



Fractions

- Count up and down in tenths
- Understand fractions as numbers on the positive number line
- Understand unit fractions as a division of a quantity ($\frac{1}{3}$ of $12 = 12 \div 3$)
- Find, and write fractions of a set of objects where the denominator is small
- Solve problems with fractions in the context of a whole, numbers, measurement or a shape
- Recognise and show, using diagrams, equivalent fractions with small denominators
- Order and compare fractions with the same denominator
- Add and subtract fractions with the same denominator within one whole ($\frac{2}{7} + \frac{3}{7} = \frac{5}{7}$)

Mental and practical strategies and informal notation

Fractions as a number

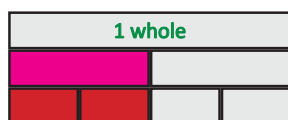
Count up in halves, quarters and tenths

Show the position of $\frac{3}{10}$, $\frac{4}{5}$ and $1\frac{1}{2}$ on a number line. Match each picture to the correct place on the number line and label it.

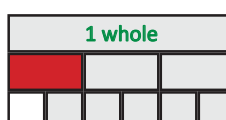


Comparing and Equivalence

Using Cuisenaire:



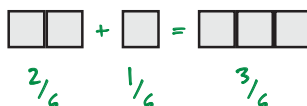
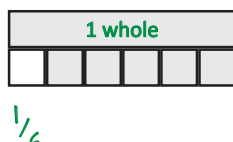
$$\frac{1}{2} = \frac{2}{4} \quad \text{One half is equal to two quarters}$$



$$\frac{1}{4} > \frac{1}{6} \quad \text{One quarter is greater than one sixth}$$

Add and subtract fractions

$$\frac{2}{6} + \frac{1}{6} =$$



What fraction of one whole is equal to $\frac{3}{6}$?
Use the rods to check your answer.

What fraction pairs can you find that total to one?



$$\frac{3}{8} + \frac{5}{8} = 1$$



$$\frac{2}{5} + \frac{3}{5} = 1$$

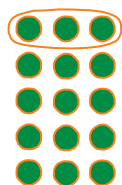
Fractions as an operator on a set of objects, a number or a shape

Shade $\frac{2}{5}$ of the shape.



2 parts out of 5

Ring $\frac{1}{5}$ of 15



Would you rather eat $\frac{1}{3}$ of 12 sweets or $\frac{1}{4}$ of 20 sweets?



$$\frac{1}{3} \text{ of } 12 = 4$$



$$\frac{1}{4} \text{ of } 20 = 5$$

I would rather have...

Fractions and division

$$4 \text{ strawberry laces divided by } 10 \text{ children} = 4 \div 10 = \frac{4}{10} = \frac{2}{5} \text{ each}$$

15 apples \div 5 plates. What fraction of apples are on each plate? $\frac{1}{5}$ of the apples are on each plate

Problem solving using the bar method

Meg has 20 stickers. $\frac{1}{2}$ are dog stickers, $\frac{1}{4}$ are cat stickers and the rest are of rabbits. How many rabbit stickers does Meg have?



Meg has 5 rabbit stickers

Method 1

$$10 + 5 = 15$$

$$20 - 15 = 5$$

Method 2

$\frac{1}{4}$ stickers left

$$\frac{1}{4} \text{ of } 20 = 5$$