Canonbury Home Learning

**Year 3 Maths**
**Steppingstone activity**

**Lesson 27**

**LO:  To find a quarter**

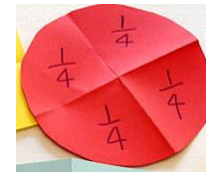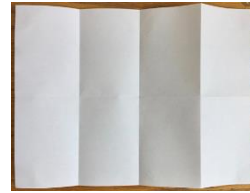Begin by watching this BBC Bitesize clip about halves and quarters:https://www.bbc.co.uk/bitesize/topics/z3rbg82/articles/zq2yfrd
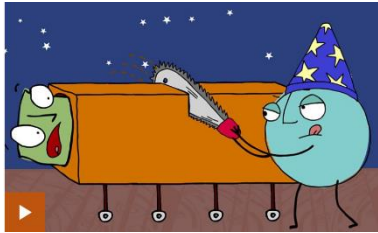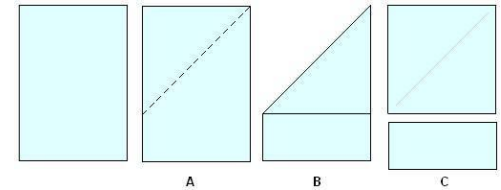
A quarter means '**one of four equal parts'**

A quarter is a type of **fraction.**

**Fraction** means **part of a whole.**

$\dfrac{1}{4}$

**Model:**  Quarters must be equal (the same size).
Here are some paper shapes folded into four quarters:

**Task 1:**

Use some paper (e.g.from your exercise book) and **turn it into a square by folding it and cutting it like this:**

A      B      C

Now see how many **different ways** you can **fold the square into quarters** – remember the four parts must be equal!

**Task 2:**

Alex and Jack are talking about quarters.

My shape shows quarters because it has four equal parts.

My shape shows quarters because it has four parts.

Alex

Jack

Are they correct?
Explain your answer.

**Year 3 Maths    Lesson 27**

**LO: Making a whole**

**Success Criteria:**

| | |
|---|---|
| 1. | Count how many in one colour (numerator) |
| 2. | Count how many altogether (denominator) |
| 3. | Write a whole, meaning the numerator and denominator are the same. |

What do you notice about these fractions which show a whole?

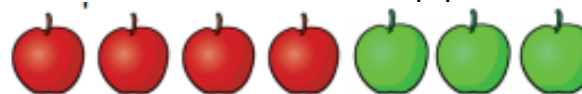$$\frac{4}{4} \qquad \frac{2}{2} \qquad \frac{3}{3}$$

The numerator and the denominator are **the same**!

E.g. The circle is divided into 4 equal parts, and all four of them are coloured in, so we write $\frac{4}{4}$.

**Model:**

These sentences describe the apples:

$\frac{4}{7}$ of the apples are **red (4 out of the 7 apples are red)**

$\frac{3}{7}$ of the apples are **green. (3 out of the 7 apples are green)**

$\frac{4}{7}$ and $\frac{3}{7}$ make one whole.   $\frac{4}{7} + \frac{3}{7} = \frac{7}{7}$

**Now you try: Here are some footballs:**

a)   What fraction of the footballs are yellow?
b)   What fraction of the footballs are orange?
c)   Complete the number sentence:

$\boxed{\phantom{0}} + \boxed{\phantom{0}} = \boxed{\phantom{0}}$

CANONBURY PRIMARY SCHOOL
Create, discover and succeed together

## Making the whole

White Rose Maths

**1** Here are some counters.

a) What fraction of the counters are yellow?

b) What fraction of the counters are red?

c) Complete the number sentence.

☐ + ☐ = ☐

**2** Here is a tower of cubes.

a) What fraction of the tower is green?
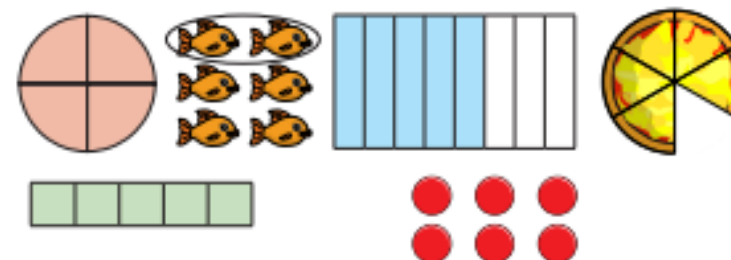
b) What fraction of the tower is blue?

c) Complete the number sentence.

☐ + ☐ = ☐

**3** What fraction of each shape is shaded?

Which fraction represents a whole?

Fill in the missing fractions.

a)

☐ = one whole

☐   ☐   ☐

b)

☐ = one whole

☐   ☐
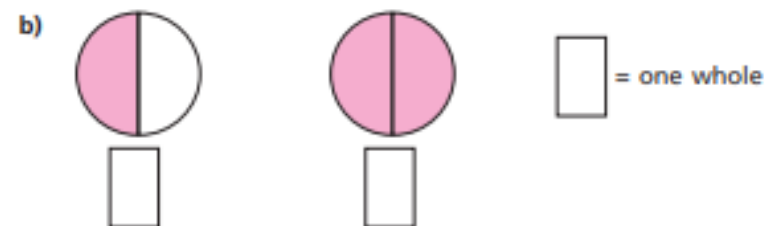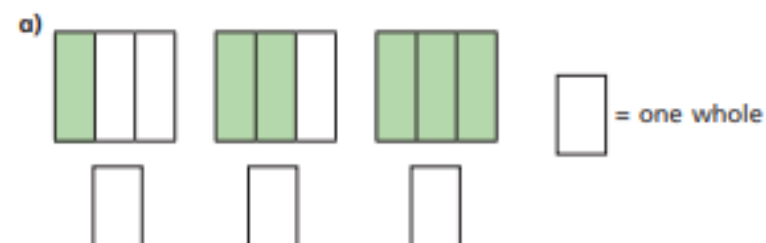
**4** Here are some pictures.

Use the pictures to help you answer the questions.
a) Write three fractions that are less than one whole.

☐ ☐ ☐

**b)** Write three fractions that are equal to one whole.

What do you notice? Talk about it with a partner.

**5** Choose a phrase to complete the sentences.

| greater than | less than | equal to |

When the numerator is _____ the denominator, the fraction is less than one whole.

When the numerator is _____ the denominator, the fraction is equal to one whole.

**6** Circle the fractions that are equivalent to one whole

$\frac{3}{5}$  $\frac{4}{4}$  $\frac{6}{10}$  $\frac{2}{2}$

$\frac{10}{10}$  $\frac{8}{9}$  $\frac{3}{3}$  $\frac{5}{5}$

**7** Here are $\frac{1}{3}$ of Jack's marbles.

Draw the rest of Jack's marbles in the bar model.

**8** $\frac{2}{7}$ of a group of children are girls.

What fraction are boys?

[ ] are boys.

**9** Each bar model is worth one whole.

Split the bar model and label the missing fractions.

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

| $\frac{1}{5}$ | $\frac{1}{5}$ | |

| | $\frac{7}{10}$ | |

**10** Complete the number sentences.

a) $\frac{3}{5} + \boxed{\phantom{x}} = 1$

c) $\boxed{\phantom{x}} = \frac{2}{7} + \frac{5}{7}$

b) $\boxed{\phantom{x}} + \frac{4}{10} = 1$

d) $\frac{9}{9} = \boxed{\phantom{x}} + \frac{5}{9}$