Name _____ Date _____ Period _____

Worksheet: Chemical Energy and ATP

B I O L O G Y

Directions: *Answer the following questions using your class notes and textbook. (pages 100-102)*

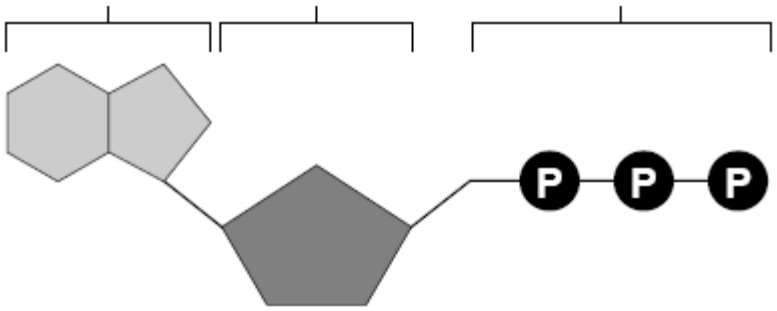
1. What type(s) of **carbon-based molecules** (organic compounds) are the source for most of the energy in the foods you eat?

2. Where is the **energy** stored in these molecules?

3. What is **ATP**?

4. What is **ATP** used for in cells?

5. Identify the parts of an ATP molecule below: (Label **adenosine**, **ribose**, and **phosphate molecules**)



6. How is energy stored in the ATP molecule?

7. What happens to the ATP molecule when a **phosphate group** is <u>removed</u>? (what does it turn into?)

8. Draw a diagram below showing the cycle of ATP and ADP below (see **Figure 4.2** on page 101)

9. What type of organic compounds store the most energy? The least?

10. How do **plants** produce ATP?