



INTRO TO CELLS: THE GRAND CELL TOUR

Video Handout

KEY



This handout accompanies the Introduction to Cells: The Grand Cell Tour video by the Amoeba Sisters on YouTube. Complete the Before the Show section first. Then, try to guess the answers to the Showtime questions *before* starting the video.

Full URL: <https://www.youtube.com/watch?v=8IlzKri08kk>

Tiny URL: <https://tinyurl.com/3dw6hykt>

BEFORE THE SHOW (answer before you start video)

- A. Do you think that cells are the smallest unit of life? Explain why or why not.
- Answers will vary. This question makes a great pair/share or small group discussion.
- B. List what you already know about cells.
- Answers will vary. Use this question to guide students and clear up misconceptions.

SHOWTIME QUESTIONS (answer while viewing the video)

- Approximately how many cells does a person contain?
 - millions
 - billions
 - trillions
- Which of the following statements is NOT a part of the modern cell theory?
 - The cell is the smallest living unit in all organisms.
 - All living things are made from cells.
 - All cells contain genetic material inside a nucleus.
 - All cells come from pre-existing cells.
- What type of cells make up archaea and bacteria?
 - eukaryotic cells
 - prokaryotic cells
 - protist cells
- What two things do eukaryotes have that prokaryotes do not?
 - DNA and cell membrane
 - cell membrane and ribosomes
 - nucleus and membrane-bound organelles
- Which of the following is NOT true of cell membranes?
 - maintains homeostasis
 - only exists in eukaryotic cells
 - is semipermeable
- Cytoplasm supports the cell and organelles and plays a role in cell movement.
 - true
 - false
- Which organelle makes proteins?
 - ribosomes
 - nucleus
 - smooth endoplasmic reticulum
- In a eukaryotic cell, where is DNA found?
 - nucleus
 - cytoplasm
 - ribosome
 - mitochondria
- Which of the following is NOT a role of smooth ER?
 - detoxification
 - folding proteins
 - synthesizing lipids
- Which organelle acts as a packaging and sorting center of the cell?
 - smooth ER
 - rough ER
 - Golgi apparatus
- Which organelle makes ATP energy during cellular respiration?
 - chloroplast
 - mitochondria
 - cell membrane
- Which of the following is NOT true of a chloroplast?
 - uses light energy to perform photosynthesis
 - contain chlorophyll
 - found in animal cells
- Which organelles do plant cells contain that animal cells do not?
 - mitochondria and cell membrane
 - cell wall and chloroplast
 - vacuole and chloroplast
- Which of the following contains the instructions for making proteins?
 - DNA
 - ribosome
 - rough endoplasmic reticulum