



# Fingerprints

(1) Make sure that your fingers are clean.

(2) Roll each finger and thumb down to the first joint on an ink pad then roll it on the paper. Set out your finger and thumb prints in the order shown below.

## LEFT HAND

Little finger

Ring finger

Middle finger

Index finger

Thumb

..... ..... ..... ..... .....

## RIGHT HAND

Thumb

Index finger

Middle finger

Ring finger

Little finger

..... ..... ..... ..... .....

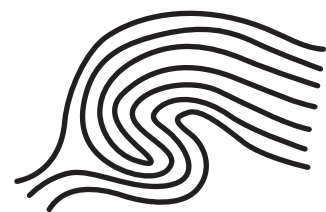
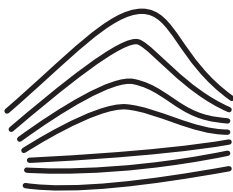
(3) Look at each print in turn with a magnifying glass and see if you can identify the pattern from the four shown below.

Arch

Loop

Whorl

Double whorl



(4) In the space under your fingerprints, write down the pattern made by each print.

(5) Compare the number and kinds of patterns with others in your class.



## Equipment

You will need ink pads, sheets of white paper and magnifying glasses.

## Outcomes

The children:

- Can follow instructions.
- Can use a magnifying glass.
- Can make comparisons.

## Background

The skin is only about 3mm thick but can become much thicker (up to about 10mm) on the soles of the feet.

The functions of the skin include protection of the internal organs from injury, prevention of invasion by micro-organisms, and temperature regulation to keep the body temperature constant by either sweating to release excess heat or withdrawing blood from the surface and developing a pallor to retain heat in the body. The ends of the fingers and thumbs have ridges which help in gripping objects. The ridges form patterns which may be left behind in the oil on the objects that have been handled.

Everybody can be identified by the pattern of ridges on the ends of their fingers and thumbs. Even identical twins have different fingerprints. Identifying someone from their fingerprints requires expert observation of the prints, but the essential patterns can be seen by making inky fingerprints on paper. Members of the class may find that they have different numbers of the essential patterns on their hands.