

Unit 10

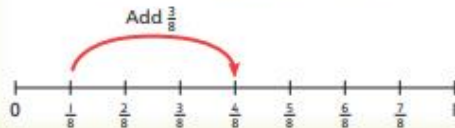
Fractions 2



In this unit we will ...

- ⚡ Find equivalent fractions
- ⚡ Compare fractions
- ⚡ Add and subtract fractions
- ⚡ Solve word problems about fractions and finding fractions of an amount

Do you remember what this is called? Use it to find what fraction is $\frac{3}{8}$ more than $\frac{1}{8}$.



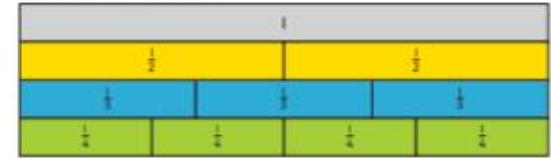
KEY LANGUAGE

There is some key language that children will need to know as part of the learning in this unit.

- ➔ part, whole, equal parts, unit fraction, non-unit fraction, denominator, numerator, equivalent fraction
- ➔ partition, split, share, count on, count back, compare, measure, calculate, method
- ➔ whole number, add, subtract, difference, multiply, divide, equal to, greater than (>), less than (<)

STRUCTURES AND REPRESENTATIONS

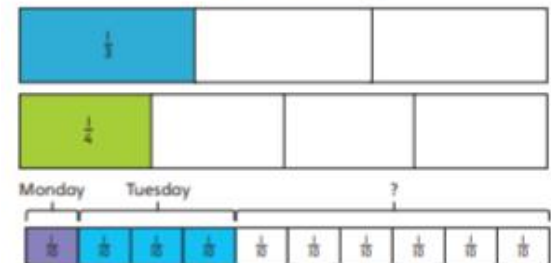
Fraction wall: This representation is crucial to allow children to find equivalent fractions. If children become confident using the fraction wall, it will increase their conceptual understanding of fractions. It can be used by itself or with a number line to compare fractions with different denominators.



Number line: This model helps children to understand fractions as numbers. Positioning fractions on a number line will require a secure understanding of the role of the numerator and denominator within a fraction.



Fraction strip: This is a powerful representation that allows children to organise the information they are given visually, and understand how it should be manipulated in order to find the solution to a problem. It can be used alone, or with a number line to enhance understanding.



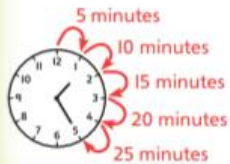
Unit II Time



In this unit we will ...

- ⚡ Learn about hours, days, months and years
- ⚡ Estimate times
- ⚡ Tell the time to the nearest minute
- ⚡ Calculate start and end times
- ⚡ Solve time problems

Do you remember how to count the number of minutes past or to an o'clock time?



KEY LANGUAGE

There is some key language that children will need to know as part of the learning in this unit.

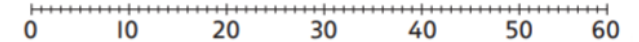
- month, year, leap year
- January, February, March, April, May, June, July, August, September, October, November, December
- day, hour, minute, second
- midnight, midday/noon
- hour hand, minute hand, past, to, half past, o'clock, quarter past, quarter to, Roman numerals
- longer, shorter, the same, units, last, convert, how long, left, passed, fastest, slowest
- 12-hour clock, 24-hour clock
- start time, end time, duration, time taken, finish, forwards, backwards, twice
- daytime, night time, around the clock, am, pm
- morning, afternoon, evening, night.

STRUCTURES AND REPRESENTATIONS

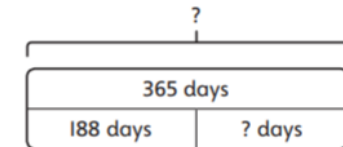
Analogue and digital clock: These models are used regularly to represent 12-hour times; some analogue clocks use Roman numerals and digital clocks can also show 24-hour times. Children will also complete analogue clock faces with no hands, to demonstrate their understanding.



Number line: This model helps children to visualise the order of numbers. It can help them to count on and back in minutes from a given start time, and to identify patterns within the count. In this unit, the number line will be used to represent minutes within an hour, so will go from 0 to 60.



Bar model: This model helps children to find the time left in problem-solving questions.



Unit 12

Angles and properties of shapes



- In this unit we will ...
- ⚡ Learn about turns
 - ⚡ Learn what a right angle is
 - ⚡ Understand and draw parallel and perpendicular lines
 - ⚡ Identify and draw vertical and horizontal lines
 - ⚡ Recognise and describe right angles and parallel and perpendicular lines in 2D shapes
 - ⚡ Recognise, describe and construct 3D shapes

We will see some different 2D shapes. Which of these are quadrilaterals?



KEY LANGUAGE

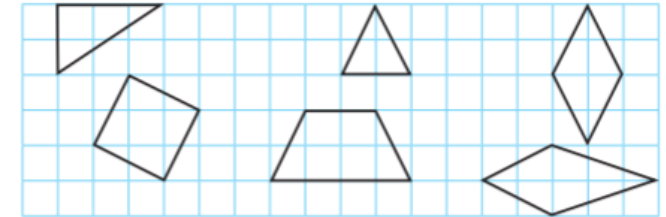
There is some key language that children will need to know as part of the learning in this unit:

- ➔ right angle, quarter turn, half turn, acute angle, obtuse angle
- ➔ vertical, horizontal, parallel, perpendicular
- ➔ triangle, quadrilateral, square, rectangle, trapezium, rhombus, kite, pentagon, hexagon
- ➔ cube, cuboid, sphere, pyramid, prism, cylinder, cone, triangular prism, square-based pyramid, tetrahedron
- ➔ describe, property, 2D, 3D, draw accurately, construct

STRUCTURES AND REPRESENTATIONS

2D shapes:

right-angled triangle isosceles triangle rhombus



square

trapezium

kite

3D shapes:

cuboid triangular prism square-based pyramid



cylinder

cone

tetrahedron

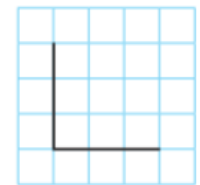
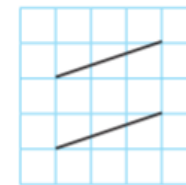
vertical

parallel lines

perpendicular lines



horizontal



Unit 13 Mass



In this unit we will ...

- ⚡ Measure mass in kilograms and grams
- ⚡ Work out different intervals on a scale
- ⚡ Add, subtract and compare masses
- ⚡ Solve problems involving mass



Do you remember what this is called? Use it to find the mass of an object.



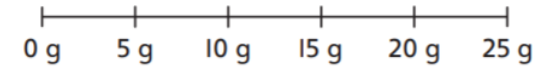
KEY LANGUAGE

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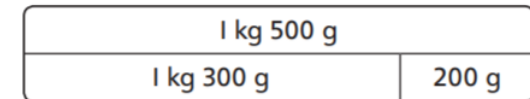
- ➔ mass, weigh, measure, grams (g), kilograms (kg)
- ➔ interval, scale

STRUCTURES AND REPRESENTATIONS

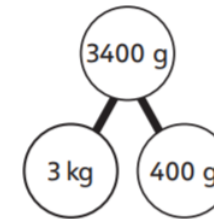
Number line: The number line is effective when looking at scales and finding missing intervals. Children can count on and back too.



Bar model: The bar model helps children gain a visual understanding of word problems involving measures.



Part-whole models: The part-whole model allows children to convert between units of measure effectively.



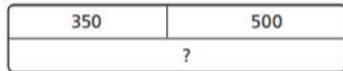
Unit 14 Capacity



In this unit we will ...

- ⚡ Measure capacity in litres and millilitres
- ⚡ Convert between litres and millilitres
- ⚡ Compare and order capacities
- ⚡ Add and subtract capacities
- ⚡ Solve problems involving capacities

Do you remember using a bar model to add numbers? Use this one to find the total.

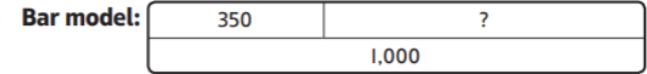


KEY LANGUAGE

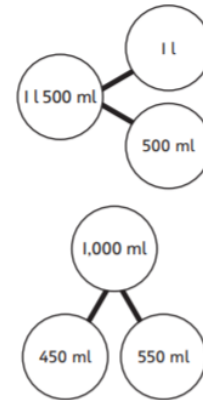
There is some key language that children will need to know as part of the learning in this unit:

- ➔ capacity, amount, measurement
- ➔ litres (l), millilitres (ml)
- ➔ scale, number line, interval
- ➔ compare, convert, order

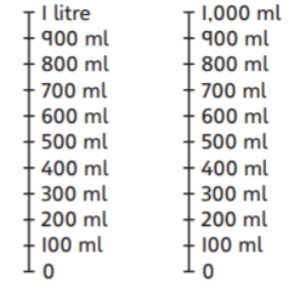
STRUCTURES AND REPRESENTATIONS



Part-whole model:



Scales:



Number lines:

