

Estimating mass

You will need:

8 different items (cover any labels that give the mass in g)

Weighing scales

Recording sheet

The activity (*points for discussion are in italics*)

Begin by quickly ordering the items from lightest to heaviest, just by looking at them. *How did you decide which order to put them in?*

Hold the first 2 items, one in each hand. *Does one feel lighter than the other? Are you happy with the order you put them in?*

Hold the 2nd and 3rd items to compare them, then the 3rd and 4th and so on, adjusting the order when needed.

Next estimate and record the mass of the first item, then weigh it and record the actual mass. *How close do you think your estimate was? What made it difficult/easy to make an estimate?*

Now hold the 1st item in one hand and the 2nd in the other, then estimate, record and weigh the 2nd item. *How much heavier does the second item feel? How can this help you to estimate its mass?*

Repeat this for all the items. *Were all the items in the correct order? Which item was the easiest/hardest to estimate and why? Were you surprised by the mass of any of the items?*

The results of this activity can provide further opportunities for estimating, discussing and calculating:

How much heavier is the heaviest item than the lightest?

What was the difference between your best estimate and the actual mass?

If we bought one of each item and put them in a shopping bag, how much would the bag of shopping weigh?

If a tin of beans and a tin of soup were the same size, do you think they would have the same mass? Why/why not?