1. What are stomata?
   1. Stems on a plant
   2. Tiny pores on the leaves of plants
   3. The place where leaves grow on a plant
   4. A part of the plants roots
2. What **enters** the stomata?
   1. Water
   2. Nitrogen
   3. Carbon Dioxide
   4. Oxygen
3. What **exits** the stomata?
   1. Oxygen
   2. Carbon Dioxide
   3. Nitrogen
   4. Heat
4. Why are stomata important to photosynthesis?
   1. It is the structure where Carbon Dioxide enters the leaf
   2. It is the structure where water enters the leaf
   3. It is the structure where sunlight enters the leaf
   4. It is the structure that performs photosynthesis
5. Use the following data to calculate Degrees of Freedom and the critical t-value:
   * + n1 = 10; n2 = 15; P = 0.05
6. DF = 25; critical t-value = 2.060
7. DF = 24; critical t-value = 2.064
8. DF = 23; critical t-value = 2.069
9. DF = 15; critical t-value = 2.131
10. Based on the following t-values, would you “reject” or “fail to reject” a null hypothesis?
    * + **Critical** t-value = 2.013
      + **Calculated** t-value = 1.222
11. Reject
12. Fail to reject
13. The Law of Conservation of Matter states, “Matter is neither created nor destroyed, but it is recycled from one form to another.” What does this tell us about the matter that is on Earth?
    1. The matter on Earth is replaced after it is used up
    2. The matter on Earth today is the same matter that was on Earth during the time of the dinosaurs
    3. The matter on Earth is refreshed whenever the Earth is hit with a giant meteor
    4. New matter is created every time an organism reproduces
14. What are the most basic building blocks of matter?
    1. Elements
    2. Carbon
    3. Oxygen
    4. Atoms
15. Which of the following is an example of nucleic acid?
    1. DNA
    2. Keratin
    3. Lipids
    4. Proteins
16. What do atoms make when they form chemical bonds with each other?
    1. Molecules
    2. Organelles
    3. Electrons
    4. Macromolecules
17. In which form do we most commonly find Carbon in the air?
    1. Carbon Monoxide (CO)
    2. Carbon Dioxide (CO2)
    3. Methane (CH4)
    4. Glucose (C6H12O6)
18. What is the difference between potential and kinetic energy?
    1. Potential energy is motion; Kinetic energy is stored
    2. There is no difference
    3. Potential energy travels in waves; Kinetic energy is stored in chemical structure
    4. Potential energy is stored; Kinetic energy is motion
19. Which wavelength of solar radiation do plants use as a source of energy?
    1. Infared
    2. Visible
    3. Ultraviolet
    4. X-Ray
20. Which of the ingredients (reactants) of photosynthesis is missing from the equation below?

CO2 + \_\_\_\_\_\_\_\_\_ + energy from the sun 🡪 C6H12O6 + O2

1. O2
2. H2O
3. N2
4. CH4
5. Which of the following best illustrates the First Law of Thermodynamics?
   1. Energy in the form of visible light from the sun being stored in glucose (C6H12O6) during photosynthesis
   2. Energy stored in glucose (C6H12O6) being released as heat during cell respiration
   3. Burning coal in order to release the energy stored in the coal as heat
   4. All of the above