Reading SAT Practice Test 13

Directions: *The SAT Reading test consists of five passages on a variety of topics. Each passage is followed by a series of 10 or 11 questions. Carefully read the passage that is provided and answer the multiple choice questions based on what is stated or implied.* ***The answers and explanations will be provided at the end of the test.***

Questions 1–10 are based on the following passage.

This passage is adapted from R. Smith's "The Organic Way of Life."

Compared to the atmosphere, soil is a place where temperature fluctuations are small and slow. Consequently, soil animals are generally intolerant to sudden temperature changes and may not function well over a very wide range. That's why leaving bare earth exposed to the hot summer sun often slows plant growth and why many thoughtful composters either put down a thin mulch in summer or try to rapidly establish a cooling leaf canopy to shade raised beds. Except for a few microorganisms, soil animals breathe oxygen just like other living things and so are dependent on an adequate air supply. Where soil is airless due to compaction, poor drainage, or large proportions of very fine clay, soil animals are few in number.

The soil environment is generally quite moist, and even when the soil seems dry the relative humidity of soil air usually approaches 100 percent. Soil animals consequently have not developed the ability to conserve their body moisture and are speedily killed by dry conditions. When faced with desiccation they retreat deeper into the soil if there is oxygen and pore spaces large enough to move about. So we see another reason why a thin mulch that preserves surface moisture can greatly increase the beneficial population of soil animals. Some single-cell animals and roundworms are capable of surviving stress by encysting themselves, forming a little "seed" that preserves their genetic material and enough food to reactivate it, coming back to life when

conditions improve. These cysts may endure long periods of severe freezing and sometimes temperatures of over 150 degree F.

Inhabitants of leaf litter reside close to the surface and so must be able to experience exposure to dryer air and light for short times without damage. These are called primary decomposers. They spend most of their time chewing on the thick reserve of moist leaves contacting the forest floor. Primary decomposers are unable to digest the entire leaf. They extract only the easily-assimilated substances from their food: proteins, sugars and other simple carbohydrates and fats. Cellulose and lignin are the two substances that make up the hard, permanent, and woody parts of plants; these materials cannot be digested by most soil animals. Interestingly, there are a few larvae whose digestive tract contains cellulose-decomposing bacteria but these larvae have little overall effect.

By the time the primary decomposers are finished, the leaves have been mechanically disintegrated and thoroughly moistened, worked over, chewed to tiny pieces and converted into minuscule bits of moist excrement still containing active digestive enzymes. Many of the bacteria and fungi that were present on the leaf surfaces have passed through this initial digestion process alive or as spores waiting and ready to activate. Digestive wastes of primary decomposers are thoroughly inoculated with microorganisms that can consume cellulose and lignin. Even though it looks broken down, it has not yet fully decomposed. It does have a water-retentive, granular structure that facilitates the presence of air and moisture throughout the mass creating perfect conditions for microbial digestion to proceed. Both secondary and primary decomposers are necessary to complete the composting process.

Question 1

According to the passage, which of the following is true about primary decomposers?

A Most of them are unable to digest cellulose and lignin.

B Most have a digestive tract that contains cellulose-decomposing bacteria.

C They can encyst themselves to protect against unfavorable weather conditions.

D They desiccate leaves, creating mulch.

Question 2

Which choice provides the best evidence for the answer to the previous question?

(Use the left arrow below to go back and review the previous question.)

A Paragraph 1, Sentences 1-3 (“Compared to the atmosphere…shade raised beds.”).

B Paragraph 2, Sentences 3-5 (“When faced with desiccation…when conditions improve.”).

C Paragraph 3, Sentences 4-6 (“Primary decomposers are…by most soil animals.”).

D Paragraph 4, Sentences 2-4 (“Many of the bacteria…yet fully decomposed.”).

Question 3

What can be inferred about the atmosphere as it is described in paragraph 1?

A Its inhabitants do not require as much moisture as creatures that live in soil.

B Changes in temperature can be abrupt.

C It is not a habitat for primary decomposers.

D Single-cell organisms cannot encyst in the atmosphere.

Question 4

Which choice provides the best evidence for the answer to the previous question?

(Use the left arrow below to go back and review the previous question.)

A Paragraph 1, Sentences 1–2 (“Compared to the atmosphere…a very wide range.”).

B Paragraph 1, Sentence 3 (“That’s why leaving…shade raised beds.”).

C Paragraph 1, Sentence 4 (“Except for a few…adequate air supply.”).

D Paragraph 1, Sentence 5 (“Where soil is…are few in number.”).

Question 5

As used in paragraph 2, the word “encysting” most nearly means

A encroaching.

B embellishing.

C encrusting.

D enclosing.

Question 6

Which of the following is the function of the fourth paragraph?

A To explain how soil animals thrive in certain temperatures and humidity levels.

B To validate the importance of both primary and secondary decomposers in composting.

C To provide a detailed summary of the composting process.

D To explain how both primary and secondary decomposers aid decomposition.

Question 7

Which of the following can be inferred from the passage?

A Primary decomposers can digest entire leaves, while secondary decomposers cannot.

B Composting requires only secondary decomposers.

C Secondary decomposers cannot decompose proteins, sugars, or fats.

D Secondary decomposers come from the leaf surfaces.

Question 8

Which choice provides the best evidence for the answer to the previous question?

(Use the left arrow below to go back and review the previous question.)

A Paragraph 4, Sentence 1 (“By the time the…active digestive enzymes.”).

B Paragraph 4, Sentence 2 (“Many of the bacteria and…and ready to activate.”).

C Paragraph 4, Sentences 3-5 (“Digestive wastes of primary…not yet fully decomposed.”).

D Paragraph 4, Sentence 6 (Both secondary and…the composting process.”).

Question 9

Which of the following is NOT necessary for the composting process?

A Air

B Heat

C Primary decomposers

D Secondary decomposers

Question 10

The author is primarily concerned with

A comparing the characteristics of two types of soil animals.

B describing the habits of a class of soil-dwelling microorganisms.

C reviewing the conditions required for an ecological process to occur.

D examining the environmental factors necessary for composting.