



## **Symposium Review Week-8<sup>th</sup> Grade**

**Monday, September 28, 2009**

**What are cells?**

**Cell-** The basic unit of structure in everything living. In other words, all living things are made up of cells. They are the smallest thing that can be called alive. Cells have certain tasks.

**Cytology-** The study of cells- all of you, after your white boards are cytologists.

**Multicellular-** Most living things are made up of many cells that collectively make up the organism.

**Unicellular-** living things made up of only one cell.

**Simplest cells in existence:** BACTERIA- little containers of DNA

**Organism-** Living thing.

### **Jobs of Specialized Cells in your Body:**

**Movement of body parts:** Muscle cells- sketch observations

**Support and protection of body:** Bone Cells- sketch observations

**Sending and receiving of messages-** Nerve Cells- sketch observations

**Fighting Disease-** immune cells- sketch observations

**Transporting materials to all your parts:** Blood Cells- sketch observations

The development of the microscope led scientists to the discovery of new living things called microscopic organisms- Microbes

Review parts of a microscope

**HOMEWORK:** Complete Microscope Review Sheet- use your word wall information from last year- due Tuesday. Quiz over the microscope on Wednesday, 9/30/09- 7C I will give you the quiz to take home on Tuesday, after class- due for 7C on Thursday-10/01

Did the improvement of the microscope make a difference in understanding microbes? Write down your hypothesis.

Scientists divided the world of living things into FIVE MAIN GROUPS CALLED- KINGDOMS

1. Monera- Monera means "alone". Monera  $\frac{1}{2}$  are bacteria. Monera has unique characteristics: Cell Wall (Plants and Fungi), unicellular (1 cell), no nucleus, microscopic in size, there is a multitude of types (3,000?), DNA is spread throughout the cell.  
Parasites are NEW members of the Monera Kingdom- What are parasites? Are there types of parasites?
2. Archea- Prokaryotes- always unicellular. Adapted to unusual and or extreme conditions, such as very hot, very salty, or no oxygen environments. Have several different cellular chemistries from Monera.
3. Protista- Larger than bacteria and monera, but smaller invertebrates. Unicellular, Divided into two groups- one group that can make its own food, and one group that can not. One or more nuclei, DNA is not spread out. Some are protozoas (animal-like) and move to obtain food. Others are algae (plant-like) and can make their own food. Some protists are fungus-like and obtain their food from what they grow on.
4. Fungi- Are mostly many-celled (multicellular) organisms that have cells with nuclei and cell walls but lack chlorophyll (what is chlorophyll?), so

they cannot make their own food. They cannot move about. Instead, they absorb their food from whatever they are growing on.

5. Chlorophyll- Green color in plants. Chloroplast is specialized organelles found in plant cells. Chlorophyll is the green color in plants- why do our leaves change color?
6. Plants- Are many-celled organisms that have cells with true nuclei, cell walls, and chlorophyll. They cannot move about; they use sunlight to make their own food.
7. Animals- Are many-celled organisms that have cells with true nuclei but lack cell walls and chlorophyll. They move about in order to eat other organisms.
8. Is there a 6<sup>th</sup> kingdom? What would scientists want that to be? Some scientist want to add a sixth kingdom to include viruses. Do you think Archaea should be considered a separate kingdom? Archaea was once thought to be odd bacteria, but now considered a fundamentally different group.

Tuesday, September 29, 2009

Collect Microscope review, and answer questions

Explanation of each of the Kingdoms and what they mean- you will NEED to know this- quiz on Monday, October 5, 2009- Vocabulary will be part of this quiz as well.

Wednesday, September 30, 2009

Alex Neal Prayer Leader

Microscope Quiz- When completed read the History of Microscopes. On the colored paper provided please create a timeline using information on the History of Microscopes-be creative! I have markers, crayons, and rulers out for you to use. What you do not finish is homework-due Thursday, October 1, 2009.

When completed review notes on smart board about the Living Kingdoms. Read each description as I have added new information.

Finish description of Living Kingdoms- Watch video on Bacteria- that it is everywhere, Archaea, Parasites, and Our Living World: The Fungi (FUN ji)

Using your notes complete What Are Cells? Reinforcement Activity- Due at the beginning of class on Thursday, October 1, 2009.

Thursday, October 1, 2009

Prayer Leader- Luke G

TPS Microscope timelines- Collect

Review What Are Cells in class- Collect

Who is Carl von Linne? See photo-A Swedish botanist (plant scientist) known as Carolus Linnaeus (Latin) began work in 1735 on a SYSTEM that would organize descriptive classification from the smallest of related groups up to the very largest. The system he developed, with revisions, is the basic system still used to day to systematically organize types of living things with their relatives.

Kingdom- The biggest and most general group to classify living things.

Phyla- Kingdoms are divided into large categories called Phyla (FIE-luh). The singular of phyla is phylum. Each phylum contains similar species.

Classes- Deciding what living things should be classified in the same groups requires deciding what's related to what, and how close those relationships are. Traits and similar internal structure help in determining classes.

Handout on the classes- place in your notebook as a separate page On this handout record the examples of diseases caused by members of each group.

The World of Microbes- C-70-C-75 Do Stopping to Think 2, Stopping to Think 3 b, and number 5 of the Analysis section p C-76.

In your notebook label a new page "Wash Your Hands, PLEASE Lab!"

Under that label Question: How effectively does hand washing reduce the spread of microbes? How can you improve the effectiveness of hand washing?

Hypothesis: Write a detailed answer to the above questions- your hypothesis.

Prediction: Write an If/Then statement communicating how you might test your hypothesis.

Read pages C-86-C-87

Label: Data Table: Create Table 1 on page C-86 in your notebook.

Label: Procedures: Summarize each procedure do you will know what to do during lab tomorrow.

Label: Conclusion and Application: Leave these blank until lab is done on Friday.

Friday, October 2, 2009

Go over in class stopping to thinks, and analysis questions. Fill in Venn Diagram on Smart Board and discuss.

Conduct Wash Your Hands Please Lab- Record your data and write about your conclusions. Did the experiment confirm your hypothesis?

What knowledge can you apply from this lab to everyday life?

Quiz Monday, October 5, 2009- Vocabulary, Kingdoms of Living Things, function of cells, and reflection on what you learned from Washing Your Hands Lab!

October 5- 7, 2009

Monday, October 5, 2009- Quiz on vocabulary, Kingdoms of Living Things, function of cells, and reflection on Lab.

Tuesday, October 6, 2009- Wednesday, October 7, 2009- Labs on using and understanding Dichotomous Keys.

Wednesday, October 7, 2009- Write down ideas for creating your own Dichotomous Key.

Thursday, October 8, 2009- Creating our own classroom dichotomous key, and testing it during lab time. Record your results. Complete reflection question for Friday, October 9, 2009.

Friday, October 9, 2009- Reflection due. Symposium (test) on dichotomous keys.