

#### How to raise money

Pupils can be sponsored for how many measurements they can gather. Alternatively, parents and carers can make a donation.

### Learning opportunities

In this activity, children work to see how many different, accurate measurements they can make of their own body, and mark these measurements on a cut-out figure which represents themselves.

Teachers can use the activity to support children's understanding of measurement and units. It can be tailored for different age groups by expecting different levels of precision – using whole numbers with younger groups, and exploring fractions and decimals with older groups.

Teachers can extend this activity in a follow-up session by using the data collected. For example, if everyone in the class measures their little finger, teachers can work with the class to rank them by finger length, or create bar charts.

### What you need:

- Copies of the activity sheets (use light coloured paper for a cheerful and diverse display).
- Measuring equipment (you can make do with just rulers but it's more fun and easier to measure if you get hold of some measuring tapes also).
- A good addition for younger children, or those not yet used to units: some non-standard units such as cubes or household objects to measure with.
- Optional: a pair of Vernier Calipers, also used by engineers to make precise measurements which can be purchased for under £10 online and are good for measuring small things like hair thickness. Children would need support/supervision to use these - worth it if you want to explore small decimals (fractions of a millimetre) or have fun with the idea of very tiny units (the micrometre and nanometre) but an extension rather than core to the activity.

### How to play:

- 1. Revise or introduce measuring. Who can remember what units and tools are used to measure length?
- 2. Model the activity by measuring some parts of your own body, such as your foot, and recording it on your cut-out figure. You could ask children to guess how long they think your foot will be.
- **3.** Hand out the 'whole body' sheets, and get children to cut out the cut-out figures. They may want to add faces or hair, and clothes. That's fine as long as there's time!
- 4. In groups of two or three, ask children to make as many measurements of themselves as they can! They can work together as long as they feel comfortable measuring height, leg length, foot length, size of smile...
- 5. As the children work:
  - Reinforce the idea that they need to be accurate. Why might they take these measurements in real life? Answers could be to make or buy clothes, to see how fast they are growing, or to compare measurements across a group.
  - Talk about what's challenging about measuring. Measuring accurately? Reading the tape measure?
  - Reinforce the requirement to state the units children are using to measure (1.5m is very different from 1.5cm!)
  - Talk about the information being collected. Do the children think their measurements will be similar to measurements made by other classes in the school? (Height, for example, will vary more than head size across a primary school).



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### **Extention ideas**

- Using Vernier Calipers, offer each group in turn a chance to use it for small measurements like fingernails and hair width.
- Children may well run out of space on the cut-outs

   so have spares, and have some copies of the hand and foot cut-outs available.
- If some children are working faster than others, ask for a greater level of precision, or ask them to express their measurements in several different units (my foot is 20cm = 200mm = 0.2m long).
- Display all the cut-outs in such a way that the children can see and read them all. Ask children to work in groups to collect together all the data on one measurement, such as foot length, from the cut-outs. You can then use this as the basis for an activity creating bar charts or pie charts, or establishing the range of the data.

This worksheet has been adapted from a Maths on Toast activity.

To find more activities online, www.mathsontoast.org.uk

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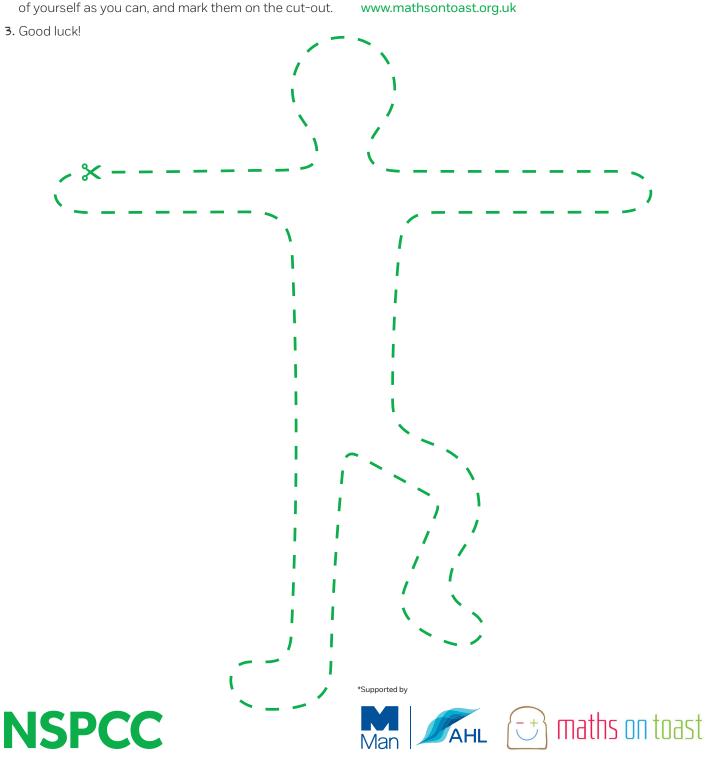




#### **Measure Me**

- 1. Cut out this shape and find a ruler or measuring tape.
- 2. With a friend, make as many accurate measurements of yourself as you can, and mark them on the cut-out.

Activity adapted from material developed by Maths on Toast, the family maths charity





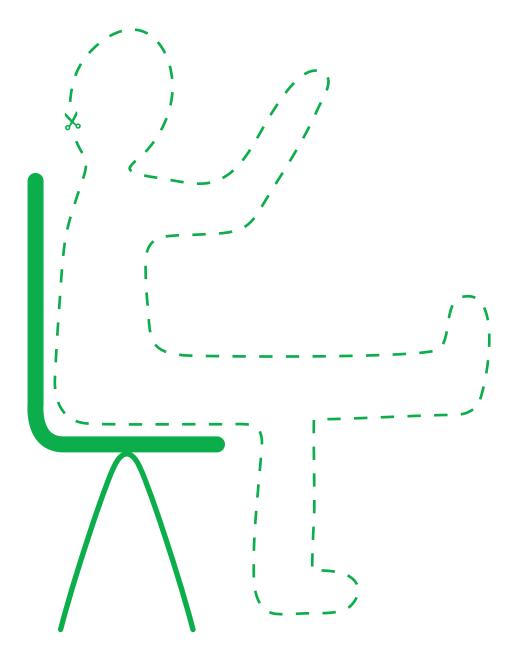
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3. Good luck!





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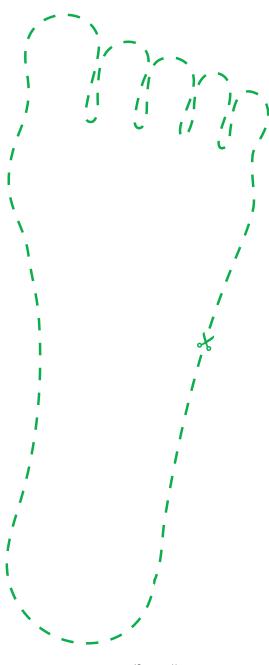


#### **Measure Me**

3. Good luck!

- 2. With a friend, make as many accurate measurements of yourself as you can, and mark them on the cut-out.

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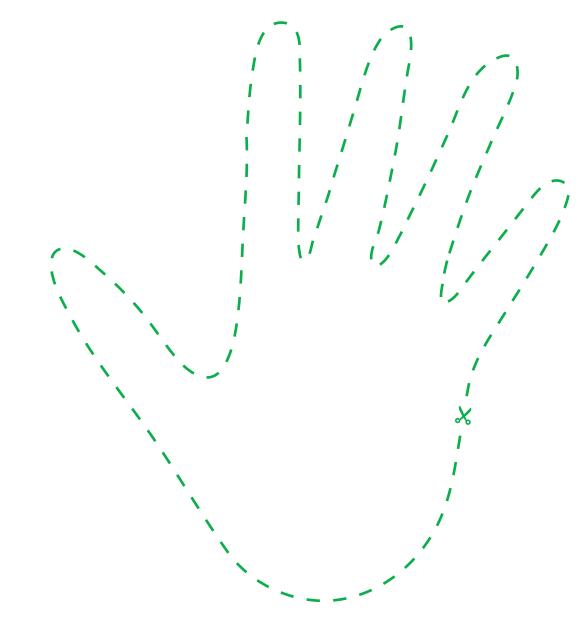
# Number Dev

### **Measure Me**

- 1. Cut out this shape (or draw round your own hand) and find a ruler or measuring tape.
- 2. With a friend, make as many accurate measurements of yourself as you can, and mark them on the cut-out.
- 3. Good luck!

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