

Name: _____

COSMETIC ELEMENTS

In “Dying to Look Good?” (p. 14), you read about some common ingredients in cosmetics. Manufacturers use these ingredients because their chemical properties give the products desirable qualities. Read the following passage to learn how different chemical elements are used in personal-care products. Then answer the questions that follow.

CHEMISTRY IN THE BATHROOM CABINET

What’s in your bathroom? Probably dozens of different elements! The personal-care products we use rely on certain elements and *compounds*, or combinations of elements, to help them do their jobs.

Bismuth, for example, is a common makeup ingredient that adds sheen to lipstick, foundation, eye shadow, and other cosmetics. Besides making these products smooth and silky so they apply well to the skin, bismuth is a *nacreous pigment* that breaks up and scatters light. That helps camouflage fine lines and wrinkles by preventing shadows from forming.

Many sunblocks containing zinc oxide, a compound of oxygen and zinc. Like tiny mirrors, particles of zinc oxide reflect the sun’s invisible *ultraviolet* (UV) rays away from the skin. Zinc oxide protects against both types of UV light—UVA and UVB—that damage skin and can lead to cancer.

Feeling stinky? Some antiperspirants include a compound made of aluminum and chlorine. When sweat reacts with the antiperspirant, the compound *precipitates*. That means that tiny bits of the compound separate from the antiperspirant mixture as solid particles. The particles move into the openings of your sweat glands, plugging them so that sweat can’t escape. No matter what your needs are, there’s probably some elements in lurking in the personal-care products in your bathroom.

QUESTIONS

1. Which of these products contains zinc?

- (A) eye shadow
- (B) antiperspirant
- (C) sunblock
- (D) foundation

2. Which of the following is NOT true about bismuth?

- (A) It is used in lipstick.
- (B) It makes beauty products smooth.
- (C) It scatters light.
- (D) It creates shadows.

3. What happens when antiperspirant reacts with sweat?

- (A) The sweat is changed into a new compound that smells good.
- (B) The compound precipitates into particles that plug the openings of sweat glands.
- (C) The sweat glands shrink in size.
- (D) The sweat precipitates into smaller particles that evaporate more quickly.

4. Use context clues to choose the BEST definition for the word *nacreous*.

- (A) smooth
- (B) broken
- (C) dull
- (D) shiny

5. Bismuth is also sometimes added to paints and pottery glazes. Based on the information above, why do you think that might be?

[reset answers](#)