*I know the Latin Root Words covered in Unit 05*

1. Tri \_\_\_\_\_\_\_\_\_ 2. Photo \_\_\_\_\_\_\_\_ 3. Synth \_\_\_\_\_\_\_\_ 4. –Sis \_\_\_\_\_\_\_\_ 5. Chloro \_\_\_\_\_\_\_\_ 6. Plast\_\_\_\_\_\_\_\_ 7. Thylakoid \_\_\_\_\_\_\_\_ 8. Grana (Granum) \_\_\_\_\_\_\_\_ 9. Auto \_\_\_\_\_\_\_\_ 10. Hetero \_\_\_\_\_\_\_\_ 11. Troph \_\_\_\_\_\_\_\_ 12. A, an \_\_\_\_\_\_\_\_ 13. Aero \_\_\_\_\_\_\_\_ 14. Crisate \_\_\_\_\_\_\_\_ 15. Glyco \_\_\_\_\_\_\_\_ 16. Lys \_\_\_\_\_\_\_\_

*I know the major source of energy for all life.*

1. Energy is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The major source of energy for all life comes from?
3. What kind of energy does it emit?

*I know the difference between radiant and chemical energy*

1. Describe radiant energy.
2. Where is the energy stored in chemical energy?
3. What are pigments and how do they interact with visible light?
4. What pigment is found in the chloroplasts of plant cells?
5. Explain why plants appear green.

*I will be able to describe the structure and function of ATP.*

1. Draw a picture of ATP and ADP.
2. Which molecule is considered charged? Which molecule is considered uncharged.
3. Describe the major difference between ATP and ADP.
4. How is energy released from ATP?
5. What is lost from ATP when energy is released?
6. What must happen to ADP to recharge it back into ATP?
7. What two processes are used to recharge ADP into ATP?

*I know the difference between an autotroph and a heterotroph.*

1. Briefly describe the difference between an Autotroph a Heterotroph.

*I know the parts of the Chloroplast and Mitochondria*

1. Draw and label a chloroplast and a Mitochondria

*I understand that photosynthesis is the conversion of radiant light energy into chemical energy.*

1. Write the balanced chemical formula for Photosynthesis.
2. Describe the process of Photosynthesis. Include its input and output and what powers the process.

*I understand the properties of an Electron Transport Chain*

1. What is an electron transport chain?
2. Where can electron transport chains be found?
3. What is ATP synthase?
4. What does ATP synthase do?

*I can differentiate between the light and dark reactions of photosynthesis*

1. Light reaction
 a. Where does it occur? Inputs (4): Output: (3)
2. Dark Reaction
 a. Where does it occur? Inputs(3): Output: (3)

*I can describe the general purpose of Cellular Respiration*

1. They primary purpose of Cellular Respiration is to turn \_\_\_\_\_\_\_\_\_\_\_\_\_\_ into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Write the balanced chemical formula for Cellular Respiration.
3. Describe how Photosynthesis and Cellular Respiration work together.
4. I can list all the phases of cellular respiration.
5. All cellular respiration begins with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

*I can describe the difference between Aerobic Respiration and Anaerobic Respiration*

1. Aerobic means \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Anaerobic means \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_.
3. List all the phases of cellular respiration that are Anaerobic.
4. Where do they occur?
5. List all the phases of cellular respiration that are aerobic.
6. Where do they occur?

*I can describe the anaerobic pathway of cellular respiration.*

1. Describe Glycolysis (Where, Input and Output and where it goes, how much net ATP is made)
2. Describe the difference between alcoholic fermentation and lactate fermentation. (what’s created, who creates it, how much ATP)

*I can describe the aerobic pathway of Cellular Respiration*

1. Describe the Krebs’s Cycle. (Where, Input and Output and where it goes, how much ATP is made)
2. Describe the Electron Transport Chain (Where, Input and Output and where it goes, how much ATP is made)
3. Compare the output of ATP between anaerobic and aerobic respiration. Which one is more beneficial for organisms?