



Forensics

Cub Scouts · Elective · Bear rank

Name

Started

Completed

Forensics lets you be a science detective. You'll study fingerprints, shoe prints, and mystery powders, and learn how police collect clues. It's hands-on science with a mystery to solve.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/cub-scout-adventures/forensics/). Tips and examples are ideas, not extra requirements.

☐ **1** Learn what forensics is and how it helps solve crimes

Tip: Talk about how scientists use clues like prints and hair to help solve crimes.

☐ **2** Analyze your fingerprints

Tip: Press your finger on an ink pad, then paper. Use a magnifying glass to find loops, whorls, or arches.

Example: Rub a pencil on paper, press a fingertip in the graphite, then onto clear tape, and stick it on an index card. Label each finger and look for loops, whorls, and arches.

☐ **3** Make a shoe print

Tip: Step in damp sand or soil and study the pattern your shoe leaves behind.

Example: Press your shoe into damp sand or a tray of soil, then study the print: the pattern on the sole, the size, and any worn spots. Could someone tell it was your shoe?

☐ 4 Analyze four substances: salt, sugar, baking soda, and cornstarch

Tip: Test each white powder with water or vinegar and watch how they act differently.

Example: Test each white powder: look at it with a magnifying glass, add a few drops of water, then a few drops of vinegar. Baking soda fizzes in vinegar, and cornstarch gets gooey in water.

☐ 5 Learn about chromatography and how it helps solve crimes

Tip: Draw a marker dot on a coffee filter, dip the edge in water, and watch the colors separate.

Example: Draw a black marker dot near the bottom of a coffee filter strip, dip the edge in water, and watch colors climb the paper. Different markers make different patterns.

☐ 6 Find out how officers collect evidence

Tip: Ask a police officer how they collect and protect evidence.

Example: An officer might explain how they photograph a scene, wear gloves, put each clue in its own labeled bag, and write down everyone who handled it so the evidence stays trustworthy.