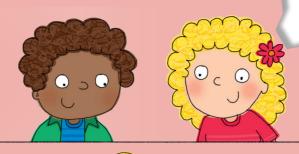
Fractions

Solving mathematical problems

Challenge

- Two children have bought eight sweets between them.
- Investigate what fraction of the eight sweets each child could have bought.



You will need:
• pencil & paper



Think about ...

How are you going to record what fraction of the sweets each child bought?

Is there more than one possible solution? If so, how many different solutions are there?

What do you know about whole numbers and fractions to help you work out the problem?

Is there a quicker and easier way to work out the solutions to the What if questions?

What if?

- What if three children buy 12 sweets between them? What fraction could each have bought?
- What about four children buying 10 sweets?

When you've finished, turn to page 80.



Using what you know



You will need:

• pencil & paper

I know my 4 times table.

I can use these facts to help me work out the 8 times table.

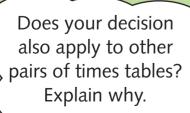
Do you agree with Naomi? Prove it.

Think about ...

What patterns do you notice in the 4 and 8 times tables?

Use examples to provide proof of your decision.

Oc 0



What if?

Naomi also says:

If I know that $4 \times 7 = 28$, I also know what 4×70 is.

How does Naomi know this?

What other related multiplication facts might Naomi also know?

What related division facts might she know?

When you've finished, turn to page 80.



Home school directions



Using and applying mathematics in real-world contexts

Challenge

Imagine you have a cousin who lives in Australia.

He and his family are coming to visit for the first time.

When your cousin arrives at your home you want him to come straight to school to meet you.

Write an email to your cousin giving directions from your home to your school.

Draw a simple map to go with your instructions.

You will need:

- squared paper
- coloured pencils
- pencil & paper

Think about ...

Think carefully about the best way to set out your set of instructions so that it is easy for your cousin to read and follow.



Can you also give some guidance on the approximate distance of each part of the journey?



Include in your directions how long the journey will take.

What if?

What if your aunt and uncle emailed you back and asked for directions from the airport to your home?

When you've finished, turn to page 80.

