

Revising decimals

The **decimal point** separates the **whole numbers** from **parts of whole numbers**. The two digits after the decimal point are **tenths** and **hundredths**. Zero can be used as a **place holder**, or a **leading zero** to show there are no whole numbers:

- 1.05 m (place holder)
- £0.89 (leading zero)

0.5 is the same as a half:

- $0.5 \text{ m} = \frac{1}{2}$ a metre
- $0.5 \text{ kg} = \frac{1}{2}$ a kilogram

Money

The most common use of decimals is with money. A decimal point is used to separate the **pounds** from the **pence**. When writing amounts in pounds always have **two digits** after the **decimal point** (eg £6.80). Money can be written in different ways: 35p or £0.35 but **not** £0.35p.

Length, Weight and Capacity

With measurements the decimal point separates the 'whole' number from the 'parts' of the whole number. For example:

With length the decimal point separates the metres from the centimetres. For example:

$$6.25 \text{ m} = 6 \text{ metres and } 25 \text{ centimetres}$$

The decimal point can also separate the centimetres from the millimetres. For example:

$$4.2 \text{ cm} = 4 \text{ centimetres and } 2 \text{ millimetres}$$

With weight the decimal point separates the kilograms from the grams. For example:

$$5.6 \text{ kg} = 5 \text{ kilograms and } 600 \text{ grams}$$

With capacity the decimal point separates the litres from the millilitres. For example:

$$2.4 \text{ l} = 2 \text{ litres and } 400 \text{ millilitres}$$

Using a calculator

If you solve money problems on a calculator you might want your answer to be in pounds and pence. You'll need to **enter the amounts using decimals**. For example:

- £1.05 is entered as 1.05
- 35p is entered as 0.35

When a calculator shows money values in pounds and pence you must write it with **two digits** in the **pence columns**.

- 1.5 becomes £1.50
- 0.3 becomes £0.30 or 30p
- 0.333333 becomes £0.33 or 33p
- 0.666666 becomes £0.67 or 67p