

MATHS



Lesson 11

Prep

Topic: Patterns and algebra

Identifying similarities and differences

Lesson concepts



Patterns — Classification



Functions — Rules

Today students will:

- ▶ identify how objects are similar or different.

Resources

Digital

Slideshow — What is different?

Find and prepare

collection of stationery items (for example: pencils, crayons, highlighters, scissors, rubbers, sharpeners)

loose sock collection with one odd sock

Key terms

describe, compare, similar, different, same, shape, size, colour, feel, use

For definitions and explanations of terms, please see the [Glossary](#).



Lesson

Introduce the lesson

Say to students

- ‘ Today, you will look at how things can be the same and how they can be different. When we do that, we are comparing.
- Think about what you know about school and home. Some things we do at school are the same as at home and some things are different. ’

Discuss how some things that students have and some things that they do at school are the same as home and some are different.

Explore similarities between school and home routines (for example: toileting, speaking politely).

Explore differences between routines at home and at school (for example: raising your hand to speak, eating lunch out of a lunch box).

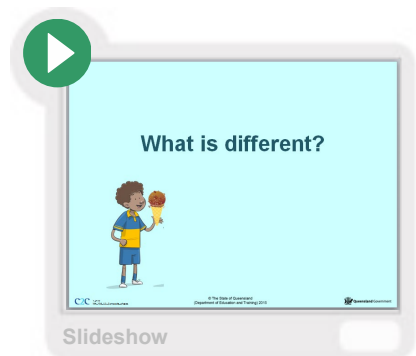
Focus questions

- Q: *What have you noticed about school that is different to home?*
- Q: *How is it similar / the same?*
- Q: *Why do you think some things are different?*

View the **Slideshow — What is different?**

Ask students to:

- look carefully at the two pictures of the ice-creams
- identify what is the same
- identify what is different.



Focus questions

- Q: *How are the two pictures different?*
- Q: *How are the two pictures the same?*
- Q: *How could you make these pictures exactly the same?*

Repeat the identification of what is the same and what is different for the other pairs of pictures in the slideshow.

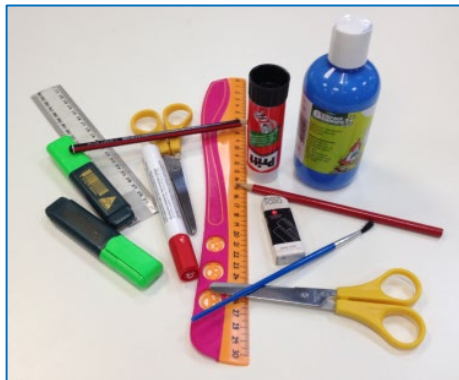
Explore how objects can be similar and different

Provide students with a collection of stationery items.



Ask students to:

- arrange the objects and materials on the desk or floor so they can be compared
- match up objects that are the same in some way (for example: use, colour, size, shape or feel).



Focus questions

- Q: *What objects do you have in your collection?*
- Q: *How could you group these objects?*
- Q: *Why did you group them in that way?*

Select an object from the collection and question students.

Focus questions

- Q: *Is there an object that is different from this?*
- Q: *How do you know?*

Select another object from the collection and question students.

Focus questions

- Q: *Is there an object that is different from this?*
- Q: *How are they different?*

Say to students

‘ When you look at this collection, you can see objects that are the same and objects that are different. Sometimes objects have one thing that is the same like their colour. Sometimes they have many things the same. Objects can also be different. They can be completely different or just different in some ways. ’

Ask students to look at the collection.

Say to students

‘ I am going to ask you to select some objects from the collection. Each time, I want you to describe how the objects are the same and how they are different. ’

Give instructions such as ‘Show me two objects that are ...’

- completely the same
- the same colour
- the same size
- made from the same material
- very different
- different in shape
- different in size
- different in colour
- the same shape but different colours.



Focus questions

Q: *Why do you think these are the same?*

Q: *Why do you think these are different?*

Q: *How are they the same?*

Q: *How are they different?*

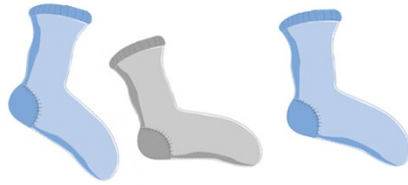
Q: *Can two objects be the same and different at the same time? How?*

Q: *What do we look at to compare objects?*

A: For example: size, shape, colour, materials, use, feel, smell.

Sock sort

Provide students with a collection of loose socks with one odd sock.



Say to students

‘ Here is a collection of socks. All of the socks except for one will make pairs. You are going to find out which one is the ‘odd’ one. To do that you will need to compare the socks. ’

Allow students time to manipulate and sort the socks into pairs.

Focus questions

- Q: *Which socks match?*
- Q: *How do you know?*
- Q: *How is this sock similar to that sock?*
- Q: *Why did you put those two socks together?*
- Q: *Which is the odd one? Why?*

Say to students

‘ When we sort collections, we compare the objects and put similar ones together. ’