## **Energy Cycle Essential Questions**

- 1. What are the reactants and products for photosynthesis?
- 2. What organisms are doing photosynthesis? What is the organelle that this organisms have to do this process in their cells?
- 3. What are the reactants and products for cellular respiration?
- 4. What organisms are doing cellular respiration? What organelle do these organisms have that helps them to do this process in their cells?
- 5. What is the energy molecule used by all living things?

## **Photosynthesis Essential Questions**

- 1. What is the function of a chloroplast?
- 2. What is the role of pigments? Why are most plants green?
- 3. What are the two processes of photosynthesis called?
- 4. What are two products of the light reaction that are used in the Calvin Cycle?
- 5. Where does the light reaction occur?
- 6. From the overall chemical equation of photosynthesis, identify the reactant and product that are part of the light reaction.
- 7. Where does the Calvin Cycle occur?
- 8. What is produced in the Calvin Cycle?

## **Anaerobic Respiration Essential Questions**

1. Describe the process of glycolysis and how much ATP is produced.

## **Aerobic Respiration Essential Questions**

- 1. What happens to the C, H, O of glucose in the Citric Acid Cycle? How much ATP is produced in this cycle?
- 2. What happens to the H in the Electron Transport process? What is the enzyme that produces the ATP and how much ATP is produced?
- 3. What is the step of aerobic respiration that is the same as anaerobic respiration? How much ATP is produced in this step?