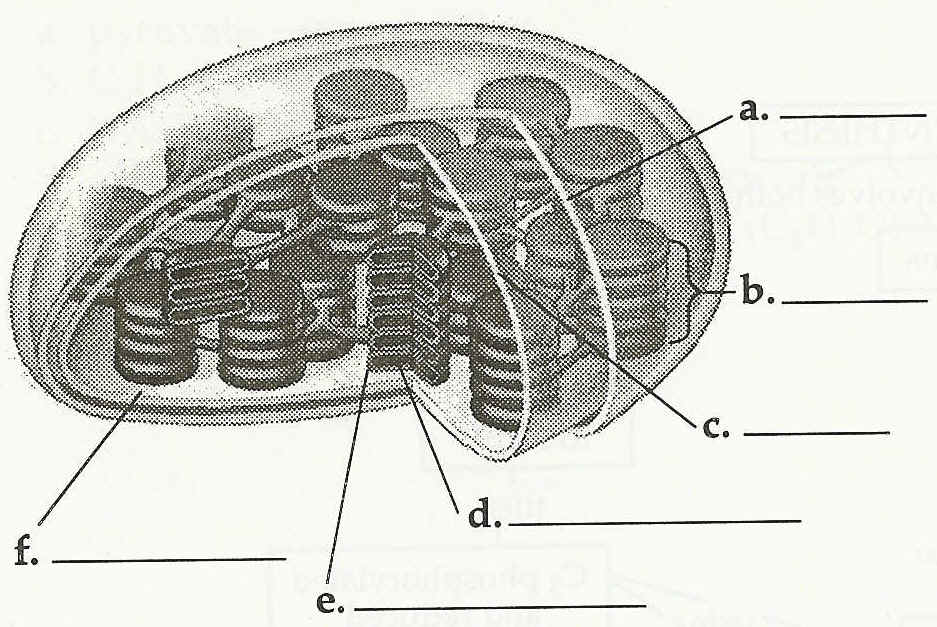
**Name: Period: Date:**

**Focus Questions for Chapter 10.1 (Photosynthesis Overview) due Tuesday, 3/18**

# Questions to answer as you read about photosynthesis. You will not be asked to turn these in, but Ms. Ransom may check to make sure you have completed them through a clicker quiz or short written response. You should be ready to discuss the answers during class.

1. What is **mesophyll**? **Stomata**? How do they relate to **photosynthesis**?
2. Label the parts of a chloroplast as shown to the right:
3. Write the overall equation of photosynthesis. Why is water shown on both sides of the arrow? If you reduce the equation to its simplest form, what would it be? (*The point of this question is to really get you to understand the chemistry of what’s going on.*)
4. Where does the oxygen come from that is released as a byproduct of photosynthesis?
5. Photosynthesis is known as a **redox** reaction (for reduction/oxidation). *If you are unfamiliar with redox reactions as a concept, there is an explanation on page 164.* What becomes reduced and what becomes oxidized?
6. What are the two stages of photosynthesis called?  
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
      What happens in this step (general description, not specific chemical reactions)?
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
      What happens in this step (general description, not specific chemical reactions)?
7. What is Nicotinamide Adenine Dinucleotide Phosphate (**NADP+**)?
8. What is **photophosphorylation**?
9. What is **carbon fixation?**