

FORENSIC FUN (CSI CHALLENGE)

AN INSTANT MEETING FOR BROWNIES
FROM THE BC PROGRAM COMMITTEE

The CSI Challenge is designed to introduce forensic science to girls and Guiders. There are a wide variety of activities available in the CSI Challenge booklet, so if you want to change up an activity, please check it out for ideas. We have only selected a few for this meeting plan. If you think your girls would be interested in doing more forensic science, there are several activities in the booklet, including the plan for an entire mystery to be solved (great for a sleepover or camp). Doing all the activities in this Instant Meeting will earn Brownies the CSI Challenge crest.



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Meeting Plan

- 5-10 min: Gathering: Super Sleuth Maze
- 5 min: Brownie Opening
- 5-10 min: Opening Discussion
- 10-15 min: Fingerprint Art Bookmark
- 20-30 min: What's That? Round Robin Activities
 - 5-10 min: What's That Noise?
 - 5-10 min: What's That Smell?
 - 5-10 min: What's That Texture?
- 20 min: Fingerprints
- 5 min: Brownie Closing

90 minute meeting. Approximate activity times shown.

Program Connections

Key to STEM:

SSSS stands for Sound, Surround, Soothe and Stimulate interest badge (one activity); STEM Special Interest Badge (earns full badge)

CSI Challenge

Meeting Supplies

- | | | |
|--|--|---|
| <input type="checkbox"/> printed mazes | <input type="checkbox"/> a variety of common items with a strong - but not harmful or potent - scent | <input type="checkbox"/> sifted cocoa |
| <input type="checkbox"/> pencils, crayons, markers | <input type="checkbox"/> opaque cups | <input type="checkbox"/> small spoon |
| <input type="checkbox"/> cardstock | <input type="checkbox"/> cotton balls | <input type="checkbox"/> transparent tape |
| <input type="checkbox"/> yarn | <input type="checkbox"/> a variety of common items with distinct textures and/or shapes | <input type="checkbox"/> white paper |
| <input type="checkbox"/> non-toxic ink pads | <input type="checkbox"/> tea towels | <input type="checkbox"/> magnifying glass |
| <input type="checkbox"/> hole punch | <input type="checkbox"/> clean drinking glasses | |
| <input type="checkbox"/> a variety of common items that make noise or a recording of common sounds | | |

Gathering: Super Sleuth Maze

Directions

Download a variety of mazes from the internet:

<https://www.google.ca/search?q=printable+mazes>

Supplies

- printed mazes
- pencils, crayons, markers

Opening Discussion

Explain to the girls that you'll be working on the CSI Challenge. Ask them for ideas about what they think forensic science is and how it might be used in a broad context. Television shows often depict forensic science as a way to investigate violent crimes, but use this opening discussion to help the girls understand that forensic science is used to investigate other crimes, as well - from theft and art forgery to accounting fraud and cyber-crime.

Fingerprint Art Bookmark

Preparation for this craft will depend on the age level of girls. If needed, pre-cut and hole punch bookmarks.

Print some examples of fingerprint art for reference:

<https://www.google.ca/search?q=fingerprint+art&tbm=isch>

Directions

1. Press your thumb or finger onto an ink pad and then on to the bookmark.
2. Use markers, crayons or pencil crayons to add details to your fingerprint artwork.
3. When the decoration is finished, use the yarn to create a tassel for the bookmark. Encourage the girls to make a CSI-themed bookmark with examples.

Supplies

- cardstock cut to bookmark size
- yarn for bookmark tail
- non-toxic ink pad (washable makes for easier clean up, but permanent is better if you would like to colour on top of the prints)
- markers, crayons or pencil crayons
- hole punch

What's That Noise?

Directions

1. With the girls' backs turned so they can't see what is making the noise, start up each of the noise-makers in turn and ask them to identify what is making the sound.
2. To increase the difficulty, look for items that sound similar but not identical (jingling keys vs. a chain).

Supplies

- a variety (10-15) of common items that make noise or a recording of common sounds (examples: telephone, mixer, bell, computer keyboard, stapler, party noise maker, crinkling plastic, keys)

What's That Smell?

Directions

1. Place one item in each cup and cover with cotton balls so you can't see the item.
2. Then, ask girls to try and identify the item in each cup using only their sense of smell.

Supplies

- a variety of common items with a strong - but not harmful or potent - scent (examples: vanilla, chocolate, black and red licorice, lemon, coffee)
- opaque cups
- cotton balls

What's That Texture?

Directions

1. Place one item under each tea towel, so that it is hidden from view, and ask the girls to try and identify what is under the tea towel.
2. Again, using similar but not identical items might make it more difficult for older girls.

Supplies

- a variety of common items with distinct textures and/or shapes (examples: sandpaper, small distinctively shaped toys, baking supplies, fabrics, tinfoil)
- tea towels

Fingerprints

Ahead of time, have one of your suspects (a Guider) press her fingers onto a glass, being careful not to smudge the fingerprints that are left. For better fingerprints, have the suspect touch her forehead before touching the glass.

Directions

1. Have everyone press their own fingers onto the ink pad and then onto a sheet of white paper, being careful not to smudge. Use the magnifying glasses to examine your fingerprints and identify which features you can see (arches, loops, whirls). Make sure all your suspects get their fingerprints taken as well.



Arch



Loop



Whirl

2. After everyone has taken their fingerprints, gather everyone around and demonstrate how to take fingerprints from a glass.

Supplies

- ink pads
- clean drinking glasses
- sifted cocoa
- small spoon
- transparent tape—not the “magic” invisible kind
- white paper
- magnifying glass
- two or more “suspects”

3. Carefully handle the glass by the rim, the base or the stem so that you do not smudge the fingerprints left by the suspect. Hold the glass up to the light to find where the fingerprints are.
4. Using the small spoon, sprinkle a small amount of cocoa over the fingerprints, making sure they are completely covered. Gently blow off the excess cocoa.
5. Press one end of the tape to the glass on one side of the fingerprint, then stretch the tape across the fingerprint and down onto it. Be careful not to drag the tape across the fingerprint or to press it down onto the fingerprint with your fingers.
6. Lift the tape off the glass and stick it to a sheet of white paper.
7. Ask each girl to compare the fingerprints from the glass to the sample prints provided by the suspects and see if they can guess who dirtied the glass.

Closing

Gather everyone together and talk about the different forensic activities. Ask them which part of “What’s that” they found the hardest and what made it hard to identify. The prints we found on the glass were pretty easy to find – what could make the job of a fingerprint analyst more difficult?

Let the girls know that they have earned the CSI Challenge crest today.

Do your usual closing.