# The Form and Structure of Hair (pgs. 110-114)



1. Another name for the form and structure of something is its \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. In a 24hour period, the average person sheds \_\_\_\_ hairs from the scalp alone.
3. Label the parts of the hair shaft pictured here.
4. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the organ out of which a hair shaft grows.
5. Why is analyzing hair useful for drugs and poisons?
6. Match the following descriptions of the parts of a hair shaft.
\_\_\_\_\_ cortex a. spongy interior core of hair that gives it flexibility; appears as a canal in the middle of
 the shaft
\_\_\_\_\_ cuticle b. middle layer of the hair shaft that provides strength; comprises most of the hair mass
\_\_\_\_\_ medulla c. tough, clear outside covering of the hair shaft
7. What is unique about the cuticle of human hair?
8. Identify the origin of the hair shafts pictured here.
\_\_\_\_\_ Human hair
\_\_\_\_\_ Mouse
\_\_\_\_\_ Cat
9. Why does human hair have a characteristic odor when it burns?
10. The protein of which hair is made is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
11. Label the longitudinal diagram of the hair shaft below.
\_\_\_\_\_ Cortical fusi
\_\_\_\_\_ Cortex
\_\_\_\_\_ Pigment granules
\_\_\_\_\_ Medulla
\_\_\_\_\_ Cuticle scales
12. Pigment that makes hair black, brown, red or yellow is found in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. Distinguish the medulla patterns in the diagram below.
\_\_\_\_\_ Continuous (human)
\_\_\_\_\_ Continuous (animal)
\_\_\_\_\_ Fragmentary
\_\_\_\_\_ Interrupted
\_\_\_\_\_ Stacked
14. The medulla is normally invisible, except in the hair of which people groups?
15. What hair shapes are generally found among these people groups?
African peoples:
Whites, Mexicans, and Middle Eastern peoples:
Asians and Native American peoples:
16. Head hair, on average grows \_\_\_\_\_\_\_\_ cm per month.
17. Put the threes stages of growth of hair into chronological order (*telogen, catagen, anagen)*.
18. The stage of hair growth that lasts up to five years is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ phase.
19. Hairs found on a hair brush are normally from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ phase.
20. Match the hair end description with a condition that would explain it.
\_\_\_\_ Squared off at the tip A. mature human hair
\_\_\_\_ Rounded at the base B. use of harsh chemicals, or overuse of a blow dryer
\_\_\_\_ Tapers to a point C. recently cut
\_\_\_\_ Frayed or split ends D. uncut for a period of time
21. List three reasons how a pencil can be a useful analogy for a hair shaft.

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