

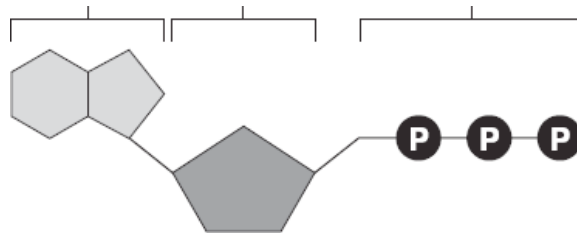
Chapter 8 Homework 1 (Pg. 226-228)

Name _____ Period _____ Score _____

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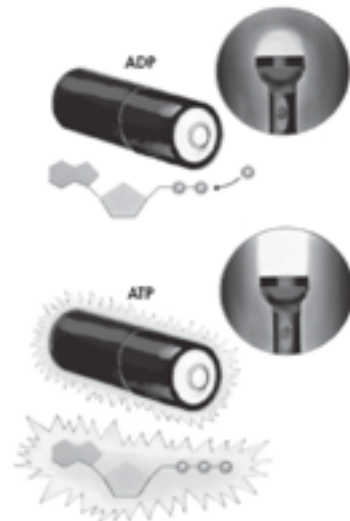
1. _____ is the ability to do work.
2. The main chemical compound cells use for energy is _____ (ATP).
3. _____ is a 5-carbon sugar molecule that is part of an ATP molecule.
4. The _____ of ATP are the key to its ability to store and supply energy.
5. ATP releases energy when it _____ bonds between its phosphate groups.
6. Most cells only store enough ATP for _____ of activity.
7. Label each part of the diagram of an ATP molecule below.



For Questions 8–10, refer to the Visual Analogy comparing ATP to a charged battery. Describe the concepts shown in the diagram.

8. In the visual analogy, what chemical is represented by the low battery?

9. In what way does the diagram shows an increase in energy?



10. What are two ways in which cells use the energy temporarily stored in ATP?

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11. Energy is needed to add a third phosphate group to ADP to make ATP. What is a cell's source of this energy?

For Questions 13–17, write True if the statement is true. If the statement is false, change the underlined word or words to make the statement true.

12. _____ All heterotrophs must eat food to get energy.
13. _____ Autotrophs do not need to eat food because they make food.
14. _____ The energy in food originally came from ATP.
15. _____ The term photosynthesis means “pulling apart with light” in Greek.
16. _____ The energy of sunlight is stored in the chemical bonds of carbohydrates.

17. Complete the table comparing two types of organisms.

Autotrophs and Heterotrophs		
Type	Description	Examples
Autotrophs		
Heterotrophs		