#

# 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](https://community.stem.org.uk/discussion/teach-computing-curriculum-share-your-adapted-units-and-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* I can recognise what devices can be used to take photographs
* 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. | To make choices when taking a photograph* 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. | To describe what makes a good photograph* 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 their photos. They also learn how the camera autofocus tool can be used to make an object in an image stand out.  | To decide how photographs can be improved* I can explore the effect that light has on a photo
* 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. | To use tools to change an image* 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. | To recognise that photos can be changed* 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**](https://teachcomputing.org/courses/CP466/getting-started-in-year-2-short-course)
* **Introduction to primary computing** [**remote**](https://teachcomputing.org/courses/CP454/introduction-to-primary-computing-remote) **or** [**face to face**](https://teachcomputing.org/courses/CP004/introduction-to-primary-computing-face-to-face)

**Teach Primary Computing Certificate**

To further enhance your subject knowledge, enrol on the [teach primary computing certificate](https://teachcomputing.org/primary-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.

Please see the learning graph for this unit for more information about progression.

## Curriculum links

[**Computing**](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/239033/PRIMARY_national_curriculum_-_Computing.pdf)

* 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**](https://assets.publishing.service.gov.uk/media/5a7ba810ed915d4147621ca0/PRIMARY_national_curriculum_-_Art_and_design.pdf)

* 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 opportunities are provided throughout each of the lesson plan documents and the learning objectives and success criteria can be used to observe learners’ progress for summative assessment.

Resources are updated regularly — the latest version is available at: [ncce.io/tcc](http://ncce.io/tcc).

This resource is licensed under the Open Government Licence, version 3. For more information on this licence, see [ncce.io/ogl](https://ncce.io/ogl).