

Name:

Processing Energy Processes

1. Does diffusion require energy to be released during cellular respiration? **YES** **NO**

2. The process where **water** moves across a cell membrane is called _____ .

3. What does it mean to be **autotrophic**? List two autotrophs with your explanation.

4. What does it mean to be **heterotrophic**? List two heterotrophs with your explanation.

5. What **process** do plants use to make food from sunlight, water, and carbon dioxide?

6. In which **organelle** does photosynthesis take place? _____

7. What **process** do organisms use to release the energy stored in food when oxygen is present?

8. In which **organelle** does respiration take place? _____

9. What is the name of the energy releasing process that does **NOT** use oxygen?

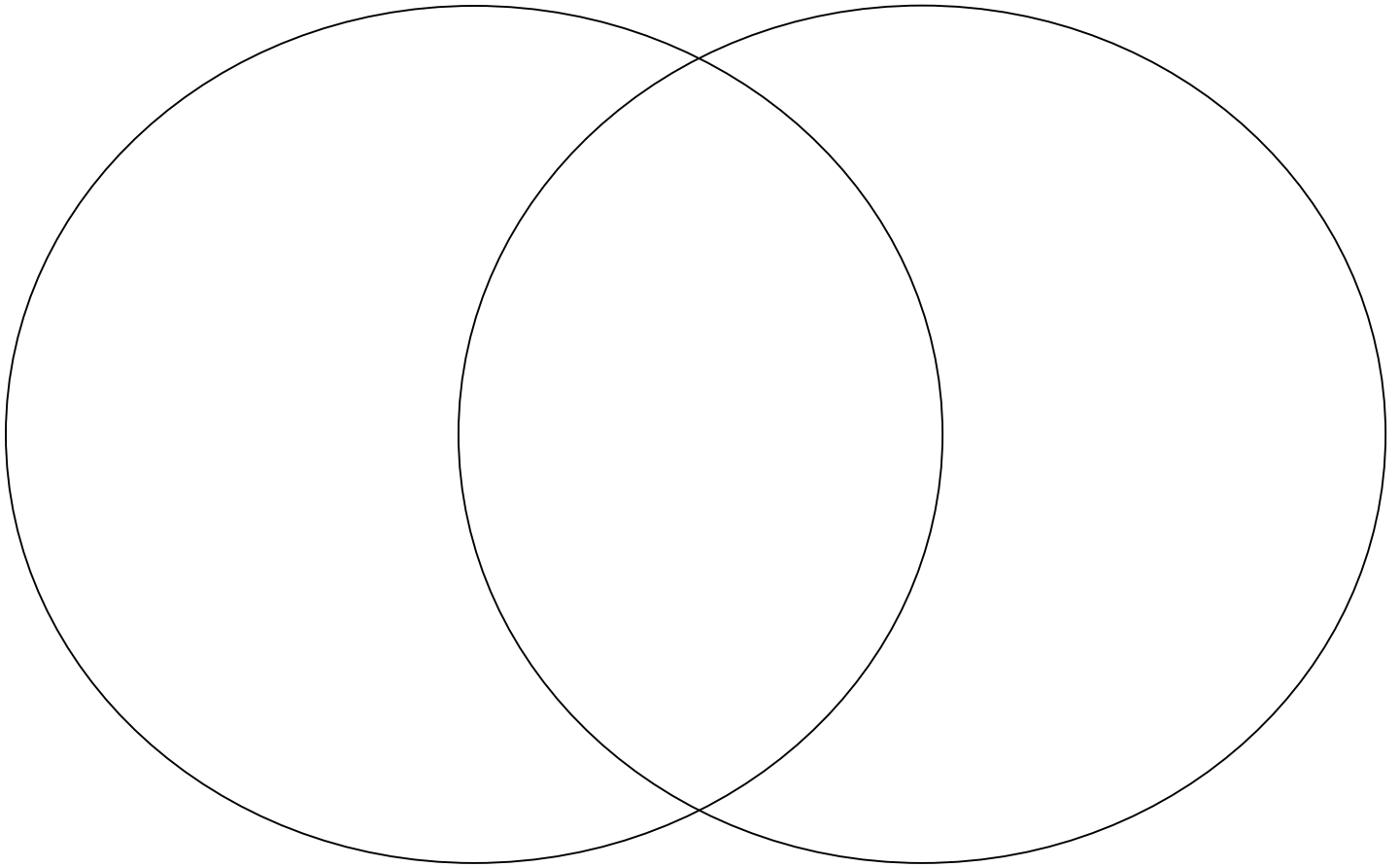
10. How is fermentation **different** than respiration? (List *two* differences)

11. All energy ultimately comes from the _____ .

12. Fill in the following Venn diagram comparing photosynthesis and cellular respiration. List **AT LEAST 3** similarities and differences. Think of molecules, purpose, organelles, etc. as you fill in the Venn diagram.

PHOTOSYNTHESIS

RESPIRATION



13. What would happen to animals if plants didn't exist? (Explain the importance of photosynthesis, which occurs in autotrophs, to heterotrophs with a diagram that shows the flow of energy using **words AND pictures!**)