Year 3 Maths

Steppingstone activity

Lesson 28

LO: To find a quarter of an amount

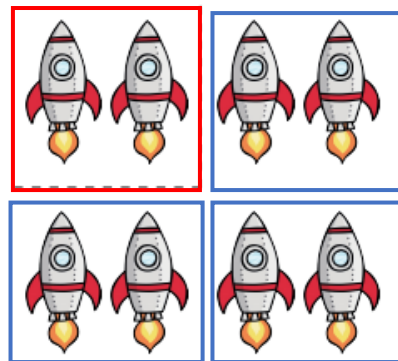A quarter means '**one** of four **equal parts**'

$$\frac{1}{4}$$

Model:

To find a quarter of an amount we **share into 4 equal groups.**

So: Find a quarter of 8:

- **Share 8 into 4 equal groups.**
- **Count how many in one group**
- **A quarter of 8 is 2**

$\frac{1}{4}$ **of 8 = 2**

Task 1:

Use your toys or objects at home to help find a quarter of these amounts by sharing them into 4 equal groups:

- a) Quarter of 4
- b) Quarter of 12
- c) Quarter of 16
- d) Quarter of 20

Task 2:

Find different containers and fill them up a quarter of the way to get a feel for what quarter looks like. Does the water in all the containers look the same or different? Talk to your adult about why this might be.
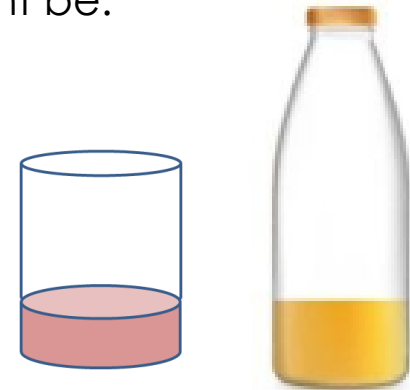
LO: To understand tenths

Success Criteria:

1. Look at the numerator of one fraction e.g. 2/10
2. Think: how many more to make ten? E.g. 8
3. Write that number as the numerator of your second fraction e.g. 8/10
4. Write the addition sentence e.g. 2/10 + 8/10 = 10/10

These fractions are all examples of **tenths**.

$\frac{4}{10}$ $\frac{6}{10}$ $\frac{5}{10}$ $\frac{3}{10}$

We know this because they have a **ten** as the **denominator**.

$\frac{10}{10}$ is the same as saying a **whole**.

Here, the shape is split into **10 equal parts** (denominator) and **3 of them have been coloured** in (numerator). It shows **three tenths.**
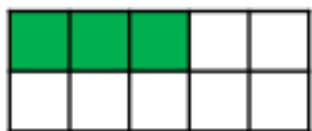
Three tenths $\frac{3}{10}$

Model:

These sentences describe the seeds Sarah planted:

$\frac{6}{10}$ of the seeds grew   **(6 out of 10 seeds grew)**

How many did not grow?   6 + **?** = 10

$\frac{4}{10}$ did not grow

$\frac{6}{10}$ + $\frac{4}{10}$ = $\frac{10}{10}$

Now you try: Karl's did a sports club.

$\frac{3}{10}$ **of the children turned up on time.**
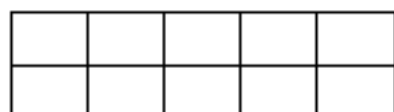
How many children were late?

Think! 3 + **?** = 10

Maths - activity

Tenths

White Rose Maths

1 Tick the pictures that show tenths.
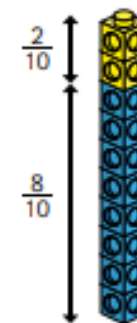
2 Write fractions to complete the sentences.

a) ☐ of the counters are yellow.
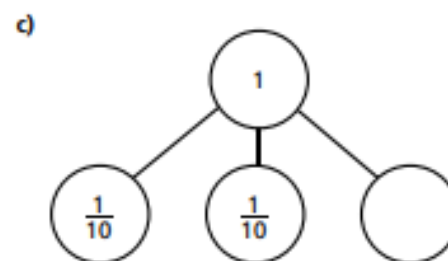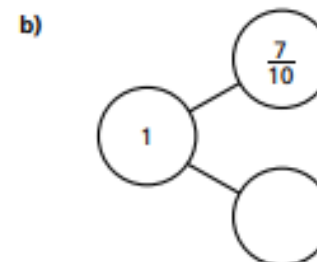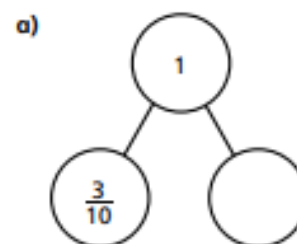
b) ☐ of the counters are red.

c) ☐ of the counters are green.

3 Amir has some blue and yellow cubes.

He makes a tower using 10 cubes.

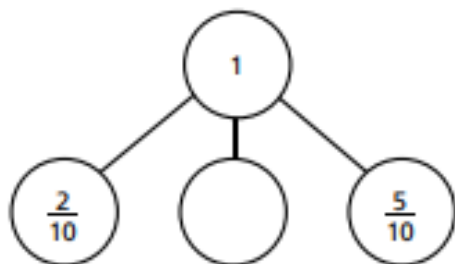Investigate how many different towers Amir can make with 10 cubes, if every tower has a different fraction of blue and yellow cubes.
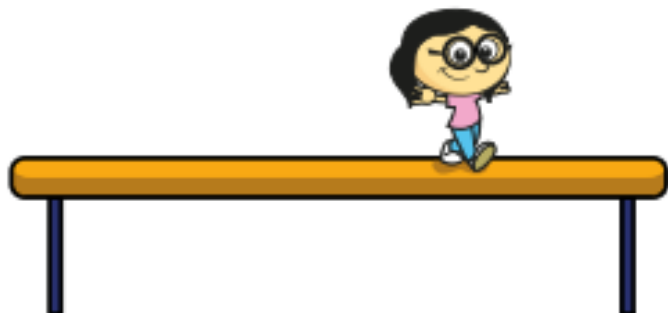
$\frac{2}{10}$

$\frac{8}{10}$

4 Complete the part-whole models.

a)

1

$\frac{3}{10}$

b)

$\frac{7}{10}$

1

c)

1

$\frac{1}{10}$ $\frac{1}{10}$

d)

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        ( 1 )
       /  |  \
   (2/10) ( ) (5/10)
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5 Annie has travelled $\frac{7}{10}$ of the way across a balance beam.

How many tenths does she have left to travel?

6 10 boys share 3 pizzas equally.

What fraction of a pizza do they each get?

7 Dani has a bag of sweets.

$\frac{1}{2}$ of the sweets are red.

$\frac{3}{10}$ of the sweets are yellow.

The rest are green.

What fraction of the sweets are green?

8 Mo also has a bag of sweets.

$\frac{4}{10}$ of his sweets are red.

The rest are green or yellow.

What fraction of Mo's sweets could be green?

What fraction could be yellow?

How many possible answers can you find?

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