

Biology EOC Review 3

Cell Structure and Function

Multiple Choice

Write the letter that best answers the question or completes the statement.

- A structure within a eukaryotic cell that performs a specific function is called a(n)
 - organelle.
 - organ tissue.
 - tissue.
 - biocenter.
- The cell membrane
 - encloses the contents of the cell.
 - allows materials to enter & leave the cell.
 - is selectively permeable.
 - All of the above
- Most of the food and waste materials that move into and out of a cell pass through
 - receptor proteins.
 - marker proteins.
 - enzymes.
 - channel proteins.
- The structure that regulates what enters and leaves the cell is the
 - nucleus.
 - cell wall.
 - nuclear membrane.
 - cell membrane.
- Elongated proteins on the surface of a cell and that identify the cell are called
 - marker proteins.
 - channel proteins.
 - receptor proteins.
 - enzymes.
- One important organelle that helps maintain homeostasis by moving substances from one part of the cell to another is the
 - mitochondrion
 - endoplasmic reticulum.
 - Golgi apparatus.
 - cytoplasm.
- How are chloroplasts similar to mitochondria?
 - They can both use energy from sunlight.
 - They are both found in prokaryotic cells.
 - They both contain their own DNA.
 - They are both found in animal cells.
- In a cell, proteins are made on the
 - mitochondria
 - ribosomes.
 - nucleus.
 - cell membrane.
- A cell that requires a lot of energy might contain large numbers of
 - chromosomes.
 - vacuoles.
 - mitochondria.
 - lysosomes.
- The organelle associated with plant photosynthesis are the
 - mitochondria.
 - vacuole.
 - Golgi apparatus.
 - chloroplast.
- Plant cells have large membrane-bound space in which water, waste products, and nutrients can be stored. This space is called the
 - mitochondrion.
 - vacuole.
 - Golgi apparatus.
 - chloroplast.
- The packaging and distribution center of the cell is the
 - nucleus.
 - Golgi apparatus.
 - central vacuole.
 - nuclear envelope.
- Which organelle breaks down food into particles the cell can use?
 - Golgi apparatus
 - lysosome
 - endoplasmic reticulum
 - mitochondrion
- One difference between prokaryotes and eukaryotes is that
 - nucleic acids are found only in prokaryotes.
 - mitochondria are found in larger quantities in eukaryotes.
 - Golgi vesicles are found only in prokaryotes.
 - prokaryotes do not have a nucleus.
- Which word best describes the structure of the cell membrane?
 - rigid.
 - layered.
 - impermeable.
 - nonpolar.
- Which phrase best describes the property of selective permeability?
 - some molecules pass
 - all ions pass
 - large molecules pass
 - all molecules pass
- The work of Schleiden and Schwann can be summarized by saying that
 - all plants are made of cells.
 - all animals are made of cells.
 - plants and animals have specialized cells.
 - all plants and animals are made of cells.
- Fuzzy images viewed with a microscope may be due to poor
 - resolution.
 - amplification.
 - magnification.
 - None of the above.
- A microscope with a 4x objective lens and a 10x ocular lens produces a total magnification of
 - 14x.
 - 40x.
 - 400x.
 - 4000x.