

Key vocabulary

Length and heights

Millimetre (mm), equivalent, twice as long, five times as long etc, perimeter, approximately, estimate, distance apart, distance between, distance to...from

Mass or weight

Equivalent, twice as heavy, five times as heavy etc, approximately, estimate

Capacity/volume

Equivalent, twice as much, five times as much etc, approximately, estimate

Time

A.m, p.m, morning, afternoon, midnight, analogue, digital, 12 hour, Roman, numeral, approximately, estimate, duration, leap year, century, calendar, date,

Money

pound(£), pence(p),total, change, note, more/most expensive, least/less expensive, worth, discount Temperature $Centigrade (^{\circ}C)$;

Concrete

recipes

Children choose appropriate instruments and units to measure and record measurements such as their height, shoe size, length of foot and

hand span, measuring where appropriate to the nearest half-centimetre – recording in both cm and mm. Children measure perimeters of regular and irregular 2d shapes.

Children increase their experience of measures through practical activities such as finding objects that weigh about 1kg or weighing and comparing 100 g of various materials.

Children given practical opportunities to scale up e.g.

Abstract

Children use the range of calculation strategies that they know to answer one and two step problems in the context of money time, measures and scaling, supported by practical activities such as role play where required. Children check that the answer to a problem sounds reasonable in the context of the problem.

Children learn the relationships between familiar units of measurement.

Lengths and perimeter	Mass and Capacity	Time	Money
Lengths and perimeter	Mass and capacity	Time	Money

- Children are introduced to millimetres for the first time and build on their understanding of centimetres and metres. Children use different measuring equipment including rulers, tape measures, metre sticks and trundle wheels. They discuss which equipment is the most appropriate depending on the object they are measuring
- Children recognise that 100 cm is equivalent to 1 metre. They use this knowledge to convert other multiples of 100 cm into metres and vice versa. Children recognise that 10 mm is equivalent to 1 cm. They use this knowledge to convert other multiples of 10 mm into centimetres and vice versa
- Children compare and order lengths based on measurements in mm, cm and m. They use their knowledge of converting between units of measurement to help them compare and order. Encourage children to convert all the measurements to the same unit of length before comparing
- Children add lengths given in different units of measurement. They convert measurements to the same unit of length to add more efficiently.
- Children use take-away and finding the difference to subtract lengths. Children should be encouraged to look for the most efficient way to calculate and develop their mental subtraction strategies. This step will prepare children for finding missing lengths within perimeter
- Children are introduced to perimeter.

 Children measure the perimeter of

- Children learn how to read a range of scales to measure mass, including scales with missing intervals. In this step, children read scales in either kilograms or grams. Represent the intervals on the scale on a straight number line to highlight the link back to place value.
- Children measure the mass of objects and record them as a mixed measurement in kilograms and grams. Recap counting in different multiples to support children's reading of scales with different intervals.
- Children build on knowledge and use 'lighter' and 'heavier' to compare mass. They use their understanding that kilograms are used for heavier objects and will use this to help them compare mass.
- Children add and subtract mass. They
 use a range of mental and written
 methods, choosing the most efficient
 one for each question. Children may
 use concrete resources to represent
 kilograms and grams.
- Children use litres, millilitres and standard scales to explore capacity.
 Children continue to use place value skills to explore scales. Children recognising the capacity is the amount of liquid a container can hold and the volume is how much liquid is in the container.
- Children use litres and millilitres and standard scales to explore capacity. Children measure capacity with litres and millilitres together and record measurements as __ l and __ ml, for example 5 l and 500 ml. Children

- Children look at the concept of years and months. They are introduced to leap years and how they are different from a non-leap year. Children should explore years using calendars to investigate the number of days in each month. Rhymes and songs are helpful for children to remember the number of days in each month
- Children recap the number of hours in a day and are introduced to language such as 'noon', 'midday', 'midnight'.
- Days in a week/month are also reviewed.
- Children tell the time to the nearest 5 minutes on an analogue clock. They focus on the language of "past" and "to", and will recognise and use Roman numerals on a clock face.
- Children tell time to the nearest minute using an analogue clock. They use the terms 'past' and 'to'. When telling time 'to' the next hour, children may need to count on to find how many minutes are left in the hour.
- Children use 'morning', 'afternoon',
 'a.m.' and 'p.m.' to describe the time of
 day.
- Children continue using analogue clocks and will be introduced to digital time
- Children are introduced to telling the time on a 24-hour digital clock
- Children find the durations of events using both analogue and digital clocks.
 They should be given opportunities to practically work out durations of time using clocks with moveable hands.
- Children compare durations of time

- Children need to know the value of each coin and note and understand what these values represent. They should understand that money can be represented in different ways but still have the same value. Children will need to be able to add coin values together to find the total amount.
- Children convert between pounds and pence using the knowledge that £1 is 100 pence. They group 100 pennies into pounds when counting money. They apply their place value knowledge and use their number bonds to 100
- Children add two amounts of money using pictorial representations to support them. They are encouraged to add the pounds first and then add the pence. Children then exchange the pence for pounds to complete their calculations.
- Children use different methods to subtract money. They will see examples where they can physically remove the coins, and examples where they will need to use their knowledge of converting money to exchange £1 for 100 pence. Children also use number lines to count on or back to calculate the difference between two amounts.
- Children use a number line and a partwhole model to subtract to find change. Teachers use coins to practically model giving change.
 Encourage role-play to give children a context of giving and receiving change.