

Fantastic Fingerprints Organiser's Card



This activity is designed to get children thinking about fingerprints.

The investigators have been given a news article about fingerprints. Teachers at Startown Primary School are wondering if they can use fingerprints to identify the students. Are the students' fingerprints that different?

Through this activity you will support your group to:

- Collect their fingerprints
- Compare different fingerprints and identify patterns
- Record and present their results

Kit list

- 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 or magnifying glasses

What to do

- Introduce the activity using the news article. Ask them if they have taken a fingerprint before.
- **2.** Give out activity cards and equipment to the children.
- 3. Explain that they will be investigating fingerprints today. Give children time to talk about what they know about fingerprints. Let them look at their own fingerprints with hand lenses or microscopes.
- 4. Demonstrate how to take a fingerprint.
- Support the children to design and carry out a test and to make their own records of their

results. Draw children's attention to the different patterns found in fingerprints (loops, arches and whorls).

6. Ask the children to present their findings to the rest of the group. They can be as creative in their presentation as they want. The prints could be projected for the entire group to see. The children could try to work out which print belongs to which person. They could draw large images of their fingerprints.

Things to think about

* *

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.

Marker pens and ink-pads can be used but they can be difficult to remove from the children's fingers.

Keywords

- Fingerprints
- Identification
- Forensics

Watch out!

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. Do not use permanent markers.









Fantastic Fingerprints *

NEWS

Fantastic Fingerprints

Teachers at Startown Primary School are wondering if they can use fingerprints to take registers, log children on to computers and borrow library books.

The fingerprint pad designer told our reporter, "Electronic pads scan the fingerprints. They change the fingerprint pattern into a code. The code is saved on a computer. Children only need to touch a pad to register. The possibilities are endless."

Mrs Teachem, the school's Head told our reporter, "I'm not sure it will work. Are fingerprints really all different? I would like to know what your readers think."

15

Your challenge

Find out if everyone's fingerprints really are different.

Fa

Fil

Tea

Sch

ca' re

tC

11



How do you think fingerprints are collected? Look at your fingerprints with a hand lens or microscope. What do your own fingerprints look like? Are they the same as your partner's prints?

Getting started

You either need to rub pencil onto a piece of paper or you can sprinkle a small amount of dust on a table.

Now put your thumb in the dust or on the pencil rubbing. Place your thumb firmly on the sticky side of a piece of sellotape. Now stick your sellotape onto a piece of paper.

You may need to experiment to get clear prints.

Test your ideas

Look at the prints, do you have any of these patterns?



Compare your prints with other people. Are they all different? Can you find other ways to collect fingerprints?

Share your ideas

Share all the fingerprints. Can you work out which are yours? You could let Mrs Teachem have copies or drawings of fingerprints.

Extra things to do

Look for fingerprints on surfaces such as glass. Can you identify who made them?

Some people think children's fingerprints should not be used as records in schools. What do you think?

Can you find out other ways of identifying individuals?

