



✂ WONDERVILLE ACTIVITY

CSI TECHNIQUES

Experiment with these different methods of collecting and analyzing evidence.

FINGERPRINT COLLECTION

Practice lifting fingerprints like crime scene investigators!

What You Need

- 1 artist's paintbrush
- 1 charcoal briquette
- packing tape
- white paper

What To Do

1. Using the paintbrush, apply a light coating of dust from the charcoal briquette to a surface in your home (the surface could be a glass, a remote control or an MP3 player).
2. Apply a piece of the clear packing tape to the surface and "lift" any prints you see.
3. Stick the tape onto white paper. You've just captured a fingerprint(s)!



ANALYZING SPLASHES & SPLATTERS

Crime scene investigators analyze splashes and splatters found at crime scenes.

What You Need

- 2 balloons
- water

What To Do

1. Fill the two balloons with water.
2. Go outside and find a dry and level paved surface such as a driveway or sidewalk.
3. Throw one balloon **straight down**.
4. Move about 2 metres. Throw the second balloon onto the surface **at an angle**.
5. What are the differences between the splashes and splatters left behind by the two water balloons?



CRIME SCENE IDENTIFICATION

Knowing the height and other physical characteristics of a crime victim can help identify him or her. But sometimes, only a few bones are left at a crime scene. The upper leg contains a large bone called the *femur*. The length of this bone can be used to estimate a person's height.

What You Need

- metric tape measure
- a partner

What To Do

1. Identify the placement of your partner's femur – it stretches from the hip socket to the kneecap (patella).
2. Measure the approximate length of this bone (in centimetres).
3. Multiply the length of the femur by 2.6.
4. Add 65 to this number to get the approximate height of your partner.
5. Measure the actual height of your partner (in centimetres). Compare the results. Was the height measurement based on the length of your partner's femur close to his or her actual height?
6. Repeat steps 1 to 5 with your partner.



$$\underline{\hspace{2cm}} \text{ (length of femur)} \times 2.6 + 65 = \underline{\hspace{2cm}} \text{ height}$$

