Sample Lesson #1

How do Plant and Animal Cells Differ?

Although they are very similar, plant and animal cells do have some differences. Outside of the cell membrane, a plant cell also has a **cell wall**. The cell wall helps all the plant cells stick together, and this supports the plant. Plant cells also have chloroplasts. Chloroplasts contain chlorophyll which makes plants green. **Chloroplasts** make food for the plant. Animal cells do not have chloroplasts.

1. Label this diagram of a plant cell. Find this diagram in the Help Pages.



Repeated Trials

Scientists want to be sure that the results they get from an experiment are accurate. They want to **verify** (show) that the results of the experiment were not just a coincidence. The only way to be sure is to repeat or **replicate** the experiment. Sometimes an experiment is replicated several times – even hundreds of times – before a scientist or group of scientists is willing to say that the results are **conclusive** (definite). Scientists are looking for **evidence** – facts that support their conclusions. If there is not enough evidence, the results are **inconclusive**, which means that nothing has been proven.



- 7. Why do scientists often repeat an experiment?
 - A) They need to verify their results.
 - B) Most scientists enjoy spending time in the lab.
 - C) Scientists are usually paid by the hour.
 - D) It is important to use up all materials in a science lab.
- 8. Which scientific instrument would you use to examine the surface of a rock?

thermometer barometer magnifying glass rock hammer

9. Match each word with its meaning.

- verifyA) proving nothingreplicateB) definite
- _____ conclusive C) repeat
- _____ evidence D) show or support
- _____ inconclusive E) facts