

Class 3 Home Learning, week beginning 18th May 2020

Maths - Year 4

Summer Term

Week 2 (w/c 27 April)

Lesson 2

Halves and quarters

Please watch the video before choosing your challenge.

Why not have a go at the reasoning
and problem solving too?

Can I represent halves and quarters as decimals?

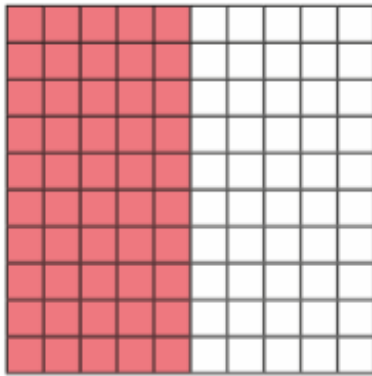
Challenge 1

These pages do not need to be printed out. Please write the short date you do the work and the above question in your maths book, underlining them with a ruler. Remember to write the question number too!

Questions 1-5 mentioned in the video are questions 1-5 in Challenge 1.

1) Write your answers in your maths book. You do not need to draw the hundred square.

1) Half of the hundred square is shaded.



a) How many hundredths are shaded?

b) How many tenths are shaded?

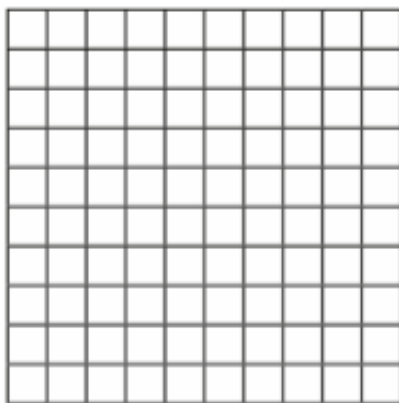
c) Complete the equivalent fractions.

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

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

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

2) Here is a blank hundred square. If you were to shade in $\frac{1}{4}$ (one quarter),



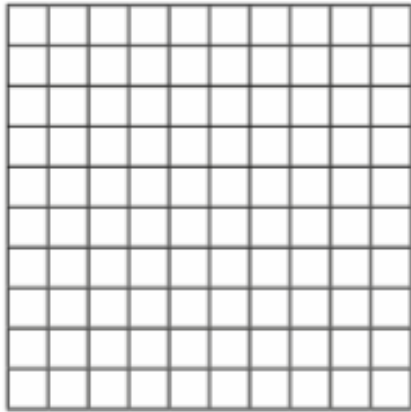
b) How many hundredths are shaded?

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. If you were to shade in $\frac{3}{4}$ (three quarters),



b) How many hundredths are shaded?

c) Complete the equivalent fraction.

$$\frac{3}{4} = \frac{\text{[]}}{100}$$

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

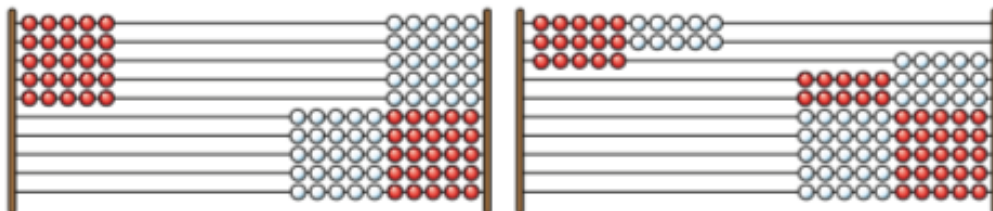
4) Hint: what is $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ written as decimals?



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) How do you know?



Both Rekenreks represent one quarter.

Is the statement true or false? _____

Can I represent halves and quarters as decimals?

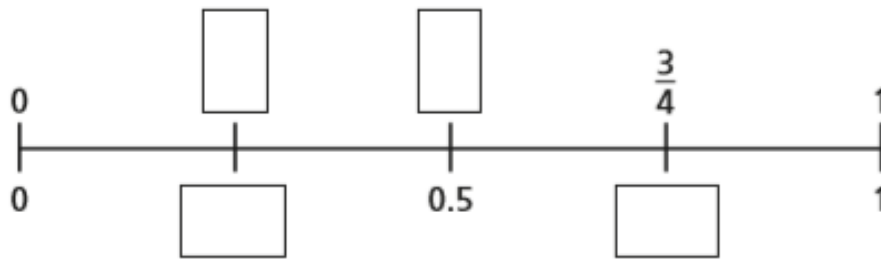
Challenge 2

These pages do not need to be printed out. Please write the short date you do the work and the above question in your maths book, underlining them with a ruler. Remember to write the question number too!

Questions 1-5 mentioned in the video are questions 1-5 in Challenge 1.
Questions 6-9 are questions 1-4 in this challenge.

1) Copy and complete.

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



2) Copy and complete.

Complete the equivalent fractions and decimals.

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

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

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

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

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

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

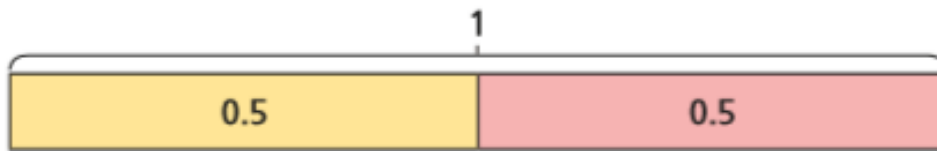
d) $\frac{3}{4} = \frac{\quad}{\quad}$

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

3)

$$0.5 + 0.5 = 1$$

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

4) Copy and complete.

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

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

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

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

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

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

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

Can I represent halves and quarters as decimals?

Reasoning and problem solving

These pages do not need to be printed out. Please write the short date you do the work and the above question in your maths book, underlining them with a ruler. Remember to write the question number too!

1) Draw bar models to help you answer this question.

Alex says:

If I know $\frac{1}{2}$ is 0.5 as a decimal, I also know $\frac{3}{6}$, $\frac{4}{8}$ and $\frac{6}{12}$ are equivalent to 0.5 as a decimal.

Explain Alex's thinking.

2)

Dexter has made a mistake when converting his fractions to decimals.

$$\frac{1}{2} = 1.2, \frac{1}{4} = 1.4 \text{ and } \frac{3}{4} = 3.4$$

What mistake has Dexter made?

Halves and Quarters

Reasoning and Problem Solving

Alex says:

If I know $\frac{1}{2}$ is 0.5 as a decimal, I also know $\frac{3}{6}$, $\frac{4}{8}$ and $\frac{6}{12}$ are equivalent to 0.5 as a decimal.

Explain Alex's thinking.

Alex has used her knowledge of equivalent fractions to find other fractions that are equivalent to 0.5

Dexter has made a mistake when converting his fractions to decimals.

$$\frac{1}{2} = 1.2, \quad \frac{1}{4} = 1.4 \quad \text{and} \quad \frac{3}{4} = 3.4$$

What mistake has Dexter made?

Dexter has incorrectly placed the numerator in the ones column and the denominator in the tenths column. He should have used equivalent fractions with tenths and or hundredths to convert the fractions to decimals.