# Guidance

## Algebra

To calculate 3n - 15 when n = 24, place 24 in the place of n.

3n = 3 × n = 3 × 24 = 72

3n - 15 = 72 - 15 = 57

To calculate the value of t in 28 - 3t = 10, there are various methods.

One is to calculate the value of 3t by calculating what is subtracted from 28 to make 10. 3t = 18.

If 3t = 18, calculate what is multiplied by 3 to give 18. So t = 6.

### Time

Children are expected to read analogue and digital clocks and watches in 12 and 24 hour time, up to 1 minute intervals. Analogue clocks use both numbers and Roman numerals.

Children are also expected to convert measurements of time, such as minutes into hours and minutes.

Practise using clocks at home or using the following resource:

http://www.twinkl.co.uk/resource/t2-m-2505-year-4-read-write-and-compare-the-time-differentiatedactivity-sheets

#### Money

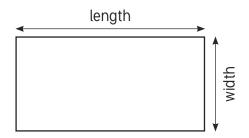
Children need to be able to combine coins to make amounts of money and calculate totals and change.

There are some multi-step money problems in this resource:

http://www.twinkl.co.uk/resource/t2-m-1638-key-stage-2-reasoning-test-practice-multi-step-moneyproblems

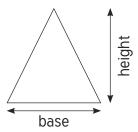
### Area and Perimeter

Children need to know that the area of rectangles can be calculated by multiplying the length and width.



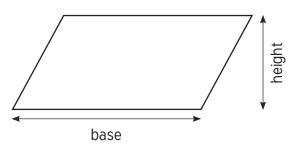
This is then applied to finding the area of triangles and parallelograms.

The area of a triangle is the length of the base  $\times$  the height  $\div$  2

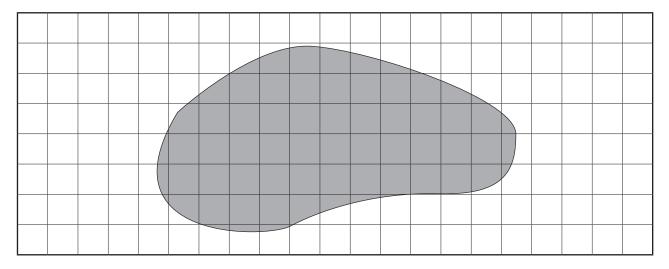




The area of a parallelogram is the length of the base × the height

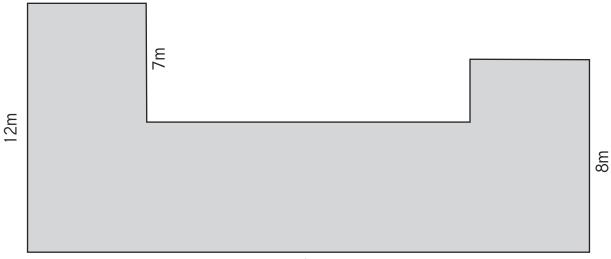


Children will also need to estimate the area of irregular shapes.



Children should count the whole squares and then those more than half shaded.

To calculate the perimeter of rectilinear shapes (rectilinear shapes have all angles as right angles), children need to calculate the lengths of all the sides, or the combined length of all sides.



19m

With this example the length of the 3 horizontal sides at the top will be 19m. There is one unknown vertical side. Because 7m + 8m is 3m longer than the 12m on the left hand side, the unknown vertical side is 3m. These measurements can be used to calculate the whole perimeter as 68m.





#### Measurement

Children are expected to calculate and convert grams and kilograms as part of a question. In Q13, the 1kg of apples has to be divided by 8. 1kg = 1000g, so divide 1000g by 8 to give 125g.

Children are expected to use scales on jugs and other capacity measuring containers. In Q14, the children need to work out that each segment of the scale is worth 5ml.

Children will need to measure to the nearest millimeter with a ruler. Remember to start at 0.

As with mass, some questions may involve converting from ml to litres and mm to cm to metres to km.

