

ATI TEAS 7 Science Questions with Answers and Explanations

An organism with chloroplasts in its cells is probably a.

a. a heterotroph

b. an autotroph.

c. an herbivore

d. a primary consumer

{ANS} - B: Organisms that have chloroplasts in their cells carry on photosynthesis and are therefore autotrophs. Autotrophs make their own food.

What property of water allows someone to fill a glass slightly above the rim without the water flowing over?

a. specific gravity

b. capillarity

c. opacity

d. surface tension

{ANS} - D: Water molecules are polar. Due to the fact that O₂ draws the electrons in the molecule toward itself.

The spaces between neurons are called?

a. synapses

b. dendrites

c. inter-neurons

d. cell gaps

{ANS} - A: An impulse travels down the axon of a neuron and reaches the terminus. There,

chemicals are released in response, which travel across the synapse to the next neuron. Thus the impulse is transmitted to the next neuron.

Which Group of chemicals is not normally found in most living things? a.

carbohydrates

b. proteins

c. silicates

d. nucleic acids

{ANS} - C: Carbohydrates, proteins, and nucleic acids (RNA and DNA) are all very important chemicals in living things.

The alimentary canal is associated with the? a.

spinal cord

b. digestive system c.

urinary tract

d. birth canal

{ANS} - B: The alimentary canal begins at the mouth and ends at the anus.

The numerous villi in the small intestine serve to? a.

secrete enzymes for digestion

b. absorb water from dissolved foods

c. secrete hydrochloric acid to dissolve food d.

provide greater surface for absorption

{ANS} - D: The villi are tiny projections in the small intestine that increase the total surface area of the intestine for absorption of digested nutrients.

As light passes obliquely from air to water, it is bent. This bending is called? a.

diffraction

b. reflection

c. refraction

d. dispersion

{ANS} - C: Refraction is the bending of light as it passes obliquely from one medium to another.

Which of the following organelles is not involved in protein synthesis? a.

ribosome

b. mitochondrion

c. rough endoplasmic reticulumd.

nucleus

{ANS} - D: The nucleus contains DNA. The ribosomes, located on the rough endoplasmic reticulum, are the site for protein synthesis.

To be absorbed by cells, proteins must be changed to? a.

amino acids

b. sucrose c.

fatty acidsd.

glycerol

{ANS} - A: Amino acids are the end products of protein digestion and are small enough to be absorbed.

A neuron that transmits impulses from the receptors to the spinal cord is called? a. motor neuron

b. an associative neuron c.

an interneuron

d. a sensory neuron

{ANS} - D: A sensory neuron conveys a message from a sensory organ to the spinal cord, which transmits the message via a motor neuron to the effector muscle.

Which group of organisms help prevent the accumulation of organic wastes in nature?

a. rabbits

b. mosses c.

bacteriads.

ferns

{ANS} - C: Bacteria comprise the decomposer portion of the food chain.

As the eardrum is made to vibrate more rapidly, the sound is perceived as? a.

louder in intensity

b. softer in intensity

c. higher in pitch d.

lower in pitch

{ANS} - C: High-pitch sounds are heard when the receptor cells closer to the oval window are stimulated, and low-pitch sounds result from the stimulation of the cells that are farther down the cochlea.