

## Cell History and Structure Test

### Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- Who was one of the first people to identify and see cork cells?
  - Anton van Leeuwenhoek
  - Robert Hooke
  - Matthias Schleiden
  - Rudolf Virchow
- 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.
- The cell theory applies to
  - bacteria.
  - plants and animals.
  - multicellular organisms.
  - all of the above
- Prokaryotes lack
  - cytoplasm.
  - a cell membrane.
  - a nucleus.
  - genetic material.
- Eukaryotes usually contain
  - a nucleus.
  - specialized organelles.
  - genetic material.
  - all of the above
- Which of the following organisms are prokaryotes?
  - plants
  - animals
  - bacteria
  - all of the above
- Which of the following is a function of the nucleus?
  - stores DNA
  - controls most of the cell's processes
  - contains the information needed to make proteins
  - all of the above
- Which organelle breaks down food into molecules the cell can use?
  - Golgi apparatus
  - lysosome
  - endoplasmic reticulum
  - mitochondrion
- Which structure makes proteins using coded instructions that come from the nucleus?
  - Golgi apparatus
  - mitochondrion
  - vacuole
  - ribosome
- Which organelle converts the chemical energy stored in food into compounds that are more convenient for the cell to use?
  - chloroplast
  - Golgi apparatus
  - endoplasmic reticulum
  - mitochondrion
- Which organelles help provide cells with energy?
  - mitochondria and chloroplasts
  - rough endoplasmic reticulum
  - smooth endoplasmic reticulum
  - Golgi apparatus and ribosomes
- Which sequence correctly traces the path of a protein in the cell?
  - rough endoplasmic reticulum, Golgi apparatus, released from the cell
  - ribosome, smooth endoplasmic reticulum, chloroplast
  - smooth endoplasmic reticulum, lysosome, Golgi apparatus
  - mitochondria, rough endoplasmic reticulum, cell membrane