**7.12F (Cell Theory) and 7.12D (Organelles) Test Review - KEY**

**Review your vocabulary for 7.12DF**

**7.12F**

Who invented the microscope?

Anton Van Leeuwenhoek

What organism did Hook look at?

A slice of a cork tree

Why did Hook name them cells?

He was reminded of rooms in a monastery when looking at them.

What did Rudolf Virchow state?

All cells arise from the division of preexisting cells.

What are the three parts of the Cell Theory?

1. All living things are composed of one or more cells.

2. Cells are the basic units of structure and function in living things.

3. All cells come from preexisting cells.

**Review your vocabulary.**

**7.12D**

Cell Membrane: Plant or Animal cell? Both

Function:

Protect the cell.  Allow certain things in and out of the cell. Hold the cell together.

Cell Wall: Plant or Animal cell? Plant

Function:

Provide structure and support for the cell.  Allows plants to grow tall.

Cytoplasm: Plant or Animal cell? Both

Function:

Fills the cell.  Holds the other organelles.  Disperses substances through the cell.

Nucleus: Plant or Animal cell? Both

Function:

Control Center.  Tells other organelles what to do.  Housed DNA.

What is the difference between prokaryotic and eukaryotic? And, which kingdoms are which?

Prokaryotic cells – no nucleus: Archaebacteria and Eubacteria

Eukaryotic cells – have a nucleus: Protista, Fungus, Plant, and Animal

Chloroplast: Plant or Animal cell? Plant

Function:

Hold chlorophyll.  Turn radiant energy into chemical energy.  Site of photosynthesis.

Vacuole: Plant or Animal cell? Both

Function:

Store water, food, and waste.

Mitochondria: Plant or Animal cell? Both

Function:

Provide energy for the cell.

Endoplasmic Reticulum (ER): Plant or Animal cell? Both

Function:

Package proteins from the Ribosomes and ship them throughout the cell.

Ribosomes: Plant or Animal cell? Both

Function:

Produces proteins needed in the cell.  Hooked onto the ER or floating in cytoplasm.

Golgi Bodies: Plant or Animal cell? Both

Function:

Receive proteins, repackage them, and send them to another part of the cell.

Lysosome: Plant or Animal cell? Both

Function:

Breaks down food and dead parts of the cell.

Why do animal cells not need chloroplast?

They do not undergo photosynthesis, they get their energy from food.

Why do plant cells have larger vacuoles than animal cells?

Plant cells have a cell wall to hold this upright in order to reach sunlight. Plants have larger vacuoles to hold more water, which puts pressure on the cell wall and means the plant has high Turgor pressure.

What are the two plant-only organelles?

Cell wall and Chloroplast