

HESI A2 Reading Comprehension

Section: HESI A2 Reading Exams • Total Questions: 10 • Format: Verified Q&A

1. What is the primary function of the water cycle?

The water cycle, also known as the hydrologic cycle, is a continuous process by which water circulates through the Earth's atmosphere, oceans, and land. This cycle is essential for supporting all forms of life and maintaining the Earth's climate. Water undergoes various changes in state—evaporating from the surface, condensing in the atmosphere, and precipitating back to the surface. At its start, the sun heats up water in rivers, lakes, and oceans, causing it to evaporate and rise into the atmosphere as vapor. Once in the atmosphere, this vapor cools and condenses into clouds. Over time, these clouds get heavy and release precipitation in the form of rain, snow, or sleet, which falls back to the Earth's surface. Some of this precipitation collects in bodies of water, while some seeps into the soil, replenishing groundwater supplies. Additionally, some water returns to the atmosphere through transpiration, a process where water is released from plants. The cycle is critical not only for water distribution but also for transporting nutrients and purifying water naturally through filtration as it flows through different layers of the Earth's surface.

- (A) To generate energy
 - (B) To transport nutrients
 - (C) To support life and maintain climate
 - (D) To produce oxygen
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2. What is the derivation of the word 'Jazz'?

ALL THE JAZZ

Jazz has been called "the art of expression set to music", and "America's great contribution to music". It has functioned as popular art and enjoyed periods of widespread public response, in the "jazz age" of the 1920s, in the "swing era" of the late 1930s and in the peak popularity of modern jazz in the late 1950s. The standard legend about Jazz is that it originated around the end of the 19th century in New Orleans and moved up the Mississippi River to Memphis, St. Louis, and finally to Chicago. It welded together the elements of Ragtime, marching band music, and the Blues. However, the influences of what led to those early sounds goes back to tribal African drum beats and European musical structures. Buddy Bolden, a New Orleans barber and cornet player, is generally considered to have been the first real Jazz musician, around 1891. What made Jazz significantly different from the other earlier forms of music was the use of improvisation. Jazz displayed a break from traditional music where a composer wrote an entire piece of music on paper, leaving the musicians to break their backs playing exactly what was written on the score. In a Jazz piece, however, the song is simply a starting point, or sort of skeletal guide for the Jazz musicians to improvise around. Many of the early Jazz musicians were bad sight readers and some couldn't even read music at all. These early musicians couldn't make money very much and were stuck working menial jobs to make a living. The second wave of New Orleans Jazz musicians included such memorable players as Joe Oliver, Kid Ory, and Jelly Roll Morton. These men formed small bands and took the music of earlier musicians, improved its complexity, and gained greater success. This music is known as "hot Jazz" due to the enormously fast speeds and rhythmic drive. Downloaded by Abdul Hamid (a.ahamid2181@gmail.com) IOMoARcPSD|10672023 HESI A2 V2 Grammar, Vocab, Reading, & Math Questions with Answers). A young cornet player by the name of Louis Armstrong was discovered by Joe Oliver in New Orleans. He soon grew up to become one of the greatest and most successful musicians of all time, and later one of the biggest stars in the world. The impact of Armstrong and other talented early Jazz musicians changed the way we look at music

- (A) East coast slang
- (B) West coast slang
- (C) Southern dialect
- (D) Northern jargon

3. According to the passage, which statement is false?

The Water Cycle

Water is needed to sustain practically all life functions on planet Earth. A single drop of this compound is composed of an oxygen atom that shares its electrons with each of the two hydrogen atoms.

The cycle starts when precipitation, such as rain, snow, sleet, or hail, descends from the sky onto the ground. Water that is not absorbed immediately from the precipitation is known as runoff. The runoff flows across the land and collects in groundwater reservoirs, rivers, streams, and oceans.

Evaporation takes place when liquid water changes into water vapor, which is a gas. Water vapor returns to the air from surface water and plants.

Ultimately, condensation happens when this water vapor cools and changes back into droplets of liquid. In fact, the puffy, cotton clouds that we observe are formed by condensation. When the clouds become heavily laden with liquid droplets, precipitation ensues.

- (A) Puffy, cotton clouds are the result of a heating process.
- (B) The compound for a single drop of water is H₂O.
- (C) Lake water is produced as a result of the runoff.
- (D) Water is an essential element for living things.

4. Which statement is a fact rather than an opinion?

The Rainforest

The Amazon River Basin is home to the largest rainforest on Earth. The basin -- roughly the size of the forty-eight contiguous United States -- covers some 40% of the South American continent, and portions of eight countries. The basin is drained by the Amazon River, the world's largest river in terms of discharge, and the second longest river in the world after the Nile.

Since 1970, over 600,000 square kilometers (232,000 square miles) of Amazon rainforest have been destroyed. This deforestation is mainly due to land clearing for pastureland by commercial and speculative interests, misguided government policies, and commercial exploitation of forest resources.

Deforestation of the rainforest has long-term implications. The loss of habitat for many creatures ensures their extinction. The loss of vegetation depletes the oxygen in the atmosphere, which some say causes global warming.

- (A) Deforestation causes global warming.
- (B) The rainforest is essential to life on Earth.
- (C) South American countries must stop deforestation of the rainforest immediately.
- (D) Over 600,000 square kilometers (232,000 square miles) of Amazon rainforest have been destroyed since 1970.

Correct Answer: D

5. According to the passage, what is the purpose of lightning rods?

Lightning Strikes

The old wives' tale of "Lightning never strikes twice" has been proven untrue time and time again.

Lightning forms from negative and positive charges within clouds and from the earth below. When these charges react with each other, the air between the cloud and the earth ionizes, which produces a lightning flash. Lightning is actually a series of multiple events consisting of a leader stroke of lightning, followed by as many as 40 smaller strokes of lightning. Being just split seconds apart, these strokes of lightning often reflect off the lining of the clouds.

Lightning rods that extend from above the roof to the ground protect buildings by forming a low resistance path for the lightning so that the lightning does not enter the building, but rather defuses as it penetrates the ground.

Some myths about lightning need to be explained. Lightning does strike tall buildings often, and during a particularly violent storm, a tall building may be hit by lightning several times. The safest place during a thunder and lightning storm is in a metal car or lying flat, face down, in the open, not under a tree as the myth suggests.

Many people believe that thunder and lightning are connected; however, this proves to be true only about 50% of the time, so if you're waiting for the clap of thunder, you're missing out on some exciting strokes of lightning!

Lightning causes injuries, deaths, and forest fires each year. However, some scientists reveal the positive aspects of lightning because it releases nitrogen into the atmosphere which the raindrops then deliver to earth to fertilize our soil.

- (A) Increase the frequency of lightning strikes
- (B) Protect buildings by drawing lightning away from them
- (C) Attract lightning to specific locations
- (D) Store electrical energy from lightning strikes

6. As used in the last sentence of this paragraph, the term 'concomitant' most nearly means:

Food

Food and drink are necessary and desirable, but their abuse can cause serious physical and mental problem. Many physicians believe that overeating is one of the country's main health problems, since it places a great strain on the heart, can lead to diabetes, and often shortens the individual's life span. To fill an emotional void. People often turn to food when they are bored or lonely.

Another area of concern is alcohol consumption. The results of alcohol abuse are widely publicized. The social drinker who becomes alcoholic, the drunken driver's contribution to highway death, spousal and child abuse, are all concomitant problems associated with alcohol abuse.

- (A) Accompanying
- (B) Quiet
- (C) Separate
- (D) Unpredictable

7. Which homophones are mentioned as examples in the text?

Homophones

English is a vibrant, changing, dynamic language. It allows people to express their thoughts in diverse ways, as there are many synonyms and antonyms to choose from. The hardest part for the English speaker - or those learning English as a second language - is learning about homonyms. These are words that sound alike but are spelled different ways, with different meanings. One example is "One". This word, spelled "one" means the numeral 1, an amount. If spelled "won," it means to be victorious. No wonder spelling is a difficult skill to master! Other homonyms encountered by the beginning English speaker are "to, two, too," "four, for, fore," "there, their, they're" and "son, sun" to name just a few. This is one reason that "Spell check" programs on word processing computers cannot be completely accurate, because the way a word is spelled depends on the context of the sentence. Proofreaders will always be in demand.

- (A) "to, two, too", "four, for, fore", "there, their, they're", "son, sun"
- (B) "one", "won"
- (C) "vibrant", "changing", "dynamic"
- (D) "numeral", "amount"

8. Why was the roadway so dangerous to build?

Linking San Francisco to Marin County in California, the Golden Gate Bridge is one of the most famous bridges in the world. The bridge crosses over a narrow strait which connects the Pacific Ocean to San Francisco Bay. Prior to the bridge, people traveled by ferry boat across the strait. Although most people thought a bridge was necessary to expedite travel, some residents of the bay area felt the risk of building the bridge was too great. Joseph Strauss believed that nothing was impossible, and dreams would never come to fruition if risks weren't taken. So, he decided to gather the best and brightest builders, architects, and workers to embark on the challenge of building a bridge across the Golden Gate Strait. With safety nets in place, the construction began in 1937. Building the anchorages first, the builders then move on to the towers on each end, and then to the three-foot thick cables to support the suspension bridge. Lastly, workers labored to complete the roadway which became the most dangerous and treacherous part of the entire task. The builders had to keep the bridge balance, so it wouldn't fall into the bay. Today, over sixty-five years later, the bridge remains a life-line for the people of the San Francisco Bay Area.

- (A) There weren't enough materials available to build the road.
- (B) The workers might get hit by passing cars.
- (C) The men would fall to their deaths.
- (D) If the road wasn't balanced, it would collapse.

9. In context, the word 'defective' in the first sentence of the passage means which of the following?

Cystic fibrosis is a disease that is passed down through families. It is caused by a defective gene that makes the body produce abnormally thick and sticky fluid, called mucus. This mucus builds up in the breathing passages of the lungs and in the pancreas. The buildup of mucus results in life-threatening lung infections and serious digestion problems. The disease may also affect the sweat glands and a man's reproductive system. Millions of Americans carry a CF gene, but do not have symptoms. This is because a person with CF must inherit two defective genes, one from each parent. About 1 in 29 Caucasian Americans have the CF gene. It is more common among those of northern or central European descent. Most children with CF are diagnosed by age 2. For a small number, the disease is not detected until age 18 or older. These children often have a milder form of the disease.

- (A) Unusual
- (B) Remarkable
- (C) Remarkable
- (D) Faulty

10. Which statement is true about greenhouses?

- (A) Greenhouses create tropical conditions at nurseries.
- (B) Greenhouses are only used for growing rare plants.
- (C) Greenhouses are a waste of resources and are never used in nurseries.
- (D) Greenhouses make all plants grow faster without any exceptions.