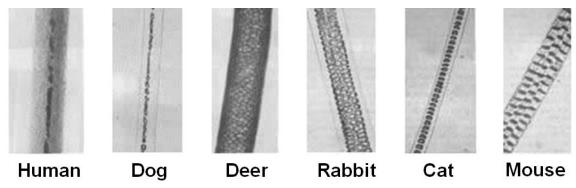


SfS Away from the Classroom!

AP21: Hair ID (Recommended for Grades 3-5)

Please use the following resources to learn about Hair ID in forensics



Microscope images of hair shafts from different animals.

Watch this Video: https://youtu.be/i52-RKay0IU

Answer these questions:

- Can a strand of hair be used to accurately identify a single individual? Why or why not?
- What is the center of the hair shaft called?
- What are some qualities of hair that forensic scientists can examine?

<u>Activities</u>: Be a forensic sleuth by playing a virtual forensic investigations game. Then test out your skills by searching for hair evidence in your home!

Part 1: Online Game

You will need:

Computer with WIFI	Paper	Pencil	
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- 1. Follow this link to play the virtual forensic investigation game: http://www.virtualmuseum.ca/sgc-cms/expositions-exhibitions/detective-investigator/en/game/index.php
- 2. As any good detective would, jot down some notes about clues you find.
- 3. See if you can solve the murder mystery!



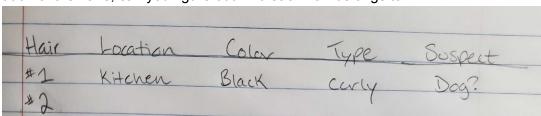
Part 2: Be a forensic scientist at home!

You will need:

Flashl	ight
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- Tweezers
- Small plastic baggies
- Sharpie marker
- White sheet of paper
- Magnifying glass

- Desk lamp
- Science notebook
- Pencil
- 1. Use your flashlight to scour each room in your house for hair evidence.
- 2. When you find a hair, use your tweezers to collect it, put it in a baggie and seal it.
- 3. Use the sharpie to label your baggie.
 - a. Write whatever number hair it is you've collected (if it's your first, write #1).
 - b. Write the name of the room you're in.
- 4. Keep searching until you've completed all rooms you have access to.
- 5. Bring your evidence to a table with the desk lamp set up on it and lay out a white sheet of paper.
- 6. Starting with baggie #1, remove the hair with your tweezers and lay it on the white paper.
- 7. Use the magnifying glass and the light from the desk lamp to examine your hair.
- 8. In your notebook, write down hair #1, the room it was found in, what color the hair is, and if it is curly, straight or wavy.
- 9. Repeat steps 6-8 with all of your hairs.
- 10. With your knowledge of the rooms, the people and animals in the rooms, and with your notes from your examination of the hairs; can you figure out who each hair belongs to?



Make observations & use Claims, Evidence, and Reasoning!

- 1. **Claim**: The most useful forensic clues for solving crimes are not hairs.
 - Evidence:
 - Reasoning:
- 2. Claim: Hairs can help scientists figure out some characteristics of the human or animal that it came from.
 - Evidence:
 - Reasoning:

