

Assignment 3 - Metabolism and Photosynthesis

1. Contrast kinetic energy and potential energy by explaining how they are different.

2. List 2 examples of kinetic energy and 2 examples of potential energy.

- Kinetic energy:
 - 1.
 - 2.
- Potential energy:
 - 1.
 - 2.

3. Draw a diagram of a molecule of ATP. Label ALL of the following: ribose sugar, adenosine, phosphate, high-energy bonds.

4. Are the high-energy bonds between the phosphate groups in ATP a form of potential energy or kinetic energy? _____

5. Explain what happens when the terminal phosphate group in ATP is hydrolyzed. Use ALL of the following words in your explanation: ATP, terminal phosphate group, ADP, Pi, energy, work. Underline or highlight each term.
