

Recording a footprint

What you will need:

- A tray or washing up bowl with a layer of wet sand (or you could use a flower bed)
- Bare feet
- Plaster of paris
- Water
- Measuring and mixing bowls, jugs and utensils
- Pencils and tape measures
- Camera

1. Fill a tray or a washing up bowl with wet sand and take your socks and shoes off.



2. Stand in the sand. If there's room, let a partner make their footprint too.



3. In your group, record the footprints in different ways. First, take a photograph. If it's hard to see the footprint, get a lamp and angle it to one side of the tray so that the edges of the footprint cast a shadow.



Height

You can usually multiply the foot length of a footprint by 7 to get the height of the person. Decide whether you think an adult or a child made this footprint.

Foot length	Multiply by 7	Adult/child?

Take a plaster cast of the footprint

With an adult to help you, follow the instructions on the packet of plaster of paris to make the mixtures to pour into your footprint. It's often either one measure of powder to one of water, or two powder to one water.

- Mix it thoroughly but not too fast. Lift up the bowl and tap it on the ground to get the air bubbles out.
- The mixture will now be very hot – **don't touch it!**



- When all the powder is mixed in, pour the mixture into the footprint and try to make sure the whole footprint is covered. Leave it to dry.



- After an hour or so, very gently lift the plaster cast out of the sand and brush it off. How did it work? Is the mould clearly a footprint? Did it break? Can you see the details of the toes?



Measure your foot length and your height to check whether multiplying by 7 works.

Foot length	Multiply by 7	Measure your height