

Nothing Is Little

Written by Carmella Van Vleet / published by Holiday House

Activities guide

Reading / discussion guide

Available here:

https://holidayhouse.com/wpcontent/uploads/2022/09/Nothing_Is_Litt le_Reading_Group_Guide.pdf

Forensic science activities for the classroom

Activity #1: Trace evidence

This activity requires a bit of simple advanced planning. Here's what to do:

• Designate a "crime scene." For example, your desk and the surrounding area.



- Trace evidence is small but measurable little things left at a crime scene. For example: hair strands, fibers, soil, paint chips. After introducing students to the concept of trace evidence, invite them to study your desk for one or two minutes, taking mental notes of what is there.
- During a time when students are not in the classroom, have someone come in to steal an item and "take something, leave something." (You can also do this yourself.) For instance, while stealing your stapler, maybe the person stepped on the Post-It Note that was on the floor near the desk. And maybe they left a few strands of hair or pebbles from the playground.
- Ask the students to revisit the scene, and see if they can identify the trace evidence and make inferences about the culprit. For example, the suspect could be someone with a Post-It Not stuck to their shoe, have a certain hair color, or been on the playground at some point.
- Ask students to write up a "police report" that details their investigation.

Activity #2: Finding fingerprints using fumes

Lifting fingerprints from a crime scene can tell investigators who was at the scene. But how can we uncover latent prints that aren't easily seen on a porous surface? Here's what to do:

 Have your students gently rub a finger over their nose or forehead. (Having oil on your fingers makes your prints easier to see.) Next, have them press that finger against a unruled, blank notecard.

- Ask students put on safety gloves before pouring 1 tablespoon of liquid iodine and a teaspoon of hydrogen peroxide (both found in the first aid aisle) into a small plastic container with a lid. (Note: iodine will stain skin, surfaces, and clothes, so have students take extra care when using it.)
- Tell students to tape the notecard to the bottom of the plastic lid. It's important for them to make sure the side with the invisible fingerprint is facing *toward* the bottom of the container/liquid so the fumes can hit it.
- Have the students seal the lid on the container and wait for ten minutes.
- At the end of the ten minutes, have students carefully remove the lid and card and observe the print.
- Ask them why law enforcement routinely uses fingerprints to identify suspects.

Activity #3: Chromatography

One way investigators might connect a suspect to a crime is by matching the ink of a pen they use. (For example, on a ransom note.) Chromatography is the separation of a mixture into its individual parts or components. Since markers are typically a blend of dyes, we can easily separate them using water if they are the water-soluble kind. Permanent markers won't work well for this experiment. Here's what to do:

 Have each student lay a paper towel on top of a piece of cardboard or another protective surface.

- Invite students to create four one-inch squares using each of the markers. Tell them to make sure the squares aren't too close to each other. (In the example, the colors include: black, orange, red, and green.)
- Have the students use eye droppers to drop enough water on each square for it to start to spread out. (If you don't have eye droppers, they can use wet fingers, too.)
- Ask the students to observe and record which colors they see in the ink blots. For instance, a black marker will have shades of blue. Green will have shades of blue.



Five-Minute Mysteries

In the book, the forensic science club advisor often ends meetings with 5-Minute Mysteries. You can do this, too, by reading from:

Encyclopedia Brown books

Hailey Haddie's Minute Mysteries

Solve-Them-Yourself-Mystery-Adventures, such as Legend of the Star Runner

Sherlock Puzzle Book (Mildred's Sherlock Puzzle Book Series)

Great Quicksolve Whodunit Puzzles: Mini-Mysteries for You to Solve

Solve the "crime" scene

Frances Glessner Lee is considered the "Mother of Forensic Science." Her dioramas, The Nutshell Studies of Unexplained Death, were used (and are still used!) to help train detectives.

See if students can figure out who stole the piece of cake in this "crime scene" found here:

https://carmellavanvleet.com/educatorsguides%2Fpdfs

Coming soon: Crime Scene #2!

Create a "crime" scene

Next, create your own crime scene models! Using various materials, have students set up their own crime scene model. Then,

invite students to visit each model and see if they can solve them.



Writing activities

 Felix is excited but also unsure about all the changes that are about to happen when his sibling is born. Ask students if they've ever been anxious about a change and have them write Felix a letter of advice.

- Felix plays a big role in the birth of his sibling, and a newspaper article is written about him. Invite students to write the newspaper article and include (draw) a picture of Felix and the baby.
- While searching for clues about his biological dad, Felix finds an old T-shirt from a college recreational football team called the Rapid Squirrels. Have students create their own sports jersey, complete with a team name. Then have them write what inspired the name, mascot, and team colors.
- Challenge students to write their own 5-Minute Mysteries.

Search for the mystery writer...

As it says in the back of the book, sometimes I like to name characters after real people I know.

One day, a visitor comes to Felix's forensic science club meeting. This character is based on a real person! See if you can figure out WHO this real-life author is (there are a couple of clues) and then check out her mystery series.

