Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period\_\_\_\_\_

Photosynthesis and Cellular Respiration Power Point Guide

1. Energy is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. All of the energy on the earth comes from \_\_\_\_\_\_\_\_\_\_\_\_\_.
3. \_\_\_\_\_\_\_\_\_\_ is the unit of energy for all cells and stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. How does ATP work to release energy in the cell?
5. Photosynthesis takes place in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of plant cells.
6. What is the equivalent of a chloroplast in an animal cell?
7. The reaction for photosynthesis is:
8. Photosynthesis occurs in 2 steps:
   1. Step 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Step 2:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Light dependent reactions require \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which release hydrogen ions to create \_\_\_\_\_\_\_\_\_\_\_\_.
10. In the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_, 6 molecules of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are used to create \_\_\_\_\_\_ molecule of \_\_\_\_\_\_\_\_\_\_\_\_\_.
11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is stored in the vacuoles of plant cells.
12. Plants are consumed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, who use the starches from plants to make their own energy.
13. Animals use a process called \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to make their energy.
14. The reaction for this process is: (the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of photosynthesis!)
15. Occurs in 3 steps:
    1. Step 1:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
       1. Means “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_”
       2. Turns glucose into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
       3. \_\_\_\_\_\_\_ molecules of ATP are made in this step
    2. Step 2:\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_
       1. Uses pyruvate to make \_\_\_\_\_\_ ATP molecules
    3. Step 3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_
       1. Concentration gradients allow the cell to make \_\_\_\_\_\_\_\_ ATP molecules
16. Photosynthesis creates \_\_\_\_\_\_\_ total ATP and Cellular Respiration creates \_\_\_\_\_\_\_\_ total ATP.
17. \_\_\_\_\_\_\_\_\_\_\_\_\_ are proteins that speed up chemical reactions
18. Each \_\_\_\_\_\_\_\_\_\_\_\_\_\_ has a specific \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
19. The same \_\_\_\_\_\_\_\_\_\_\_ can be used over and over again to create the same \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
20. Can be compared to a \_\_\_\_\_\_\_\_\_\_\_\_\_.