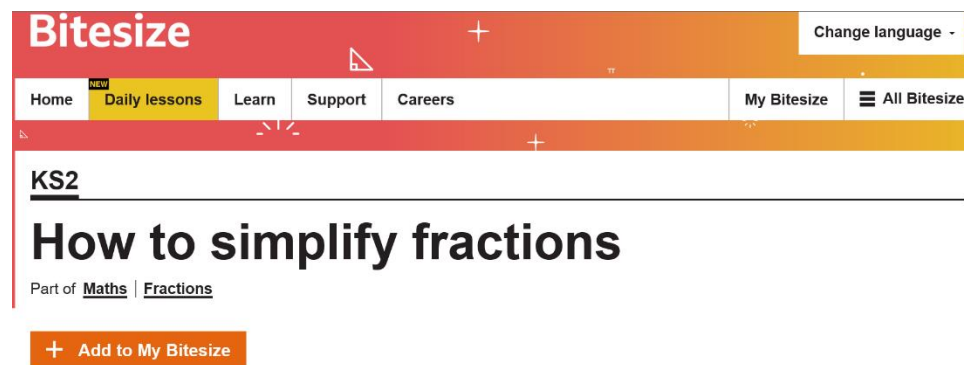


Tuesday 28th April 2020

Good morning Y4s.

Today please go to <https://whiterosemaths.com> and click on home learning and Year 4. In **Summer Term Week 2, Lesson 2**, watch the video clip called '**Halves and quarters**' then do the activity (I have copied it below).

If you need a bit more help with finding equivalent fractions, follow the link to **BBC Bitesize Maths KS2** below and watch the clip called 'Simplifying Fractions' and try the questions.



The screenshot shows the BBC Bitesize website interface. At the top, there is a red navigation bar with the 'Bitesize' logo and a 'Change language' dropdown menu. Below this is a white navigation bar with links for 'Home', 'Daily lessons', 'Learn', 'Support', and 'Careers'. On the right side of this bar are 'My Bitesize' and 'All Bitesize' options. The main content area is white and features the text 'KS2' followed by the title 'How to simplify fractions'. Below the title, it says 'Part of Maths | Fractions'. At the bottom of this section is an orange button with a plus sign and the text 'Add to My Bitesize'.



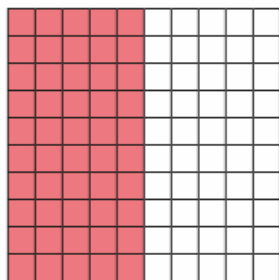
<https://www.bbc.co.uk/bitesize/topics/zhdwxnb/articles/zcdgxfr>

Or, if you would like a **challenge**, try the activity 'Fractions in a Box' on the last page.

Miss Bamber

Halves and quarters

1 Half of the hundred square is shaded.



a) How many hundredths are shaded?

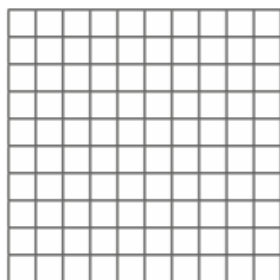
b) How many tenths are shaded?

c) Complete the equivalent fractions.

$$\frac{1}{2} = \frac{\boxed{}}{100} \quad \frac{1}{2} = \frac{\boxed{}}{10}$$

d) Write $\frac{1}{2}$ as a decimal.

2 Here is a blank hundred square.



a) Shade $\frac{1}{4}$

b) How many hundredths are shaded?

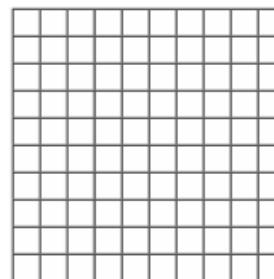
c) Complete the equivalent fraction.

$$\frac{1}{4} = \frac{\boxed{}}{100}$$

d) Write $\frac{1}{4}$ as a decimal.



3 Here is a blank hundred square.



a) Shade $\frac{3}{4}$

b) How many hundredths are shaded?

c) Complete the equivalent fraction.

$$\frac{3}{4} = \frac{\boxed{}}{100}$$

d) Write $\frac{3}{4}$ as a decimal.

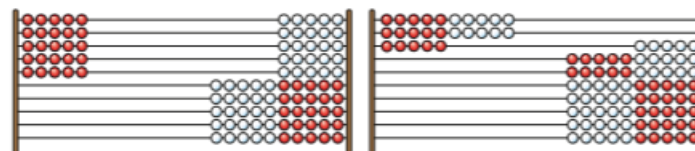
4



I don't need to shade a hundred square to write $\frac{3}{4}$ as a decimal because I already know what $\frac{1}{2}$ and $\frac{1}{4}$ are as decimals.

How does this help Annie?

5

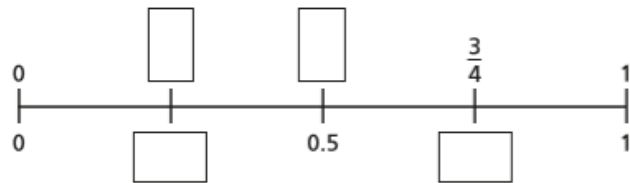


Both Rekenreks represent one quarter.

Is the statement true or false? _____

Talk about it with a partner.

6 Fill in the missing fractions and decimals on the number line.



7 Complete the equivalent fractions and decimals.

a) $\frac{25}{100} = \square$

e) $\frac{25}{100} = \frac{\square}{4}$

b) $\frac{75}{100} = \square$

f) $\frac{\square}{4} = \frac{75}{100}$

c) $\frac{1}{4} = \square$

g) $\square = \frac{1}{2}$

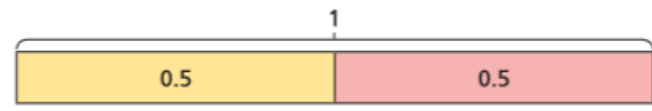
d) $\frac{3}{4} = \square$

h) $\frac{50}{100} = \frac{\square}{2}$

8

$0.5 + 0.5 = 1$

This bar model shows that $\frac{1}{2}$ is equivalent to 0.5



Draw a bar model to show that $\frac{1}{4}$ is equivalent to 0.25



9

Use your knowledge of equivalent fractions to convert between fractions and decimals.

a) $\frac{2}{4} = \square$

d) $0.25 = \frac{\square}{24}$

b) $\frac{5}{20} = \square$

e) $\frac{\square}{68} = 0.5$

c) $\square = \frac{21}{28}$

f) $0.75 = \frac{\square}{400}$

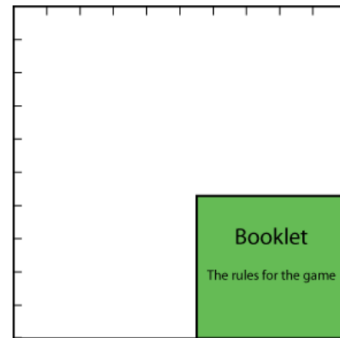
Challenge

Fractions in a Box

Age 7 to 11 ★★

We have a game which has a number of discs in seven different colours. These are kept in a flat square box with a square hole for each disc. There are 10 holes in each row and 10 in each column. So, there would be 100 discs altogether, except that there is a square booklet which is kept in a corner of the box in place of some of the holes.

We haven't drawn a grid to show all the holes because that would give the answer away!



There is a different number of discs of each of the seven colours.

Half ($\frac{1}{2}$) of the discs are red, $\frac{1}{4}$ are black and $\frac{1}{12}$ are blue.



One complete row (of 10 holes) of the box is filled with all the blue and green discs.



One of the shortened rows (that is where the booklet is) is exactly filled with all the orange discs.



Two of the shortened rows are filled with some of the red discs and the rest of the red discs exactly fill a number of complete rows (of 10) in the box.

There is just one white disc and all the rest are yellow.



How many discs are there altogether?
What fraction of them are orange?
What fraction are green? Yellow? White?