Session 2: Learning to use the iPad camera

To understand how digital cameras work
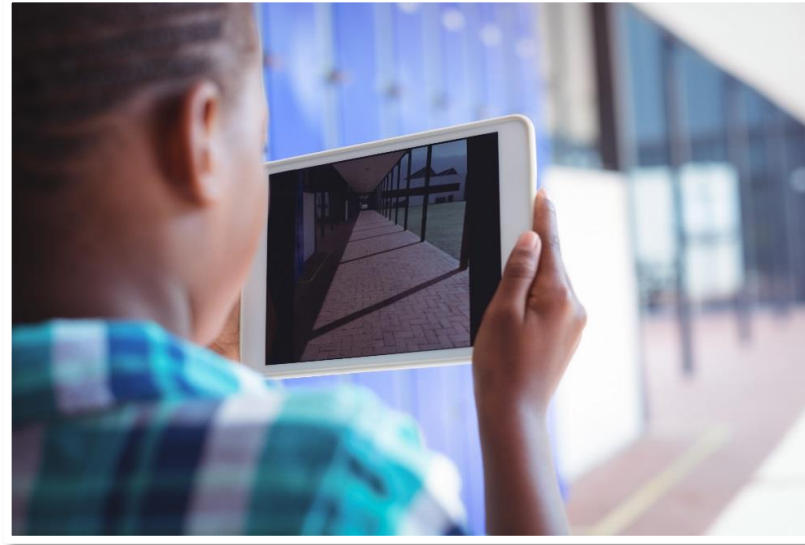
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Let's learn

In the past, people could only take photographs with a camera, but now there are lots of devices that can take them.

Let's discuss

How many devices can you think of that can take pictures?

Click to see some examples of devices that can take pictures!

Tablet (such as iPad)

Smartphone (such as Android)

Digital Camera

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Let's learn: How does a digital camera work?

Inside each of the devices that take photographs, there is a computer chip containing millions of tiny **sensors** that measure the amount of light falling onto them and store this information as a number.

- The numbers from the sensors become the **pixels** (picture elements) of the image.
- Each pixel is made up of three numbers (a **colour value**), typically between 0 and 255, representing a colour as a combination of red, green and blue light (RGB). Up to 16 million different colours can be represented in this way.
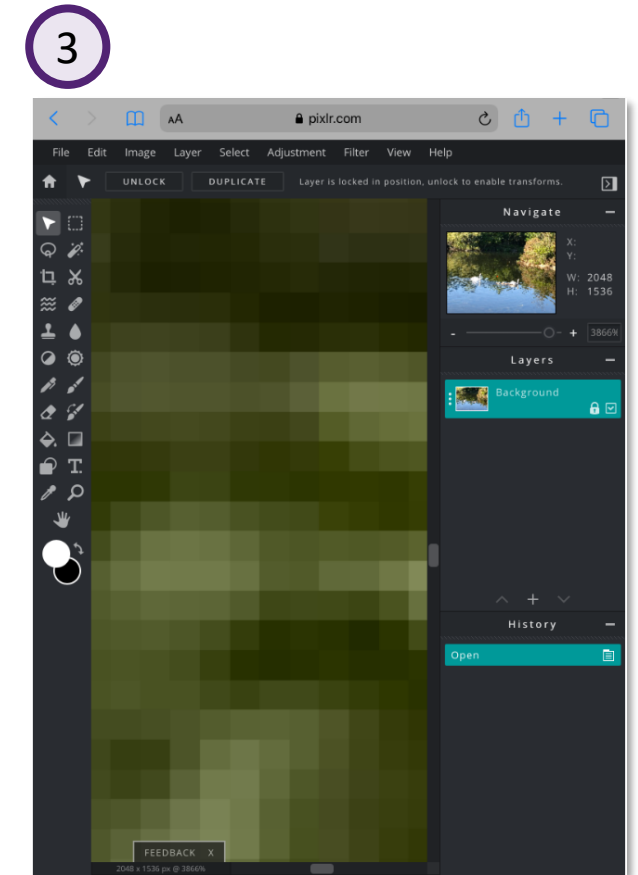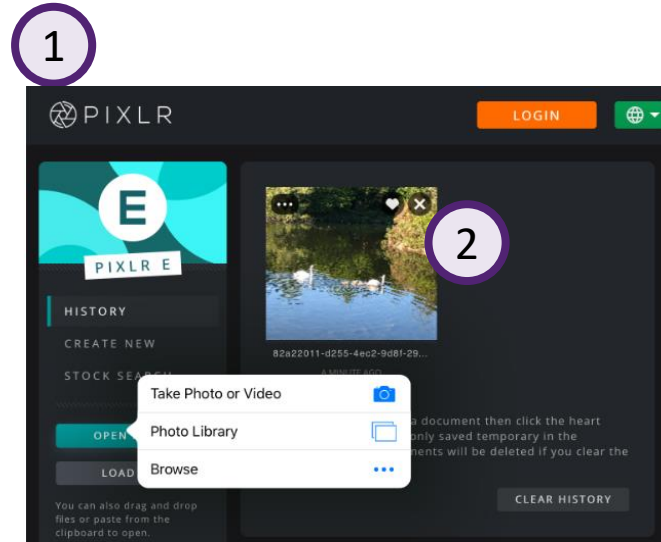
Click here to launch a video about how a digital camera works!

Do you know what **sensors** and **pixels** are?
Click on this box to see the definitions.

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Let's do

We can zoom in on photographs to see the individual pixels using a piece of software called Pixlr.

1. Open Pixlr (**www.pixlr.com**). Tap 'Open image' and then 'Photo Library'.
2. Find the photograph on your tablet and upload it.
3. Pull the photo outwards to zoom in to see the pixels.

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Let's try
You are going to take pictures on an iPad or other device.

Let's do
1.   Open the Camera app.
2.   Take some photographs by tapping the big circle.
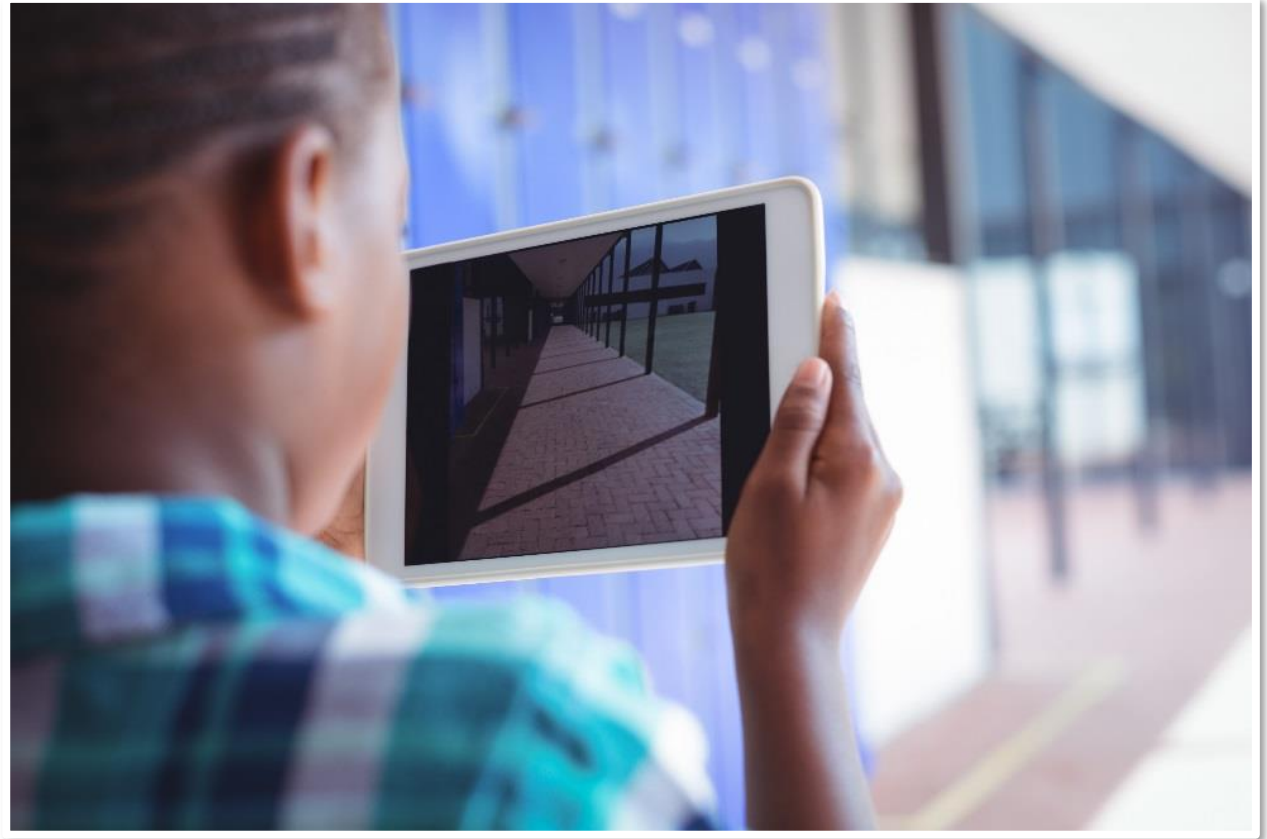
Experiment with landscape and portrait photos.

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Let's discuss
Do you know any rules or tips for taking great photographs?

Click on the image for some ideas!

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Let's review

Look back at your pictures.

Let's discuss

Look at the pictures, have you:

1. Focused on the subject of the photo?
2. Kept the device steady?
3. Checked that the subject is well lit?

Let's review

Review the photos that you have taken.

1. Open the Photos app and look at the **camera roll**.
2. Keep the ones you like by pressing on them and tapping 'Share'. You can add them to the album that you added the other images to from the internet. Delete the ones you don't like by tapping 'Delete'.
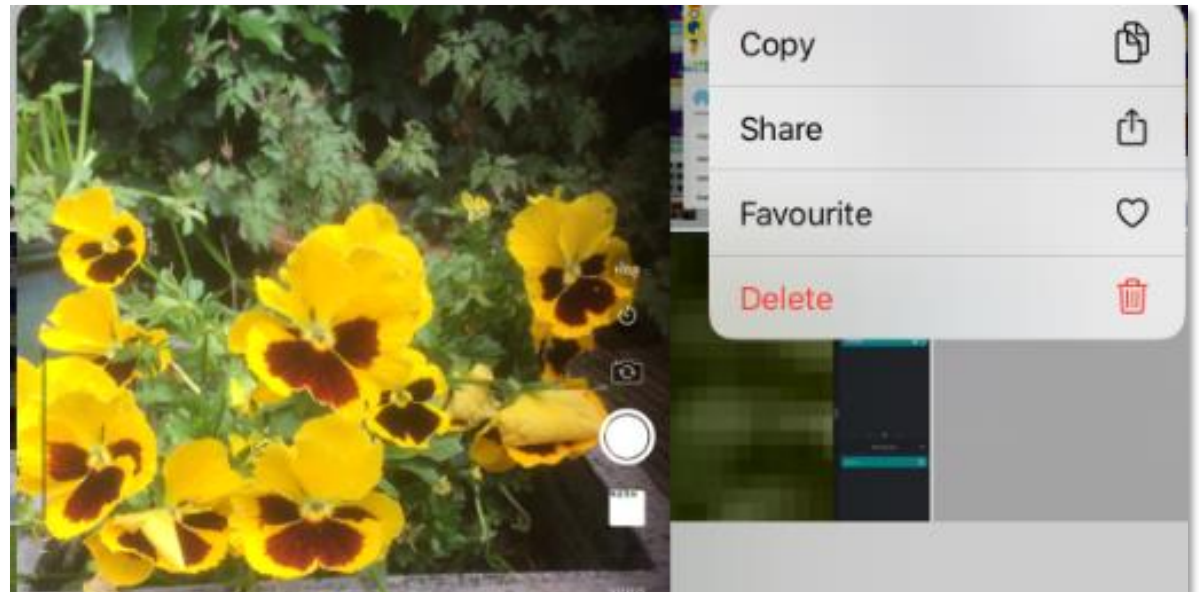
Do you remember what the **camera roll** is?

Click on this box to see the answer.

1

2

Copy

Share

Favourite

Delete

Let's learn

We should always remember online safety when taking pictures.

Remember the following:

1. We must always ask permission if taking pictures on private property.
2. We should always explain how the pictures will be used.
3. We should always ask someone before taking their picture.

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