

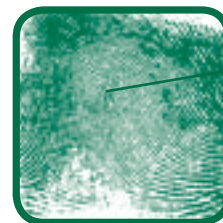
Fantastic fingerprints

★ What do I do?



1. Read the ACTIVITY CARD to familiarise yourself with the activity.
2. Check the Resources list – see overleaf.
3. Set the scene by discussing the news story with the children.
4. Give children time to talk about what they know about fingerprints. Let them look at their own fingerprints with hand lenses or microscopes.
5. Show children one way of taking their own fingerprints by following the instructions on the ACTIVITY CARD.
6. Draw children's attention to the different patterns found in fingerprints (loops, arches and whorls) – see ACTIVITY CARD.
7. Let the children investigate ways of recording their group's fingerprints.
8. If you wish, you can provide other resources so that they can try other methods of recording.

9. Ask children to use hand lenses to examine their own prints and mark where they find the different patterns.
10. Give children time to talk about what they have found out.
11. Children can share their findings by placing the tape used to collect their fingerprints on a sheet of overhead projector film or under a digital microscope. The prints can be projected for the entire group to see. They can try to work out which print belongs to which person. They could draw large images of their fingerprints.
12. At the end of the activity let children take their prints home or destroy them – make sure the children know you won't keep them.
13. There are extra challenges on the ACTIVITY CARD to use if there is spare time or if the children want to try more ideas at home and earn a bonus sticker.



Loop

★ Handy hints

Background information

- ★ Dirt, sweat and body oils collect on your fingers and almost every time you touch something, you leave a fingerprint.
- ★ Everyone's fingerprint is different! As you grow, they stay the same. This is why detectives use a fingerprint bank to identify people and solve crimes.
- ★ Fingerprints are now used for keeping data in schools. Some people are concerned about the use of personal details (biometrics) to keep records. A web search using 'school' and 'fingerprints' will give you more information. Encourage children to think about these issues.

Things to look out for

- ★ Let the children investigate how to get good prints. Only give advice if they are failing to make any progress.
- ★ To obtain a good quality fingerprint, children should wash their hands between prints. They also need to tap off the excess powder. A thin layer is best.
- ★ Sticking the pieces of sellotape onto an overhead projector transparency and using it on an OHP is a good way to share findings across the whole group. Pencil prints show up best.
- ★ Marker pens and ink-pads can be used but they can be difficult to remove from the children's fingers. Do not use permanent markers.

Safety

- ★ Check if any children have wheat or nut allergies before using flour and cocoa.
- ★ Children should be reminded to keep fingers out of their mouths and eyes during this activity and to wash their hands thoroughly at the end of the session.

Resources

- ★ Dust (flour, chalk, talc, cocoa powder), soft pencils
- ★ Blank paper (white paper for pencil and cocoa prints; black paper for white powder prints)
- ★ Other things to investigate e.g. oil or cream (leaves a print on OHT film or plastic), non-permanent markers etc.
- ★ Sellotape
- ★ Scissors
- ★ Hand lenses
- ★ Overhead projector and film (optional)
- ★ Digital microscope (optional)