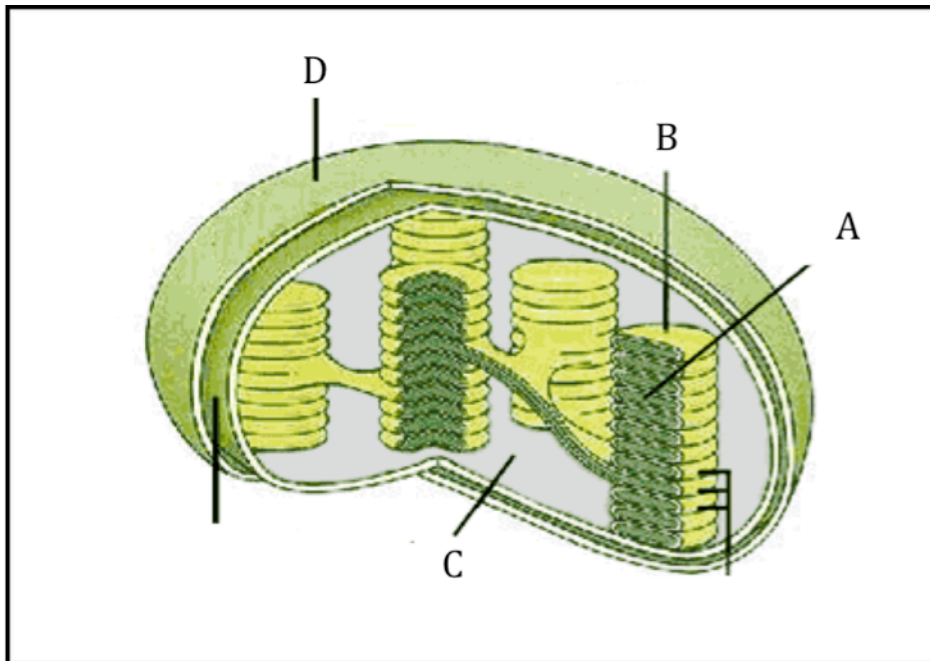


NAME: \_\_\_\_\_

1. What stage of photosynthesis involves the use of the electron transport chain?
  - a. **Light-dependent reaction**
  - b. Light-independent reaction
  - c. Calvin Cycle
  - d. Krebs Cycle
2. Electrons that flow down the first electron transport chain of photosynthesis originate from \_\_\_\_\_ molecules and are replaced by electrons from \_\_\_\_\_ molecules?
  - a. **Chlorophyll, water**
  - b. Light, chlorophyll
  - c. Chlorophyll, NADPH
  - d. Water, NADPH
3. CO<sub>2</sub> reacts with a 3-carbon molecule to form malate in \_\_\_\_ photosynthesis, which is then transferred to a \_\_\_\_\_ cell.
  - a. C<sub>4</sub>, mesophyll
  - b. **C<sub>4</sub>, bundle-sheath**
  - c. C<sub>3</sub>, mesophyll
  - d. C<sub>3</sub>, bundle-sheath



4. What reaction occurs in 'A'? **Poorly worded question (thrown out)**
  - a. Light-dependent
  - b. Light-independent

- c. Calvin Cycle
  - d. Krebs Cycle
5. What is the name of 'C'?
- a. Stoma
  - b. Stroma**
  - c. Thykaloid
  - d. Granum
6. \_\_\_\_\_ are pumped across the membrane during photosynthesis to form \_\_\_\_?
- Poorly worded question (thrown out)**
- a. Electrons, NADPH
  - b. Protons, CO<sub>2</sub>
  - c. Electrons, ATP
  - d. Protons, ATP
7. What molecules are generated in the Krebs Cycle that will be used in the electron transport chain to pump protons across the membrane? (circle all that apply)
- a. NADH**
  - b. FADH<sub>2</sub>**
  - c. O<sub>2</sub>
  - d. ATP
8. During which stage of cellular respiration is the majority of ATP generated?
- a. Glycolysis
  - b. Making acetyl-CoA
  - c. Krebs Cycle
  - d. Electron transport chain**
9. What carbon molecule is produced from glycolysis?
- a. Pyruvate**
  - b. Malate
  - c. Acetyl-CoA
  - d. Glycogen
10. What molecule is formed at the end of the electron transport chain of cellular respiration as part of a redox reaction?
- a. glucose
  - b. CO<sub>2</sub>
  - c. H<sub>2</sub>O**
  - d. ATP

11. The electron transport chain of cellular respiration takes place in what organelle? **Poorly worded question (thrown out)**
- a. Nucleus
  - b. Mitochondria
  - c. Chloroplasts
  - d. Plasma membrane
12. CO<sub>2</sub> is involved (used up) during which stage of photosynthesis?
- a. Photosystem I
  - b. Photosystem II
  - c. Light-dependent reaction
  - d. **Light-independent reaction**
13. Acetyl-CoA is a \_\_\_\_-carbon molecule that joins up with a \_\_\_\_-carbon molecule in the Krebs cycle to form a 6-carbon molecule.
- a. **2, 4**
  - b. 4, 2
  - c. 3, 3
  - d. 1, 5
14. Photosynthesis and cellular respiration have a lot in common. What molecules are found in both systems? (circle all that apply)
- a. **H<sub>2</sub>O**
  - b. **O<sub>2</sub>**
  - c. **CO<sub>2</sub>**
  - d. **Glucose**
  - e. NADH
  - f. **ATP synthase**
  - g. Chlorophyll
  - h. **ATP**
15. Plants use \_\_\_\_\_ to make the majority of the ATP they use, whereas animals use \_\_\_\_\_ to make the majority of ATP they use.
- a. Photosynthesis, cellular respiration
  - b. Cellular respiration, photosynthesis
  - c. **Cellular respiration, cellular respiration**
  - d. Fermentation, cellular respiration