Year 6 Maths

Developing activity
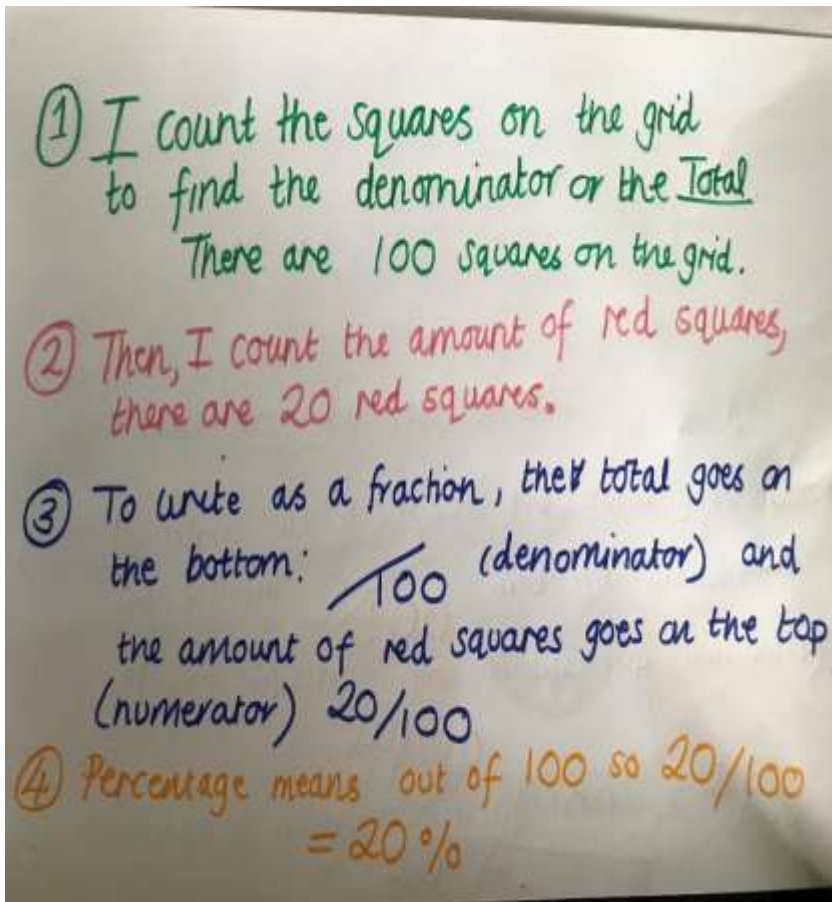
Lesson 2

LO: TBAT find equivalent decimals and fractions.

Success Criteria:

1. Recap your knowledge of fractions.
2. Compare the fractions to the percentage.
3. Work out the percentages for the questions.

Model

Now you try…

Look at the coloured grid.

1. What fraction of the grid is red?
2. What percentage of the grid is yellow?
3. Is the purple area of the grid greater or less than 40%?
4. Which colour is 20% of the grid?
5. What colour is exactly $\frac{1}{4}$ of the grid?
6. Write the non-coloured part of the grid as a decimal.

Look at the cats and answer the questions.

What fraction of the cats:

7. are ginger?   have a bell?
8. have collars?   are not black?

    Write each fraction as a percentage and as a decimal.

Year 6 Maths

Expected/ Greater depth activity

Lesson 2

LO: TBAT solve problems including percentages.

Task:

You are going apply your knowledge to solve several problems including percentages.

Success Criteria:

1. Convert the fractions to percentages.
2. To find fractions of amounts start by finding 10% to help you.
3. For some questions you may need to use one of the 4 operations.

Recap:

Converting fractions to percentages

$$\frac{2}{10} = \frac{20}{100}$$

×10

×10

You must multiply the denominator to make 100.

Then you multiply the numerator by the same number.

Finding percentages and fractions of amounts.

$50\% = \frac{1}{2}$ because $\frac{1}{2} \xrightarrow{\times 50} \frac{50}{100}$

To find 50% of an amount we divide by 2 or find $\frac{1}{2}$.

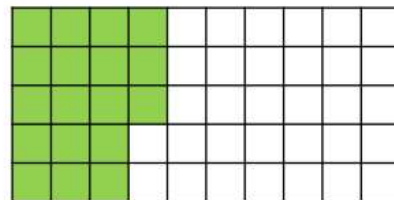50% of $10 = 5$

$10 \div 2 = 5$

To find 55%, first find 50%. Then find 5% and add together.

55% of $140 = 77$

50% of $140 = 140 \div 2 = 70$

5% of $140 = 140 \div 10 = 14$, $14 \div 2 = 7$

$70 + 7 = 77$

Year 6 Maths
Main activity
Complete at least 2 columns, more if you can!

Task 1	Task 2	Task 3	Task 4
Practice Write the following fractions as percentages.	**Arithmetic**	**Problem Solving**	**Reasoning**

Task 1 (Practice)

Write the following fractions as percentages.

- 9. $\frac{1}{10}$
- 10. $\frac{7}{10}$
- 11. $\frac{35}{100}$
- 12. $\frac{1}{4}$
- 13. $\frac{1}{2}$
- 14. $\frac{7}{10}$
- 15. $\frac{3}{4}$
- 16. $\frac{1}{5}$

Task 2 (Arithmetic)

15. 15% of $250 =$

16. $\frac{1}{6}$ of $720 =$

17. $\frac{2}{3} = \frac{12}{?}$

18. $\begin{array}{r} 125.9 \\ \times 4 \\ \hline \end{array}$

19. $\frac{1}{5} \times 70 =$

20. $5.09 + 27.4 =$

21. $34.8 \times 1000 =$

Problem Solving

Task 1

Calculate 55% of 640

Task 2

Amina asked 60 children to choose their favourite flavour of jelly.

These were her results.

Flavour	Number of children
Raspberry	12
Lemon	8
Orange	15
Blackcurrant	25
Total	**60**

What **percentage** of the 60 children chose orange?

Task 3

Jack has £400

He spends **35%** of his money on a new bike.

How much does Jack spend on his new bike?

Reasoning
Task 1

In a Maths test, Tommy answered 62% of the questions correctly.

Rosie answered $\frac{3}{5}$ of the questions correctly.

Who answered more questions correctly?

Explain your answer.

Task 2

Amir thinks that 18% of the grid has been shaded.

Dora thinks that 36% of the grid has been shaded.

Who do you agree with?

Explain your reasoning.

Task 4

200 children went on holiday.

10% of the children went to Wales.

25% of the children went to Scotland.

How many **more** children went to Scotland than went to Wales?

Task 3

Amir says 0.3 is less than 12% because 3 is less than 12

Explain why Amir is wrong.