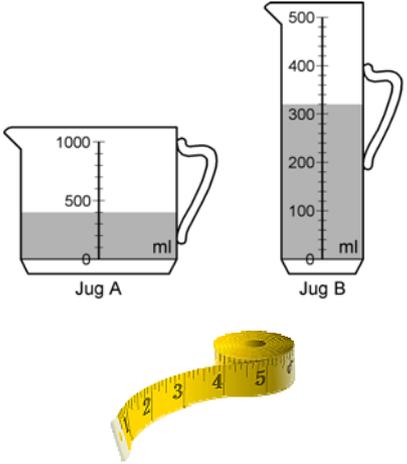
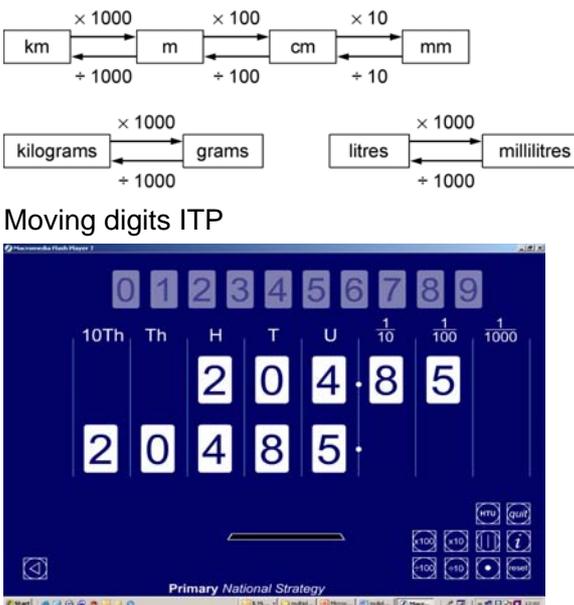
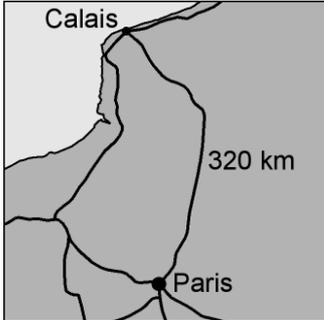


Year 6 Block D

The models, images and practical resources detailed below will support the teaching of this Block. The text in italics relates directly to the learning overview of each Unit in the Block – this is accessed using the Planning tab in the Framework. Select: Planning–Year group–Block, then click on the Unit tabs.

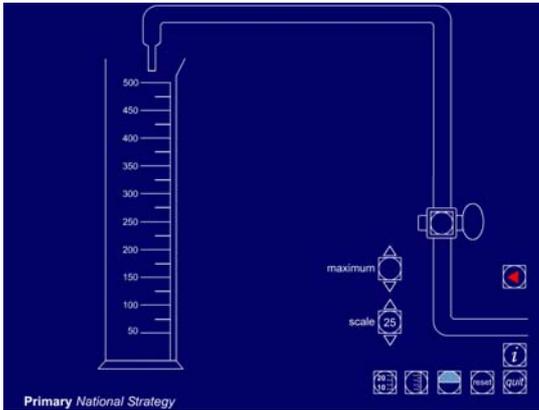
	<p>Children solve practical problems by estimating and measuring using standard metric units. They measure and compare lengths using rulers, metre sticks and tape measures, including a surveyor's tape for measuring longer distances outdoors. They learn how a car milometer measures longer distances. They study local maps and use a simple scale to compare map distances with actual distances.</p>
 <p>Moving digits ITP</p>	<p>Children convert between units as necessary, drawing on their knowledge of multiplying and dividing whole numbers and decimals by 10, 100 and 1000.</p> <p>Children use decimal notation in the context of measures.</p> <p>Moving digits ITP can be found in the library section of the Primary Framework.</p>

5 miles is approximately 8 kilometres.
 Use this fact to calculate the approximate distance, in miles, from Calais to Paris.



Children have an occasional opportunity to work with **imperial units** still in everyday use (such as pints or miles). They know the approximate equivalent metric values of these units and use them to make simple conversions.

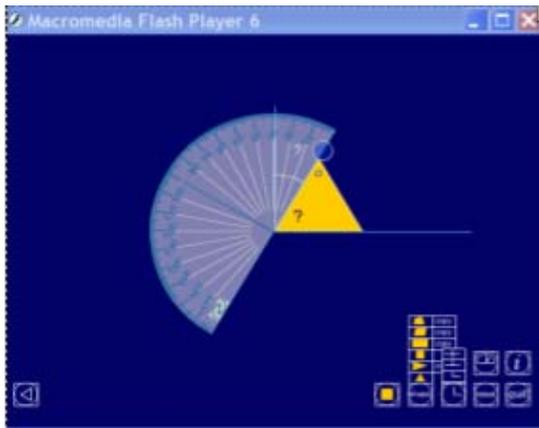
Measuring cylinder ITP



Children continue to **read measurements from a range of scales**. They suggest suitable equipment to measure with, and the **degree of accuracy** needed when **reading scales**. They are able to **convert a measurement** to an alternative form, describing, for example, 1 litre 200 millilitres as 1200 ml or 1.2 litres.

Measuring cylinder ITP can be found in the library section of the Primary Framework.

CalcAngle ITP



Children **estimate angles**, and use a protractor to **measure** and **draw** angles on their own and in shapes. They know the angles of a triangle add up to 180° and that the angles around a point add up to 360° , and they use this information to calculate missing angles.

Children use a protractor to **measure acute and obtuse angles**.

CalcAngle ITP can be found in the library section of the Primary Framework.

Here is a rectangle with 13 identical shaded squares inside it.

What fraction of the rectangle is shaded?

Children extend their understanding of area and perimeter.

They estimate the area of irregular shapes by counting squares.

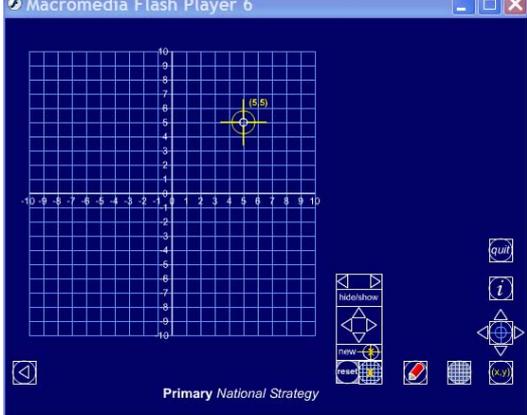
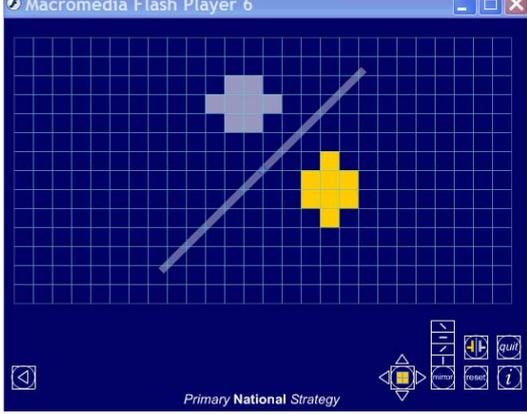
Children continue to explore **area and perimeter of rectilinear shapes**. For example, they draw different shapes (using whole and half squares) that have an area of 12 cm^2 , then find which has the longest perimeter.

Thermometer ITP

Children **solve multi-step problems** involving measures. They decide what calculation(s) to do and estimate the answers. They choose **appropriate** and **efficient** methods, including mental methods, and using a calculator where appropriate. For example, they solve problems such as:

The temperature inside an aeroplane is 20°C . The temperature outside the aeroplane is -30°C . What is the difference between these temperatures?

Thermometer ITP can be found in the library section of the Primary Framework.

<p>Coordinates ITP</p> 	<p>Children read and plot coordinates in order to draw, complete and locate shapes.</p> <p>Coordinates ITP can be found in the library section of the Primary Framework.</p>
<p>Symmetry ITP</p> 	<p>Children predict then check where the image of a shape will be after a reflection, rotation or translation. They use equipment (such as tracing paper) or ICT to rotate shapes through 90° and 180° about their centres or one of their vertices. Children use different grids to visualise, draw and transform shapes, using ICT or other approaches.</p> <p>Symmetry ITP can be found in the library section of the Primary Framework.</p>