taking a good photograph • I can take photos in both landscape and portrait format • I can explain why a photo looks better in portrait or landscape format
3 What makes a good photograph?	A photograph is composed by a photographer. In this lesson, learners discover what constitutes good photography composition and put this into practice by composing and capturing photos of their own.	<p>To describe what makes a good photograph</p> <ul style="list-style-type: none"> • I can identify what is wrong with a photograph • I can discuss how to take a good photograph • I can improve a photograph by retaking it
4 Lighting	This lesson introduces the concepts of light and focus as further important aspects of good photography composition. In this lesson, learners investigate the effect that good lighting has on the quality of the photos they take, and explore what effect using the camera flash and adding an artificial light source have on	<p>To decide how photographs can be improved</p> <ul style="list-style-type: none"> • I can explore the effect that light has on a photo

	their photos. They also learn how the camera autofocus tool can be used to make an object in an image stand out.	<ul style="list-style-type: none"> • I can experiment with different light sources • I can explain why a picture may be unclear
5 Effects	This lesson introduces the concept of simple image editing. Learners are introduced to the image editing software and use the 'Adjust' tools to change the colour effect of an image.	<p>To use tools to change an image</p> <ul style="list-style-type: none"> • I can recognise that images can be changed • I can use a tool to achieve a desired effect • I can explain my choices
6 Is it real?	This lesson introduces the concept that images can be changed for a purpose. Learners are introduced to a range of images that have been changed in different ways and through this, develop an awareness that not all images they see are real. To start the lesson, learners are first challenged to take their best photograph by applying the photography composition skills that they have developed during the unit.	<p>To recognise that photos can be changed</p> <ul style="list-style-type: none"> • I can apply a range of photography skills to capture a photo • I can recognise which photos have been changed • I can identify which photos are real and which have been changed

Subject knowledge and CPD opportunities

You should be familiar with the basic principles of photography, including composition, framing, lighting, and how to reduce blur.

Lesson 5 uses photo editing software, so knowledge of using simple photo editing software to alter images is required to teach this effectively; you should also be familiar with how to save the edited images on your school's system.

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

- [Getting started in Year 2 – 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 begins the learners' understanding of how photos are captured and can be manipulated for different purposes. Following this unit, learners will develop their photo editing skills in Year 4.

Common misconceptions

Whilst not a misconception, it is important for pupils to understand that digital photographs do not always represent what was actually seen. They can be easily changed, for example through simple editing techniques. Simple editing is covered in the unit. Reinforcing that changing the photograph can improve it but means it doesn't represent the 'real world' any more is an important consideration when teaching this.

Curriculum links

[Computing](#)

- Use technology purposefully to create, organise, store, manipulate, and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

Art and design

- To develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form, and space (Lessons 4 and 5)

Assessment

Formative assessment

Assessment opportunities are detailed in each lesson plan. The learning objective and success criteria are introduced in the slide deck 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 learning and highlights whether the pupil is approaching (emerging), achieving (expected), or exceeding the expectations in this unit.

Resources are updated regularly — the latest version is available at: nccce.io/tcc.

Attribution statement

This resource was created by Raspberry Pi Foundation and updated by STEM Learning for the National Centre for Computing Education.

The contents of this resource are available for use under the [Open Government License](https://open.gov.uk/open-government-licence) (OGL v3) meaning you can copy, adapt, distribute and publish the information. You must acknowledge the source of the Information in your product or application, by attributing Raspberry Pi Foundation and STEM Learning as stated here and are asked to provide a link to the [OGL v3](https://open.gov.uk/open-government-licence).

The original version can be made available on request via info@teachcomputing.org.