

Can I read a variety of partially labelled scales and explain how I know what each unlabelled division represents?

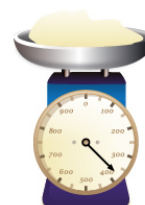
Teaching guidance

Key vocabulary

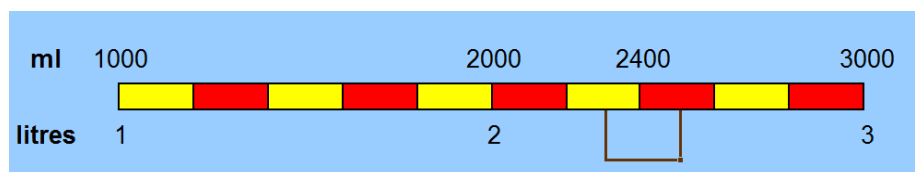
measuring scale, interval, division, label, equivalent, estimate, approximate, accurate, unit

Models and images, resources

Range of measuring equipment using different scales

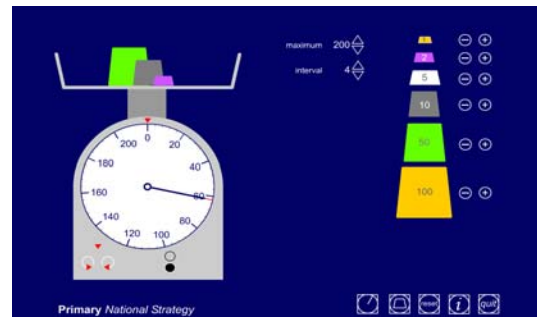
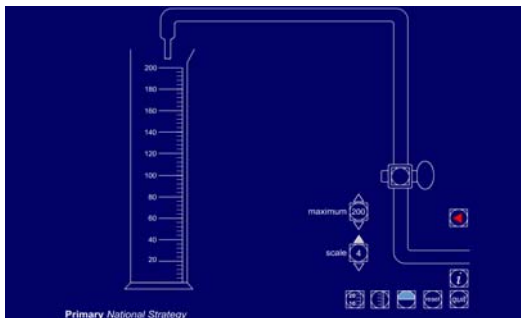


Counting stick or Converting measures spreadsheet



Reveal one or two labels on a counting stick and ask children to work out measurements at other points.

Measuring cylinder and Measuring scales ITPs



Teaching tips

- Ensure that children have regular opportunities to solve practical problems that involve measurement. This will hone their skills in choosing and using suitable equipment, interpreting and reading a range of scales accurately. Draw on opportunities provided in other curriculum areas such as science and food and design technology.
- Make sure that children use measuring equipment with a wide range of scales. Build in activities where they use different measuring equipment to measure the same object. This allows them to discuss ease of use, compare the scales and to find equivalents, for example measuring the same amount of liquid in both litres and in fluid ounces.
- Ensure that children can identify the important steps in reading a measurement from a scale:
 - Choose two labelled measures and find the difference between them.
 - Count how many intervals lie between them.
 - Calculate the value of one interval by dividing the difference by the number of intervals.
 - Use this to work out the value of each interval.
 - Check their answers by counting in intervals along the scale.
- Counting sticks, number lines and the ITPs Measuring cylinder and Measuring scales can be easily adapted to practise reading scales involving a wide range of numbers.
- Rehearse counting in equal steps, including large numbers and decimal numbers as a regular part of your mental and oral work. Relate this to counting along a measuring scale by counting in steps of 50 ml or 0.2 kg.
- Rehearse counting along a scale in more than one unit, for example: 1000 ml, 1200 ml, 1400 ml, followed by 1 litre, 1.2 litre, 1.4 litre and so on.
- Encourage children to annotate diagrams of scales by writing in key unlabelled measurements.
- Use scales that show two units alongside each other to work out equivalent measurements in the two units by reading the scales accurately.