

Cells

CH 7 REVIEW PPT

- ◉ Who wrote the cell theory?

- ◉ Schleiden and Schwann

- ◉ What are the three parts of the cell theory?

- ◉ All things are made of cells
- ◉ All cells come from preexisting cells.
- ◉ Cells are the basic unit of life

What organelle is in plants but not animals?

- ◉ Cell walls
- ◉ Chloroplast

- What does an electron microscope use to illuminate an object?

- Electron beams

Where in a cell can I find BOTH DNA and RNA together?

- Nucleus.

- What is the total magnification of an electron microscope?

- 1 million times

What is the best way to tell a Prokaryote from a Eukaryote?

- Prokaryotes don't have a nucleus.

◉ What does a light microscope use to illuminate an object?

◉ light

◉ What is the total magnification of a light microscope?

◉ 1000 X's

◉ Who was the first person to study cells under a microscope?

◉ Hooke

- ◉ What was the first person to view living cells?

- ◉ Van Leeuwenhoek

- ◉ What is an advantage of a light microscope over an electron microscope?

- ◉ You can view living samples

- ◉ What is an advantage of an electron microscope over a light microscope?

- ◉ Greater magnification and higher resolution.

- ◉ What is the best way to tell the difference between a prokaryotic cell and a eukaryotic cell?

- ◉ Eukaryotes have a nucleus and prokaryotes do not.

- ◉ What organelles are unique to plants?

- ◉ Chloroplasts
- ◉ Cell walls
- ◉ Giant vacuoles.

- ◉ Which organelle controls cell functions?

- ◉ nucleus

◉ Which organelle makes ribosomes?

◉ nucleolus

◉ Which organelle digests things the cells eats? AKA suicide sacs.

◉ lysosomes

◉ Which organelle generates power for the cell?

◉ mitochondria

- ◉ Which organelle traps the sun's energy to make food?

- ◉ chloroplast

- ◉ Which organelle acts as the "ups" system of the cell... package and secretes...

- ◉ golgi

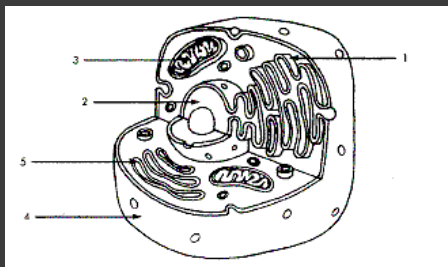
- ◉ Which organelle generates the spindle fibers needed for cell division?

- ◉ centrioles

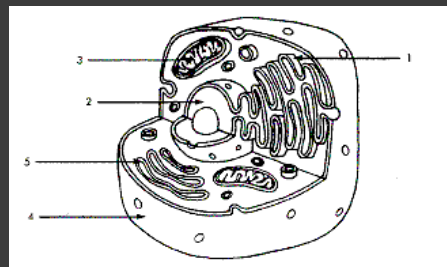
• What does the cell membrane do?

• Controls what enters and leaves the cells

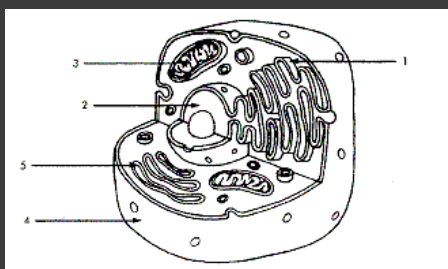
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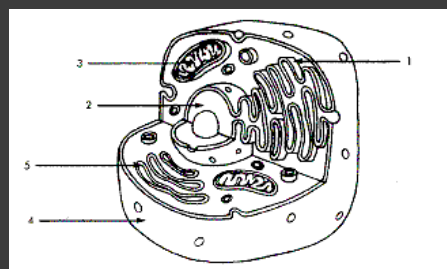
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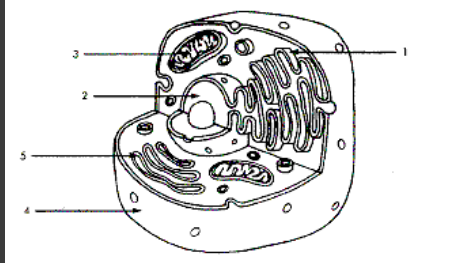
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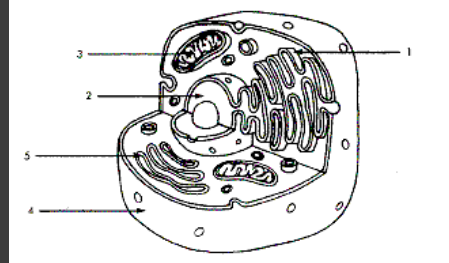
Name item 4



Name item 5



Is this a Prokaryote or Eukaryote?



If a cell or tissue needed a lot of energy, what organelle would they need a lot of?

- Mitochondria

Which organelle makes lipids?

- Smooth ER

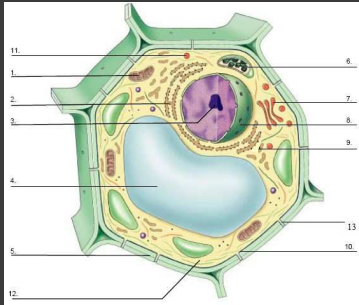
If a cell needed to make lots of protein, what organelle would it need a lot of to do it?

- Ribosomes

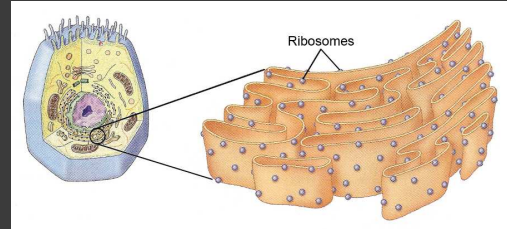
Which cell is more ancient, Prokaryote or Eukaryote?

- Prokaryote

Plant cell v animal cell



What organelle is this?



- Remember you'll also have review questions from ch 6...
- Good luck!