

Junior Detective Badge

In this badge program you will learn how to crack codes, follow clues and more. When you've earned this badge you will be able to do these things like a real detective.

1. Breaking the Code

Materials needed: 2 toilet paper/paper towel tubes, a few long stripes of paper 2" wide (or old calculator paper), Scissors, glue, tape, pens/pencil/marker

- a. Have a conversation about how spies and special agents use code to talk to each other. Maybe you can even look up other codes that you can try too ie: Morse Code.
- b. Now let's create a code.
 - i. First take your tube and hold it so one open side is on the table and the other is in the air.
 - ii. Take your stripe of paper lengthwise and wrap around your tube until it reaches the end and tape it into place.
 - iii. Now hold your tube lengthwise in front of you like a rolling pin.
 - iv. Write your message across the tube left to right across the paper.
 - v. Gently pull off the paper from the tube
 - vi. Have another family member to do the same to crack the message you just wrote.
- c. What other codes do we have in our lives?
 - i. Some ideas: Baseball signals, fire and police codes, Emergency room codes, texting codes like LOL, locker combination just to name a few.
 - ii. Talk about how codes make our lives easier together.
- d. Using the attached handout, try Morse Code together and see if you can write messages to each other.

2. Handwriting Analysis

Materials: Index cards or small pieces of paper, pen/pencil

- a. Give each person in your family an index card and have them write "Girl Scout cookies are yummy" on it.
- b. Then give them each another index card and have them write "I like to ____ because ____."
- c. Then lay them side by side and see if you can match them up!

3. Clue Hunt!

- a. Hide something in your home or outside.
- b. Take small pieces of paper and write clues on them about where the object is hidden.

- c. Give the clues to someone else to see if they can find the object.
 - d. Try giving clues to multiple objects in a row.
- 4. Fingerprinting.
 - a. Using the fingerprinting PDF try to see the differences in each fingerprint.
 - b. Take fingerprints of your family members using ink pad or marker to see if you can identify which type of fingerprint they each have.
 - c. Are these similar? How about someone not related to you? How do they differ.

Basic Fingerprint Patterns



whorl



loop



arch

Morse Code

Morse code is a way to send messages with a system of dots and dashes. Each letter in the alphabet is given its own set of these symbols. The dots and dashes can be written or made with short and long flashes of light or sound.

A	• —
B	— • • •
C	— • — •
D	— • •
E	•
F	• • — •
G	— — •
H	• • • •
I	• •
J	• — — —
K	— • —
L	• — • •
M	— —
N	— •
O	— — —
P	• — — •
Q	— — • —
R	• — •
S	• • •
T	—
U	• • —
V	• • • —
W	• — —
X	— • • —
Y	— • — —
Z	— — • •