

Question type 4: NEGATIVE FACTUAL INFORMATION

Question forms

- According to the passage, which of the following is NOT true of _____?
- All of the following are mentioned in paragraph X as _____ EXCEPT:
- The author's description of _____ mentions all of the following EXCEPT.
- Which of the following is NOT mentioned in the passage?

Strategy:

- Read, scan for keywords and synonyms, and simplify the question.
- Eliminate incorrect choices.
- Don't forget that the necessary information may be spread out over an entire paragraph or several paragraphs.

Sample Questions

[4] Darwin's theory is that 'selective breeding' occurs in nature as 'natural selection' is the engine behind evolution. Thus, the theory provides an excellent basis for understanding how organisms change over time. Nevertheless, it is just a theory and elusively difficult to prove. One of the major holes in Darwin's theory revolves around "irreducibly complex systems." An irreducibly complex system is known as a system where many different parts must all operate together. As a result, in the absence of one, the system as a whole collapses. Consequently, as modern technology improves, science can identify these "irreducibly complex systems" even at microscopic levels. These complex systems, if so inter-reliant, would be resistant to Darwin's supposition of how evolution occurs. As Darwin himself admitted, "To suppose that the eye with all its inimitable contrivances for adjusting the focus for different distances, for admitting different amounts of light, and for the correction of spherical and chromatic aberration, could have been formed by natural selection, seems, I free confess, absurd in the highest degree.

All of the following are mentioned in paragraph 4 as a viewpoint to state the natural selection is difficult to prove EXCEPT

- A. The belief that the complexity of the human eye could have been formed by natural selection seems highly unlikely
- B. The presence of irreducibly complex system contradicts how evolution occurs
- C. Modern microbiology proves that irreducibly complex systems exist
- D. Selective breeding is the major hole in the theory of natural selection

PRACTICE 1

Types of Pressure

Pressure is a force exerted by a substance that is in contact with another substance. Atmospheric pressure is pressure exerted by the mixture of gases (primarily nitrogen and oxygen) in the Earth's atmosphere. Although you may not perceive it, atmospheric pressure is constantly pressing down on your body. This pressure keeps gases within your body, such as the gaseous nitrogen in body fluids, dissolved. If you were suddenly ejected from a spaceship above Earth's atmosphere, you would go from a situation of normal pressure to one of very low pressure. The pressure of the nitrogen gas in your blood would be much higher than the pressure of nitrogen in the space surrounding your body. As a result, the nitrogen gas in your blood would expand, forming bubbles that could block blood vessels and even cause cells to break apart.

Atmospheric pressure does more than just keep blood gases dissolved. Your ability to breathe—that is, to take in oxygen and release carbon dioxide—also depends upon a precise atmospheric pressure. Altitude sickness occurs in part because the atmosphere at high altitudes exerts less pressure, reducing the exchange of these gases, and causing shortness of breath, confusion, headache, lethargy, and nausea. Mountain climbers carry oxygen to reduce the effects of both low oxygen levels and low barometric pressure at higher altitudes.

Q. According to paragraph 2, which of the following is NOT true about atmospheric pressure?

- a. The lower pressure at high altitudes is the sole cause of altitude
- b. A very specific level of pressure is required for humans to breathe
- c. sickness It is responsible for more than the dissolution of blood gases
- d. Some of the symptoms of altitude sickness are confusion, nausea, and being short of breath

PRACTICE 2

The common name for a disruption of blood supply to the brain is a stroke. It is caused by a blockage to an artery in the brain. The blockage is from some type of embolus: a blood clot, a fat embolus, or an air bubble. When the blood cannot travel through the artery, the surrounding tissue that is deprived starves and dies. Strokes will often result in the loss of very specific functions. A stroke in the lateral medulla, for example, can cause a loss in the ability to swallow. Sometimes, seemingly unrelated functions will be lost because they are dependent on structures in the same region. Along with the swallowing in the previous example, a stroke in that region could affect sensory functions from the face or extremities because important white matter pathways also pass through the lateral medulla. Loss of blood flow to specific regions of the cortex can lead to the loss of specific higher functions, from the ability to recognize faces to the ability to move a particular region of the body. Severe or limited memory loss can be the result of a temporal lobe stroke.

Q. All of the following are true of strokes EXCEPT ...

- a. They occur when there is a blockage of blood supply to an artery in the brain
- b. Tissues rely on the blood flow through arteries and will die from lack of nourishment if there is a disruption
- c. Various levels of memory loss can result from certain types of strokes
- d. While some functions are disrupted for a time, there are no real long-term effects of having a stroke

Question type 5: INFERENCE

An inference question requires you to make logical assumptions and connections by using the information in the passage to come up with a new conclusion. In other words, an inference question asks you to pick up on information that is indirectly given, rather than being directly stated in the passage.

Question forms

- Which of the following can be inferred from paragraph _____ about X?
- According to the passage, it can be inferred that
- The author of the passage implies that
- It can be inferred from the passage that the author most likely believes which of the following about X?
- Which of the following statements most accurately reflects the author's opinion about X?
- The author's attitude toward X could be best described as

Strategy:

- Read the question carefully and understand what you are being asked
- Make sure you understand the main idea of the whole paragraph.
- Use the process of elimination. The answer is incorrect if it is beyond the scope of the information in the passage. In other words, you can't really make this inference based only on the passage. You must use your logical thinking.
- Pay attention to answers containing extreme language such as always, forever, never, all, totally, completely or extreme phrases such as "this is the only (x)," or "this is the limit of (y)," and so on. They are used as traps and are often INCORRECT.
- Pay attention to answers only repeating words from the passage but don't answer the question. These answers look appealing because they contain technical words that you saw in the passage. But, if you read them carefully, they aren't correct!

Sample Questions

The body that impacted Earth at the end of the Cretaceous period was a meteorite with a mass of more than a trillion tons and a diameter of at least 10 kilometers. Scientists first identified this impact in 1980 from the worldwide layer of sediment deposited from the dust cloud that enveloped the planet after the impact. This sediment layer is enriched in the rare metal iridium and other elements that are relatively abundant in a meteorite but very rare in the crust of Earth. Even diluted by the terrestrial material excavated from the crater, this component of meteorites is easily identified. By 1990 geologists had located the impact site itself in the Yucatán region of Mexico. The crater, now deeply buried in sediment, was originally about 200 kilometers in diameter.

Question: Which of the following can be inferred from the paragraph about the location of the meteorite impact in Mexico?

- A. The location of the impact site in Mexico was kept secret by geologists from 1980 to 1990.
- B. It was a well-known fact that the impact had occurred in the Yucatán region.
- C. Geologists knew that there had been an impact before they knew where it had occurred.
- D. The Yucatán region was chosen by geologists as the most probable impact site because of its climate.

PRACTICE 1

The need for knowledge of the constitution and functions, in the concrete, of human nature is great just because the teacher's attitude to subject matter is so different from that of the pupil. The teacher presents in actuality what the pupil represents only in posse. That is, the teacher already knows the things which the student is only learning. Hence the problem of the two is radically unlike. When engaged in the direct act of teaching, the instructor needs to have subject matter at his fingers' ends; his attention should be upon the attitude and response of the pupil. To understand the latter in its interplay with subject matter is his task, while the pupil's mind, naturally, should be not on itself but on the topic in hand. Or to state the same point in a somewhat different manner: the teacher should be occupied not with subject matter in itself but in its interaction with the pupils' present needs and capacities. Hence simple scholarship is not enough.

Question: It can be inferred from the paragraph that:

- A. simple scholarship is lop-sided in its focus
- B. simple scholarship might overlook the subject matter and focus purely on the student
- C. simple scholarship, with a narrow focus, might not place enough emphasis on the student's needs
- D. simple scholarship will always be lopsided in nature because of its ambiguous stand on problems

PRACTICE 2

A being whose activities are associated with others has a social environment. What he does and what he can do depend upon the expectations, demands, approvals, and condemnations of others. A being connected with other beings cannot perform his own activities without taking the activities of others into account. For they are the indispensable conditions of the realization of his tendencies. When he moves he stirs them and reciprocally. We might as well try to imagine a businessman doing business, buying and selling, all by himself, as to conceive it possible to define the activities of an individual in terms of his isolated actions. The manufacturer moreover is as truly socially guided in his activities when he is laying plans in the privacy of his own counting house as when he is buying his raw material or selling his finished goods. Thinking and feeling that have to do with action in association with others is as much a social mode of behavior as is the most overt cooperative or hostile act.

Question: It can be inferred from the paragraph that:

- A. In our social world, one's thinking, feelings and actions cannot stand in isolation to actions of others
- B. In our social world, thinking, feelings and actions of an individual are driven by motivations and thoughts of others
- C. In our social world, thinking, feelings and actions of a person cannot stand in isolation to those of others
- D. In our social world, thinking, feelings and actions of a single person are juxtaposed retrospectively to those of others

Question type 6: SENTENCE INSERTION

In a "Sentence Insertion" question, you will be asked to decide where a new sentence best fits into the reading passage. This question type tests your understanding of the logic in the passage. It also tests your ability to understand the grammatical connections from one sentence to another.

Question forms

- In which space (marked [A], [B], [C] and [D] in the passage) will the following sentence fit?

Strategy:

1. Ideas in the paragraph are written in a general → specific formula, meaning that an idea is introduced with general details, and then more specific details will follow.
2. Pronouns are often included in the prompt sentence. Therefore, when you see a word like “they”, “these”, “those”, or “this”, look for the sentence that contains the information that these pronouns refer to. Then, the prompt sentence must be inserted after that sentence.
3. Be familiar with connecting words such as “and”, “so”, “therefore” (share the same ideas and opinions with the prompt sentence; “yet”, “on the contrary”, “in contrast” (contradict the ideas or opinions from the prompt sentence).

Sample Questions

Examine the four ■ in the selection below and indicate at which block the following sentence could be inserted into the passage:

Seagrasses grow together in dense patches, or beds, with as many as 4,000 blades per square meter.

Many areas of the shallow sea bottom are covered with a lush growth of aquatic flowering plants adapted to live submerged in seawater. ■ [A] These plants are collectively called seagrasses. ■ [B] Seagrass beds are strongly influenced by several physical factors. ■ [C] The most significant is water motion: currents and waves. ■ [D] Since seagrass systems exist in both sheltered and relatively open areas, they are subject to differing amounts of water motion.

Choose the place where the sentence fits best.

PRACTICE 1

Examine the four ■ in the selection below and indicate at which block the following sentence could be inserted into the passage:

Thanks to radiocarbon dating and technological development in studying evidence, researchers can now give a more precise age on this type of art.

■ [A] The age of rock art in Australia has been revised several times, with earlier dates suggested recently after new discoveries. ■ [B] Accurate scientific proof has dated the first appearance of surface rock in Australia to approximately 30,000 to 50,000 years ago. ■ [C] This lengthy and astounding history of rock art in Australia makes it the oldest art tradition known today in the world. ■ [D]

Choose the place where the sentence fits best.

PRACTICE 2

Chemistry: The Central Science

Chemistry is sometimes referred to as “the central science” due to its interconnectedness with a vast array of other STEM disciplines (STEM stands for areas of study in the science, technology, engineering, and math fields). Chemistry and the language of chemists play vital roles in biology, medicine, materials science, forensics, environmental science, and many other fields.

■ [A] The basic principles of physics are essential for understanding many aspects of chemistry, and there is extensive overlap between many subdisciplines within the two fields, such as chemical physics and nuclear chemistry. ■ [B] Mathematics, computer science, and information theory provide important tools that help us calculate, interpret, describe, and generally make sense of the chemical world. ■ [C] Biology and chemistry converge in biochemistry, which is crucial to understanding the many complex factors and processes that keep living organisms (such as us) alive. ■ [D] Chemical engineering, materials science, and nanotechnology combine chemical principles and empirical findings to produce useful substances, ranging from gasoline to fabrics to electronics. Agriculture, food science, veterinary science, and brewing and winemaking help provide sustenance in the form of food and drink to the world’s population. Medicine, pharmacology, biotechnology, and botany identify and produce substances that help keep us healthy. Environmental science, geology, oceanography, and atmospheric science incorporate many chemical ideas to help us better understand and protect our physical world. Chemistry’s usefulness also extends outside of our own world to help us better understand the universe and the composition of space in disciplines like astronomy and cosmology.

Q. In paragraph 2 there is a missing sentence. Look at the four squares [A, B, C, D] that indicate where the sentence could be added. Where would the sentence best fit?

Biochemistry is one of the five major branches of chemistry, which can be divided into many sub-branches.

- a. A
- b. B
- c. C
- d. D