



Badge Blueprint

Detective badge

Purpose: This badge teaches Juniors how to follow clues and discover facts like a real detective.

Step 1: Practice the power of observation.

The ability to watch people and situations very closely is an important detective skill. Practice your observation skills by watching the one-minute Troop Round Up 2014 video on Girl Scouts of Eastern Missouri's YouTube page called "Troop Round Up." Then answer the following questions about the video. Be sure not to read the questions before you watch!

1. What color hat was the canoeing girl wearing?
2. Name two activities (besides canoeing) girls were doing in the video.
3. How many participants were there?
4. What were the girls eating?
5. How many school buses were shown in the opening shot?
6. Did the girl doing archery make a bullseye?
7. How many girls rode the zip line?
8. What were the girls petting?

Step 2: Communicate in code.

Special agents sometimes cannot talk to one another due to distance or danger so they have to use other ways to get messages to each other. Write a message to a friend or family member using invisible ink.

Materials:

Q-Tip or small
paintbrush
Lemon juice
Paper
Baking soda
Water

Dip the cotton swab or paintbrush in lemon juice and write a message on paper with the swab. Dry the paper in the sun or with a hair dryer to see the message. The ink needs to dry completely. Try it again, but use baking soda mixed into water instead of lemon juice. Hold it under a light to see the words. Why do you think heat causes the "inks" to reveal your message?

Additional steps on next page

Remember, girls gain confidence and leadership skills through girl-led activities. Whenever possible, let the girls take charge when completing activities. Adult help is necessary for guidance, support and safety.



Step 3: Study three sets of fingerprints.

Fingerprinting is used to find criminals and identify missing or injured persons. Take fingerprints of you and two of your friends or family members.

Materials:

Clear tape
No. 2 pencil
White paper
Magnifying glass

Rub the pencil on a piece of paper, coloring in a small area. Beginning with the little finger, press on the area until the fingertip is covered with graphite. Place a small piece of tape over the fingertip print. Press the tape down gently over the fingerprint. Carefully remove the tape and stick it on a clean, white piece of paper. Record which finger the print came from. Repeat the process for the other four fingers. Try to identify the patterns in the sets of fingerprints, using the guide from the link below. How are they the same and how are they different?

- globalsecurity.org/security/systems/biometrics-fingerprint.htm

Step 4: Try out detective science.

Forensic scientists help solve crimes using their skills. This often includes using DNA evidence. Find out what DNA is and what it's made of. Your science teacher at school is a great resource for this step. Once you know what DNA is, make some edible "DNA" using directions from step three on the link below. This is a great snack option for a meeting.

- mykidsadventures.com/edible-dna-project/

Step 5: Solve a mystery.

We now have evidence you could make a great detective, so it's time to put your skills into action! Solve the mystery of the painting using the link below.

- insideout.net/wp-content/uploads/2010/09/IO0035-Mona-Lisa1.pdf

Congratulations! You have now earned this badge!