

Mid- Quarter 2 Science Test Study Guide

1. **Plant and Animal Cells:** Be able to **locate** the following organelles on an animal and plant cell. Know the **function** of each of these organelles: **Nucleus, cell wall, cell membrane, vacuole, cytoplasm, mitochondria, chloroplast**
2. Be able to state the difference between an animal and plant cell.
3. **Inherited Traits and Learned Behaviors:** Know what an inherited trait is- examples: eye color, hair color, height, physical characteristics, fur color (animals), etc –These are all determined by a combination of genes that come from **both** parents, not just one.
4. Know that learned characteristics are what we learn during our lifetime (riding a bicycle, swimming, etc)
5. Know the difference between a learned characteristic and an inherited trait
6. **Photosynthesis:** Photosynthesis- the process of plants making food; In order for photosynthesis to take place, plants need Carbon Dioxide, sunlight and water
7. The product of photosynthesis = sugar (glucose) and oxygen
8. **Investigations:** Be able to select an investigation that could be used to answer specific questions
9. **Physical and chemical changes:** Distinguish between physical and chemical changes
10. **Freezing, Melting, and Evaporation:** Understand the differences among freezing, melting, and evaporation; Understand factors that influence the rate at which different types of material freeze, melt, or evaporate
11. **Heat Transfer:** Use information from an investigation to determine the method by which heat energy is transferred from one object or material to another. **Conduction, Convection or Radiation**
12. **Tools for Science:** select a tool to solve a problem: microscope, telescope, star chart, hand lens, etc.
13. **Plants and Animals Obtaining Energy:** Compare how plants and animals obtain energy- plants get their energy from the sun; animals get their energy from plants or other animals.
14. **Fossils:** Fossils provide us with information from the past
15. **Symbiosis:** Know the differences of the three different symbiotic relationships: **parasitism, commensalism, mutualism**