

Odd One Out

Thinking Task

People

Look at the images below:



Similarities

You have 2 minutes to think of as many similarities as you can

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

If you're stuck, think about:

- appearance
- what they do
- where they might be found

Differences

Now, spend 2 minutes thinking of all the differences you can spot.

1)

2)

3)

4)

5)

6)

Which one is the odd one out?

Decide which one is the odd one out and, more importantly, why you think this!

Time for a debate

Share the image with a family member. Do you agree or disagree?

Has their opinion changed your mind? Why?

Background Science

The three images show a firefighter, a police officer and a hospital nurse. Each of these important jobs requires a different uniform to fulfil the daily needs and protect the wearer from all sorts of external dangers.

Firefighters, for example, need to be protected from heat. Until relatively recently, asbestos was used in firefighters' uniforms to protect them from heat. However, since the dangers of asbestos have been recognised, a synthetic fibre known as Kevlar is used. This material is incredibly strong and used in a wide range of different applications. Kevlar is also used in uniforms worn by police, which include safety vests. Nurses' 'scrubs' get their name from when hospital staff sterilise themselves before surgery, a process called 'scrubbing in'. They are lightweight and washable and help prevent the spread of infectious substances.

The fibres used to manufacture the fabrics for uniforms can be broadly categorised as either human-made or natural. Human-made fibres can be further subdivided into those that are made from plants or animals, such as rayon which is made from cellulose (from plants). Other materials used in this way include milk, bamboo, seaweed and crab shells. Other human-made fibres are synthetic, including nylon and acrylic, and are made from crude oil.

Natural fibres do not need to be highly processed before they are ready to use and can be derived from either animals (such as wool from sheep and silk from silk worms), plants (such as cotton or linen) or minerals (such as asbestos).

Challenge

Think about the properties of the materials needed for some other types of clothing/tasks and design a uniform.

Photos can be emailed to science@oldparkprimary.com. Remember to include an explanation.