

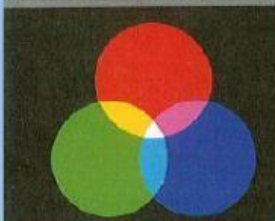
## 2 READING



TRACK 2.17

Read *How a Digital Camera Works*. Name one new fact which you learned from the article.

## HOW A DIGITAL CAMERA WORKS



Digital cameras produce instant photos that you can print at home, share online, or send to friends from your phone. They're really simple to use—but how do they actually work?

Unlike traditional cameras, digital cameras don't use film. Instead, they have a computer chip covered in millions of tiny squares called pixels. The more pixels a camera has, the better pictures it takes. When you press the button on the camera, each pixel records the brightness of the light it 'sees.' When the camera records what it sees, it uses numbers, not images.

But the pixels only record light and dark. So do digital cameras only take black and white pictures? No, when you look at digital photos, you see color pictures. So where does the color come from?

There are three primary colors of light: red, green, and blue. What happens if we mix the three primary colors? We get white! If we mix red and green, we get yellow, and so on. This is how your eyes, a computer screen, and a digital camera work. In a digital camera, there's a filter in front of each pixel, so it 'sees' only one of the three colors.

There's also a computer in your camera that mixes the colors. When you take a picture, the computer compares what each pixel 'sees' with the other pixels around it. During this process, the computer makes millions of calculations in a few seconds.

And the great thing is that if you don't like the pictures, you can always delete them!

## AFTER READING

Match the beginnings with the endings.

- 1 You get instant pictures
- 2 When you take a picture with a digital camera,
- 3 A digital camera uses numbers
- 4 When you look at digital photos,
- 5 You get white light
- 6 The computer makes millions of calculations

- a if you mix red, green, and blue.
- b when it records what it sees.
- c they are in color.
- d when you use a digital camera.
- e when it compares what each pixel 'sees.'
- f each pixel records the brightness of the light.

Good Luck!  
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