

Year 6 Spring 2 Scientific Enquiry – Fingerprints

Did you know?

If you look at your fingers you'll see lots of lines, arches and loops. Did you know your fingerprint is unique to you!! Even more unique than your DNA. Fingerprinting is a form of biometrics. Biometrics use a person's physical characteristics to identify them.



loop



whorl



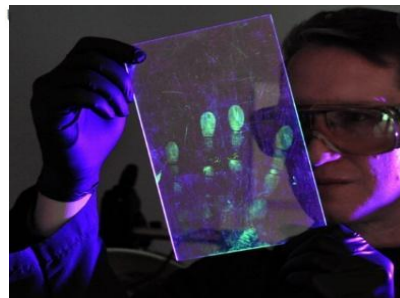
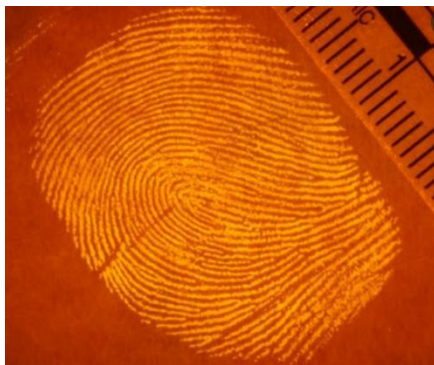
arch



The friction ridges on a finger

Forensic scientists have used fingerprints in criminal investigations as a means of identification for centuries to identify an individual as the suspect, a victim, or a witness. Our skin makes natural oils which mean that when we touch flat surfaces like glass or plastic, we leave the imprint of our fingers behind. Often these are difficult to see, especially on coloured surfaces, so forensics officers use a fine dust to see them more clearly.

- There are two categories for methods of fingerprint collection.
- Manual
 - Dusting with powders
- Chemical
 - Coating/dusting with chemicals to cause a chemical reaction (colour change)



What does Working Scientifically look like in Year 6?

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Using simple models to describe scientific ideas
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations
- Identifying scientific evidence that has been used to support or refute ideas or arguments.