

# Hair Structure & Chemistry

## The Hair Follicle: Where it All Begins

The hair follicle is extremely important because it produces the hair. It's the living part of the hair and is nourished by blood vessels.

We are born with all of the follicles we'll have for the rest of our lives.

Once the hair leaves the follicle, it's no longer alive.

## Sebaceous Glands & Oils

Oils are extremely important for the hair. Watch the video or listen to the audio and write down why sebum is so crucial for healthy hair and what it's actually composed of.

## The Hair Shaft

The hair shaft is the part of the hair finer we see emerging from the scalp and it's made up of 3 layers. List each layer and its characteristics.

Layer 1: \_\_\_\_\_

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Layer 2: \_\_\_\_\_

Layer 3: \_\_\_\_\_

## Keratin

Keratin is the essential component of hair and is formed by the combination of 18 amino acids. Chemical bonds are present in the protein structure. Write down the importance of these bonds.

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## The Cell Membrane Complex

The cells of the cortex are firmly bonded together in order to prevent cells from sliding past each other. Describe the difference between the Cell Member Complex of the cuticle and the cortex.

## 18 MEA

Why is 18 MEA so important? What are the factors that can deplete this lipid?

## The Cuticle

This is the hair's first line of defense. What is the job of the cuticle? What can happen with the hair if it becomes damaged?

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## Acidic and Alkaline Products

What is the effect of applying acidic or mildly acidic products to the hair?

What is the effect of applying alkaline products to the hair?

Please list acidic and alkaline products that can be used on the hair.