Chapter 2 Lesson 3
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# Who Do Organelles Do?

Name: _____ Date: _____

Organelles and Their Functions: Mitochondria

- _____ are organelles that release the energy the cell needs to function.
- Often referred to as the "_____" of the cell.
- May be _____ or cylindrical in shape.
- Has _____ membranes.
- Outer membrane is _____ and has a structure like that of the cell membrane.
- Inner membrane has several _____.
- Folds on the inner membrane are called _____.
- The cristae provide the surface area needed for _____-producing reactions to take place.

Organelles and Their Functions: Chloroplasts

- _____ are large, green, oval-shaped organelles in which photosynthesis takes place.
- Found only in _____, many protists, and some prokaryotic cells.
- These organelles have a _____ membrane that surrounds them.
- Inside the membranes is a gel-like fluid called _____.
- _____ are made inside the chloroplast.
- The manufacture of sugars takes place on special disc-shaped structures called _____.
- The grana contain chlorophyll-filled sacks called _____.
- It is the chlorophyll that gives plants their _____ color.
- The job of the chloroplasts is to trap energy from sunlight and turn it into _____ energy.

Organelles and Their Functions: Vesicle

- The _____ is a small sac-like structure that forms when part of the smooth ER buds off.
- Vesicles help transport _____ and other materials that the cells need to be able to do the jobs for which they are designed.
- When needed, the proteins and other materials contained by the vesicles are released into the _____ to be used by the cell.

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Organelles and Their Functions: Lysosomes

- _____ are specialized vesicles that float freely in the cytoplasm.
- They are formed in the _____ _____.
- They are responsible for _____ _____ and digesting materials such as food and worn-out cell parts.
- They play a role in _____ harmful bacteria.
- They contain powerful digestive chemicals that combine with white blood cells that surround bacteria and form a vacuole around the bacteria to _____ them.

Organelles and Their Functions: Cilia and Flagella

- Some cells have hair-like projections, called _____ and flagella that sick out from the cell's surface.
- Cilia are hair-like and generally cover the cell's entire _____.
- _____ are much longer, and usually limited to one or two per cell.
- Both structures are often found in _____.
- Protozoa are _____ creatures that live in water and wet place.
- Protozoa use cilia or flagella to _____ from place to place.
- In your body the movement of cilia in the trachea and bronchioles helps clear your _____ of dust.
- The hair cells of the _____ ear, which move in response to the vibration of sound waves are cilia that play an essential role in hearing.