

### High School Science Virtual Learning

# Forensic Science Human Hair

May 18, 2020



High School Forensic Science Lesson: May 18, 2020

**Objective/Learning Target:** 

Students will be able to analyze hair and identify the various components that make up the structure of human hair.



1. Why are hairs useful to investigators?

2. What are the limitations of the information that hair can provide?



1. They resist decomposition, may indicate drug use or poisoning, and can give information about who it came from.

2. Hair is considered class evidence. Alone (without follicle cells attached), it cannot be used to identify a specific individual.



## Lesson Activity:

Directions: View the following presentation and follow along with the handout provided. Watch the video to also provide you with additional information about hair.

#### Link(s):

Presentation: <u>Human Hair</u>

Handout: Biology of Hair

Video: Hair As Evidence



### Practice

You will use the information from the activity to answer the following questions.



#### **Practice Questions**

- 1. Does hair grow after death?
- 2. Would an investigator be able to tell with what force hair was removed from an individual?
- 3. The hair shaft is composed of what three parts?
- 4. Which component of hair can be used in nuclear DNA analysis for personal identification?
- 5. Identify the medulla pattern present in each of the following strands of hair:

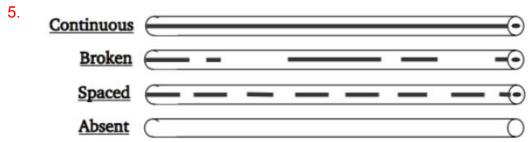




### Answer Key

Once you have completed the practice questions check with the work.

- 1. Growth ceases at death, but as skin shrinks the hair, especially facial hair, become more prominent as it is pushed out further.
- 2. Yes, if a great amount of force was used to remove the hair then the root of the hair will have the follicular tissue attached to it.
- 3. Cuticle, cortex, and medulla.
- 4. Follicular tag





### **Additional Practice**

The Study of Hair

Calculating the Medulla Index