

NAME: _____ DATE: _____ CLASS: _____

PASSAGE ONE (Questions 1–2)

Common types of calendars can be based on the Sun or on the Moon. The solar calendar is based on the solar year. Since the solar year is 365.2422 days long, solar calendars consist of regular years of 365 days and have an extra day every fourth year, or leap year, to make up for the additional fractional amount. In a solar calendar, the waxing and waning of the Moon can take place at various stages of each month.

The lunar calendar is synchronized to the lunar month rather than the solar year. Since the lunar month is twenty-nine and a half days long, most lunar calendars have alternating months of twenty-nine and thirty days. A twelve-month lunar year thus has 354 days, 11 days shorter than a solar year.

1. What is the main idea of the passage?
 - (A) All calendars are the same.
 - (B) The solar calendar is based on the Sun.
 - (C) Different calendars have dissimilar bases.
 - (D) The lunar month is twenty-nine and a half days long.
2. How is the information in the passage organized?
 - (A) Characteristics of the solar calendar are outlined.
 - (B) Two types of calendars are described.
 - (C) The strengths and weakness of the lunar calendar are described.
 - (D) The length of each existing calendar is contrasted.

PASSAGE TWO (Questions 3–6)

Vaccines are prepared from harmful viruses or bacteria and administered to patients to provide immunity to specific diseases. The various types of vaccines are classified according to the method by which they are derived.

The most basic class of vaccines actually contains disease-causing microorganisms that have been killed with a solution containing formaldehyde. In this type of vaccine, the microorganisms are dead and therefore cannot cause disease; however, the antigens found in and on the microorganisms can still stimulate the formation of antibodies. Examples of this type of vaccine are the ones that fight influenza, typhoid fever, and cholera.

A second type of vaccine contains the toxins produced by the microorganisms rather than the microorganisms themselves. This type of vaccine is prepared when the microorganism itself does little damage but the toxin within the microorganism is extremely harmful. For example, the bacteria that cause diphtheria can thrive in the throat without much harm, but when toxins are released from the bacteria, muscles can become paralyzed and death can ensue.

A final type of vaccine contains living microorganisms that have been rendered harmless. With this type of vaccine, a large number of antigen molecules are produced and the immunity that results is generally longer lasting than the immunity from other types of vaccines. The Sabin oral antipolio vaccine and the BCG vaccine against tuberculosis are examples of this type of vaccine.

3. Which of the following expresses the main idea of the passage?
 - (A) Vaccines provide immunity to specific diseases.
 - (B) Vaccines contain disease-causing microorganisms.
 - (C) Vaccines are derived in different ways.
 - (D) New approaches in administering vaccines are being developed.
4. How many types of vaccines are presented in the passage?
 - (A) Two
 - (B) Three
 - (C) Four
 - (D) Five
5. Click on the paragraph that discusses vaccines made from dead organisms.
6. Click on the paragraph that discusses vaccines that do not contain the disease-causing microorganism.

PASSAGE THREE (Questions 7–10)

A hoax, unlike an honest error, is a deliberately-concocted plan to present an untruth as the truth. It can take the form of a fraud, a fake, a swindle, or a forgery, and can be accomplished in almost any field: successful hoaxes have been foisted on the public in fields as varied as politics, religion, science, art, and literature.

(5) A famous scientific hoax occurred in 1912 when Charles Dawson claimed to have uncovered a human skull and jawbone on the Piltdown Common in southern England. These human remains were said to be more than 500,000 years old and were unlike any other remains from that period; as such, they represented an important discovery in the study of human evolution. These remains, popularly known as the Piltdown Man and scientifically named *Eoanthropus dawsoni* after their discoverer, confounded scientists for several decades.

(10) It took more than forty years for the hoax to be uncovered. In 1953, a chemical analysis was used to date the bones, and it was found that the bones were modern bones that had been skillfully aged. A further twist to the hoax was that the skull belonged to a human and the jaws to an orangutan.

7. The topic of this passage could best be described as
 - (A) the Piltdown Man
 - (B) Charles Dawson's discovery
 - (C) *Eoanthropus dawsoni*
 - (D) a definition and example of a hoax
8. The author's main point is that
 - (A) various types of hoaxes have been perpetrated
 - (B) Charles Dawson discovered a human skull and jawbone
 - (C) Charles Dawson was not an honest man
 - (D) the human skull and jawbone were extremely old
9. Click on the paragraph that defines a hoax.
10. Click on the paragraph that explains how one particular hoax was resolved.