

Science Quiz Review 11-15-13

Topics that you should study:

- Respiration – aerobic and anaerobic
 - What are the differences?
 - Which is more efficient?
- Photosynthesis
 - Why is it so important to humans?
 - Is it the only process that plants need to get energy?
- Scientific Theory
 - What is needed for an idea to become a scientific theory?
 - Can a theory ever become a law?
 - Can a theory be disproven?
 - What are some examples of important scientific theories?
 - What is one scientific theory that has been disproven?
- Evolution
 - What observations lead Darwin to develop his theory of evolution?
 - What is natural selection and how does it work? (See Section 1, Darwin's Theory)
 - Overproduction
 - Variation
 - Competition
 - Selection
 - What happened with the peppered moths?
 - How does antibiotic resistance happen?
 - How can we help prevent antibiotic resistance?
 - What is an adaptation?
 - What are homologous structures?
 - How does isolation result in new species?
 - How has understanding of DNA helped us in understanding species relationships?
- Egg Osmosis
 - What is a semi-permeable membrane?
 - Under what circumstances did the egg swell, and why did this happen?
 - What caused the egg to shrink and why?
 - How did the egg osmosis lab relate to cells and cell membranes?
 - What were the independent and dependent variables in this lab?
 - How is osmosis different from diffusion?
- Yogurt Lab and food preservation
 - How did we check to see if the yogurt bacteria grew?
 - How did understanding the pH scale help us in this lab?
 - Why do we use refrigeration to help preserve food?
 - How does lactic acid fermentation help to preserve milk?