









When you think of a special agent what are some things that come to your mind?

A special agent can have several different jobs. They can be a detective, scientist, psychologist, or an enforcer of the law.

- A special agent specializes in solving puzzles.
- They ask questions and search for clues.

For this badge, you will become a special agent, and learn how to investigate puzzles and ask the right questions to get the job done!

Step 1: Investigate investigation

Step 2: Reveal reality

Step 3: Try the science

Step 4: Key in to body language

Step 5: Practice the art of detection

### Step 1: Investigate investigation - Hold an "Identity Crisis Party"

- 1. First, gather yourself and your guests together. Ask several family members to be your "guests' for this activity.
- 2. Give each person 3 pieces of paper (3 inch by 3 inches squares), a pencil, and clear tape.
- 3. Have each person write their name at the bottom of <u>one of the three</u> pieces of paper. (Each person should have 2 papers left without a name.)
- 4. Using the **instructions on the next page**, they will capture their fingerprints on all three pieces of paper.
- 5. Put the pieces of paper <u>without names</u> into a box or a hat. Then, mix them up and add a number to each paper starting with #1 until you are finished.
- 6. Using the fingerprint squares that have names on them, compare it the other fingerprint paper squares that have no names to identify them.
- 7. Try to identify which numbered fingerprint belongs to who.

#### **Questions to think about:**

How many types of fingerprints are there?

Why would fingerprints be important to a special agent?

What seemed to be the most common fingerprint pattern you found?

For more fun you could practice your investigative skills while playing the game Clue or have some finger sandwiches as a tasty treat.

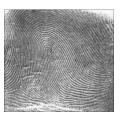


#### How to capture your fingerprint:

- Gather a No.2 pencil, some sheets of paper and some clear tape.
- Gently rub the pencil tip sideways onto the paper until a dark smudge appears. The dark smudge is called graphite. It is what you will use to make your prints.
- Place your thumb or fingertip onto the graphite.
- Take some clear tape and wrap it over your thumb or fingertip. Then press the tape gently down to capture the graphite.
- Remove the tape and tape it to the clean piece of paper.
- You have just captured a fingerprint!

#### **Three Main Types of Fingerprint Patterns**







Arch

Loop

Whorl

These are examples of the three basic types of fingerprints patterns: Arch, loop and whorl.

What are some reasons for someone to be fingerprinted?







https://www.youtube.com/watch?v=cZKGpg\_fttw

### **Step 2: Reveal Reality**

Over time, Forensic Science has helped separate the difference between reality and myth. Forensic scientists examine and analyze crime scenes and assist in investigations.

Here is just one example:

Look into the reliability of eyewitness reports. The Innocence Project has been using DNA evidence to free prisoners who were wrongly convicted before DNA technology was available. Of the first 293 cases, fully half of the prisoners were convicted on eyewitness testimony alone. Eyewitness testimony can be wildly inaccurate, because what people think they see can be affected by weather, stress, health, and personal bias. Ask a law-enforcement officer, judge, lawyer, or other expert to share stories of people wrongly convicted.

Let's test the reliability of an **eyewitness testimony**. An eyewitness testimony refers to an account given by people on an event that they have witnessed.

- Ask a family member to put a variety of household items on a tray and leave them in the room where the "crime scene" will take place.
- Gather some of your family members.
- Select one family member to run into the room, grab something from the tray, and leave in a flash.
- While the "crime" takes place, the other family members, including you, should take notes on the description of the person, what item was taken, and the time that the person came in and left.
- Compare reports and have the person come back into the room.
- Was your "eyewitness testimony" accurate?

### Step 3: Try the Science

From the biology of insects that can determine time of death to the precise physics that determine the trajectory of bullets, forensic scientists need to know about all areas of science.

#### Materials needed:

- Two packets of red-colored drink mix, such as Crystal Light or Kool-aid (Substitute drink mix with a dark colored juice or other dark liquid)
- 2 teaspoons of hot water (to dissolve the drink mix)
- Paper cup
- Straw
- Coffee stirrer
- White paper
- Ruler, yard stick, or measuring tape

#### Try this experiment Forensic Physics: Interpreting Blood Spatter

- 1. Make fake blood by dissolving and mixing the red-colored drink mix into a cup with two teaspoons of hot water.
- 2. As the "blood" is cooling, cut the white paper into 10 pieces (approximately 4 inches by 6 inches each). Take 5 of the pieces and lay them out on a flat surface.
- 3. Dip the straw in the "blood" and drip one drop onto a piece of the paper from a height of ½ inches.
- 4. Now, drip one drop of "blood" on a new piece of paper for each different height: 1 inch, 6 inches, 12 inches and 18 inches. Observe how the size of the drop changes as the height is increased.
- 5. Hang a new piece of paper at a an angle that is not flat on a surface. For example, hang the piece of paper on the wall.
- 6. Drip a drop of blood on that piece of paper. What happens?
- 7. Repeat steps 5 and 6 on the additional papers at various angles. Observe how the size and shape of the "blood" drop changes as the angle increases.





https://www.youtube.com/watch?v=1sfM-xx7tHI

### Step 4: Key in to Body Language

When detectives have to interview a suspect, they often read the body language of their suspects to detect the validity of the suspect's speech. At the same time, detectives have to conceal their true feelings and ideas to prevent their suspects from changing their response. What do you think detectives do to keep their cool? How do they read the body language of others?

- Using the internet, research 'body language.'
   Examples: A person may make strong eye contact with someone to look confident or a person may not jiggle their legs to not come off as nervous.
- 2. Now, taking what you have learned about the basics of body language, practice reading body language by observing pictures of people in magazines, television or in movies. Try to make guesses to identify what their body language is telling you.

For more fun: Look through old photos or videos of yourself. Look at your body language. What messages were you trying to send?



#### **Step 5: Practice the art of detection**

Now, using everything you have learned so far, put those skills to the test. Write a script for a crime story and perform it with your family!

What makes a good crime show?

What are the essentials for writing a thrilling story?

- The five elements of a mystery story are: characters, setting, plot, problem, and solution.
- Think about the style script you would want to write: a play, a tv show, a podcast, or an old radio program.

#### **Careers to explore:**

- Mystery author
- Private investigator
- Research scientist
- Forensic scientist
- FBI Agent
- Detective
- Therapist
- Cryptographer or cryptologist (code breaker)
- Forensic psychologist specializing in: Criminal justice, law enforcement, corrections facilities, rehabilitation facilities, crime prevention, education, research, or profiling

#### Now have some fun!!





# Congratulations!

You've earned your Cadette Special Agent Badge!

The Special Agent badge can be purchased through our <u>GSWNY Council Shop</u>.

Questions? Contact <u>CustomerCare@GSWNY.org</u> or <u>Girl.Experience@GSWNY.org</u>