

# HAIR as EVIDENCE

## TERMS TO KNOW

- Follicle: \_\_\_\_\_
- Macroscopic: \_\_\_\_\_
- Microscopic: \_\_\_\_\_
- Cuticle: \_\_\_\_\_
- Cortex: \_\_\_\_\_
- Medulla: \_\_\_\_\_
- Neutron Activation Analysis: \_\_\_\_\_
- Keratin: \_\_\_\_\_
- Medullary index: \_\_\_\_\_



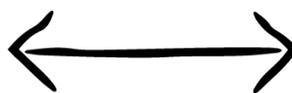
### did you know?

The average person loses approximately \_\_\_\_\_ hairs per day.

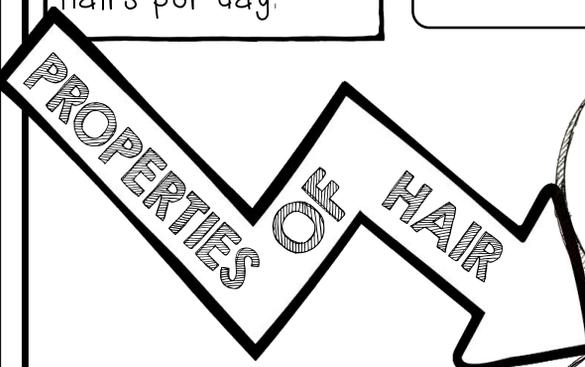


Hair can be considered both class and individual evidence.

INDIVIDUAL EVIDENCE



CLASS EVIDENCE

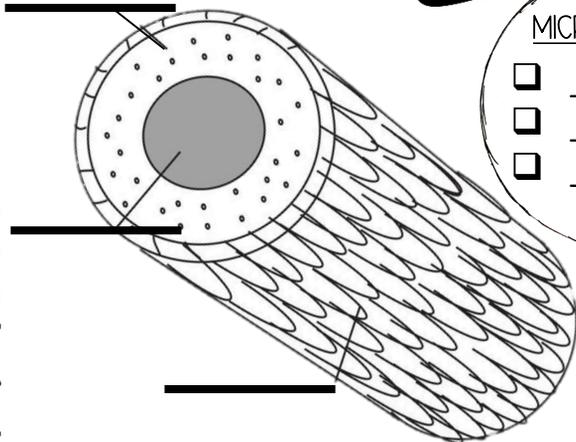
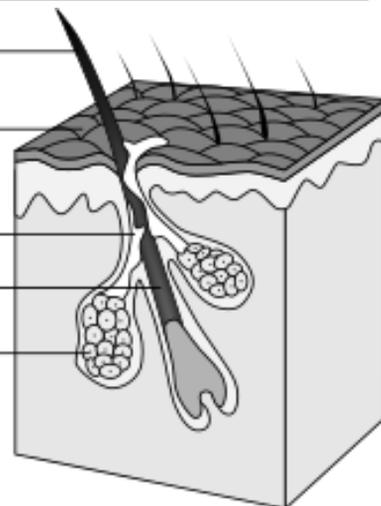
### MACROSCOPIC

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### MICROSCOPIC

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

hair  
skin surface  
sebum  
follicle  
sebaceous gland



### FUNCTION OF HAIR



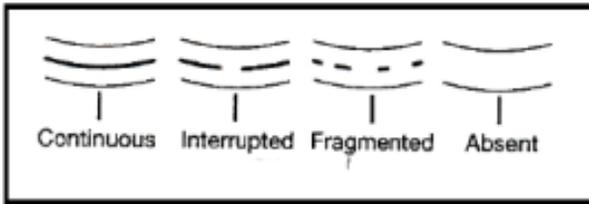
**FOLLICLE**

**CUTICLE**

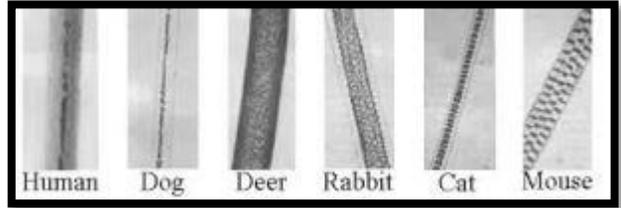
**CORTEX**

**MEDULLA**

# MEDULLA PATTERNS



# HAIR DIFFERENCES



## BODY HAIRS

- 
- 
- 
- 
- 
- 

---



---



---



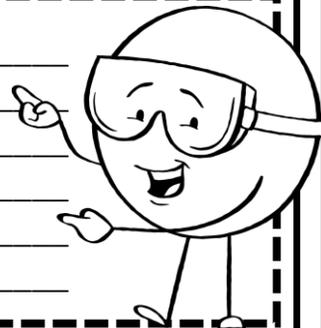
---



---



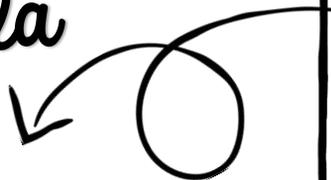
---



	HUMAN HAIR	ANIMAL HAIR
PIGMENT	➤	➤
MEDULLA	➤	➤
SCALE STRUCTURE	➤	➤

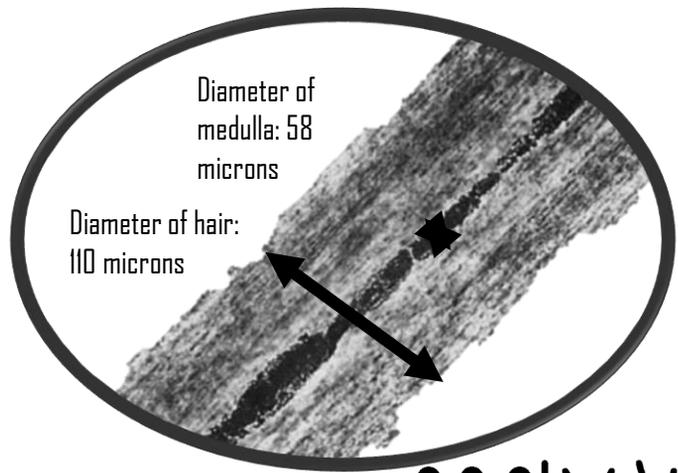
## MEDULLARY INDEX

*formula*



## PRACTICE

What is the medullary index of the hair below?



# EXPLORING HAIR

## Materials:

- Microscope
- Microscope slide
- Isopropyl alcohol
- Cotton balls
- Clear nail polish
- Human and/or non-human hair samples

## Procedure:

1. Thoroughly clean the hair you intend to cast by pulling it through a cotton ball moistened with alcohol.
2. Apply a very thin layer of clear nail polish to a microscope slide in a long stripe.
3. Immediately lay the hair sample across the nail polish.
4. Allow the polish to dry and lift the hair out of the polish by the root end.
5. An imprint of the hair should be visible on the surface of the polish.
6. Place the slide on the microscope stage and begin viewing under the lowest magnification.
7. Increase the magnification until you get the clearest view of the cuticle.
8. Sketch your observations in the space provided.

**sketch  
the cuticle  
here**

