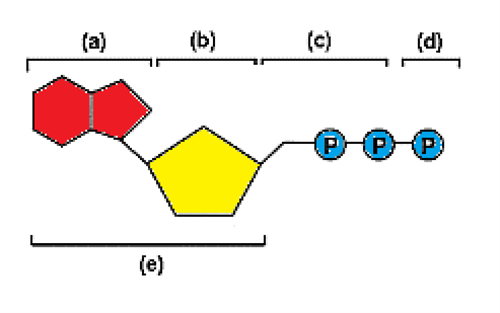
Cell Energy Practice Assessment

1. What statement best compares aerobic and anaerobic respiration?
   1. Less ATP is generated during aerobic respiration than during aerobic respiration
   2. More water is generated during anaerobic respiration than during aerobic respiration
   3. More oxygen is generated during anaerobic respiration than during aerobic respiration
   4. Less lactic acid is generated during anaerobic respiration than during aerobic respiration
2. Energy is released from ATP when
   1. A phosphate group is added
   2. Adenine bonds to ribose
   3. ATP is exposed to sunlight
   4. A phosphate group is removed
3. Looking at the figure 8-1, all of the following are parts of an ADP molecule EXCEPT
   1. Structure A

Figure 8-1



* 1. Structure B
  2. Structure C
  3. Structure D

1. Looking at the figure 8-1. Which structures make up an ATP molecule?
   1. A and B
   2. A, B, and C
   3. A, B, C, and D
   4. C and D
2. Which structure in figure 8-1 is a sugar molecule?
   1. Structure A
   2. Structure B
   3. Structure C
   4. Structure D
3. Which of the following are used in the overall reactions for photosynthesis?
   1. Carbon dioxide
   2. Water
   3. Light
   4. All of the above
4. Which of the following is not a part of the ATP molecule?
   1. Adenine
   2. Ribose
   3. Chlorophyll
   4. Phosphate
5. Photosynthesis uses sunlight to convert water and carbon dioxide into
   1. Oxygen
   2. High energy sugars
   3. ATP and oxygen
   4. Oxygen and high energy sugars
6. Plants gather the suns energy with light-absorbing molecules called
   1. Pigments
   2. Glycolysis
   3. Chloroplasts
   4. Glucose
7. What are the reactants in the equation for cellular respiration?
   1. Oxygen and lactic acid
   2. Carbon dioxide and water
   3. Glucose and oxygen
   4. Water and glucose
8. One cause of muscle soreness is
   1. Alcoholic fermentation
   2. Glycolysis
   3. Lactic acid fermentation
   4. The Krebs’s cycle
9. Which organism is not likely to carry out photosynthesis?
   1. Algae
   2. Bacteria
   3. Plants
   4. Amoeba
10. Cellular respiration uses one molecule of glucose to produce
    1. 12 ATP molecules
    2. 0 ATP molecules
    3. 36 ATP molecules
    4. 8 ATP molecules
11. Photosynthesis is to chloroplasts as cellular respiration is to
    1. Chloroplasts
    2. Cytoplasm
    3. Mitochondria
    4. Nucleus
12. Which of these processes takes place in the cytoplasm of a cell?
    1. Glycolysis
    2. Electron transport chain
    3. Krebs cycle
    4. All of the above
13. The two main types of fermentation are called
    1. Alcoholic and aerobic
    2. Aerobic and anaerobic
    3. Alcoholic and lactic acid
    4. Lactic acid and anaerobic
14. Cellular respiration can be called an aerobic process because it requires
    1. Light
    2. Exercise
    3. Oxygen
    4. Glucose