Intermediate Critical Reading - Clocks

Clocks are used to measure time. Clocks are used to show the time. Clocks are used so that people can agree on the time.

People use clocks to measure units of time that are shorter than natural units. Natural units are the day, the month, and the year. The sun rises at the beginning of each day. The moon is new at the beginning of each month. The sun appears at the same place in the sky at the beginning of each year.

The clock is a very old invention. Sundials were used in ancient times. Sundials work by measuring shadows that are cast by the sun. Candle clocks were used a very long time ago. Candle clocks work by measuring the time it takes for the wax to melt. Hourglasses are similar to candle clocks because they also measure the time it takes for something to happen. Hourglasses work by measuring the time it takes for sand to pour through a small opening into a glass. Mechanical clocks appeared in the 13th century in Europe. They work with a system of moving gears. The gears always move at the same speed. Pendulum clocks work with a swinging weight. The swinging weight is called a pendulum. The pendulum makes the clock parts move.

Now people typically use mechanical clocks or digital clocks. Digital clocks show numbers on a screen. The numbers represent the time. Some people use auditory clocks. Auditory clocks use language to tell the time aloud. Computers also use clocks. Computers use internal clocks in order to work properly.

In today’s world, clocks are everywhere — in homes, schools, offices, and public places. Many people live their lives according to the clock. People go to work and return home according to the clock. School days start and end according to the clock. Airplanes take off and land according to the clock. It is fun to imagine a world without clocks!

Questions

1. According to the passage, which of the following statements is/are true?
   I) The clock is people’s oldest invention.
   II) Sundials were the first kind of clock that people invented.
   III) Mechanical clocks contain gears.

   A) I only  
   B) II only  
   C) III only  
   D) I and II only  
   E) II and III only

2. What is the main idea of the third paragraph?
   A) Why clocks are used  
   B) How sundials work  
   C) How hourglasses are similar to candle clocks  
   D) What types of clocks have been invented  
   E) How mechanical clocks are different from digital clocks
3. In line 16, *auditory* most closely means

A) related to machines  
B) related to numbers  
C) related to hearing  
D) related to moving parts  
E) related to the sun

**Answers and Explanations**

1. The correct answer is C.

   I) Incorrect. While line 7 states that “The clock is a *very old* invention,” it does **not** state that the clock is people’s *oldest* invention.

   II) Incorrect. While line 7 states that “Sundials were used in ancient times,” there is **no** mention of whether it was the *oldest* type of clock.

   III) Correct. Lines 11-12 state that “Mechanical clocks appeared in the 13\(^{\text{th}}\) century in Europe. They work with a system of moving gears.”

   A) I only  
   B) II only  
   C) III only  
   D) I and II only  
   E) II and III only

2. The correct answer is D.

   A) Incorrect. Line 3 in **paragraph 2** explains *why clocks are used* with the statement “People use clocks to measure units of time that are shorter than natural units.”

   B) Incorrect. While lines 7-8 explain *how sundials work* with the statement “Sundials work by measuring shadows that are cast by the sun,” this is **only one** explanation of how a type of clock works in a *series* of types of clocks and their workings. This is **not** the main idea of the paragraph.

   C) Incorrect. While lines 9-10 explain *how hourglasses are similar to candle clocks*, this is **only one** explanation of how these clocks work in a *series* of types of clocks and how they work. This is **not** the main idea of the paragraph.

   D) Correct. The paragraph is a listing of various types of clocks and how they work.

   E) Incorrect. While lines 12-13 explain *what mechanical clocks are* and how they work by stating “Mechanical clocks appeared in the 13\(^{\text{th}}\) century in Europe. They work with a system of moving gears. The gears always move at the same speed,” there is **no** mention of *digital clocks* in paragraph 3. More information is given about *mechanical clocks* and *digital clocks* in paragraph 4: “Now people usually use mechanical clocks or digital clocks. Digital clocks show numbers on a screen. The numbers represent the time.”

3. The correct answer is C.

   A) Incorrect. Lines 15-17 tell about **three** kinds of clocks – *mechanical*, digital, and *auditory*. Since these words are related to **three different** types of clocks, *auditory* cannot mean *mechanical*. 

   B) Incorrect. While lines 15-17 explain *how mechanical clocks work* with the statement “Mechanical clocks work by a system of moving gears. The gears always move at the same speed,” there is **no** mention of *digital clocks* in paragraph 3.
B) Incorrect. Lines 15-17 tell about three kinds of clocks – mechanical, digital, and auditory. Lines 15–16 state that “Digital clocks show numbers on a screen.” Since numbers on a screen are related to digital clocks, it is unlikely that the word auditory is related to numbers.

C) Correct. Since line 17 states that “Auditory clocks use language to tell the time aloud,” and hearing the sense which would be associated with time told aloud, it is very likely that the word auditory is related to hearing.

D) Incorrect. Lines 15-17 tell about three types of clocks – mechanical, digital, and auditory. Since lines 12-13 state that “Mechanical clocks appeared in the 13th century in Europe.” and “They work with a system of moving gears,” it seems that mechanical clocks are related to moving parts, not primarily auditory clocks. So the word auditory is most likely not related to moving parts.

E) Incorrect. Lines 15-17 tell about three types of clocks – mechanical, digital, and auditory. The sun is mentioned in lines 6-8 with the sentences “Sundials were used in ancient times. Sundials work by measuring shadows that are cast by the sun.” Sundials were invented long before other clocks mentioned in this passage. It is unlikely that the word auditory is related to the sun.