Activity: Super Glue Fingerprints

On SCOPE's CSI Science episode, you saw Julia uncover some fingerprints using super glue. Here's how she did it:

What you need:
Super glue
Aluminium foil
Clean jar with a lid
Magnifying glass

What to do:

1. Rip off a piece of aluminium foil (about 4cm x 10cm) and make some fingerprints on the dull side (the fingerprints will stand out more on the dull side).
2. Make some more prints on the aluminium foil but before you do, rub your fingers through your hair first, so they are nice and oily!
3. Place the piece of aluminium foil into the jar with the fingerprints facing up.
4. Make a small container for the superglue. You can do this by once again using the aluminium foil - rip off another piece and make a cup shape by moulding it to your finger.
5. Fill the aluminium foil cup with super glue and place it in the jar with the fingerprints.
6. Screw the lid on the jar and leave it for about 2 hours.
7. The fingerprints should now have appeared on the aluminium foil! Get a closer look at the prints by using the magnifying glass.

What's happening?
How are fingerprints formed? Well, we all have sweat on our fingers and when you touch a surface, some sweat is left behind. But why did the glue help to reveal the fingerprints? Sugar glue has a pretty strong smell all thanks to chemicals called cyanoacrylates. These chemicals evaporate, fill the jar and combine with the sweat to make a white sticky material. When the prints start to appear, you should find the oily fingerprint to be clearer because there was more sweat to react with the chemicals in the glue!