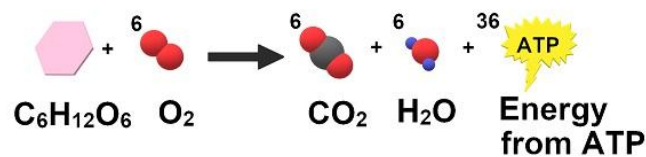


1. **Answer:** A

Explanation: In cellular respiration, glucose and oxygen are the reactants while carbon dioxide, water, and ATP are the products.



2. **Answer:** D

Explanation: In total, oxidative phosphorylation yields 32 ATP.

3. **Answer:** C

Explanation: Electron carriers like nicotinamide adenine dinucleotide (NAD⁺/NADH) are essential in regulating and facilitating cellular respiration.

4. **Answer:** C

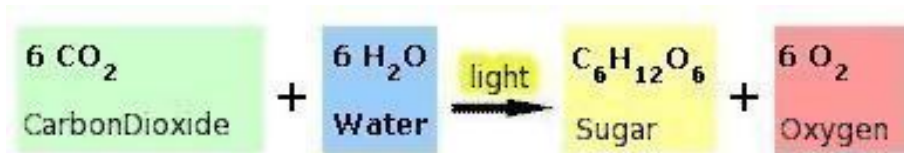
Explanation: The Krebs Cycle is best summarized by this mnemonic: "*Citrate Is Kreb's Starting Substrate For Making Oxaloacetate*".

5. **Answer:** B

Explanation: During the electron transport chain, NADH yields 2.5 ATPs while FADH₂ yields 1.5 ATP.

6. **Answer:** B

Explanation: An anabolic process produces complex, larger compounds out of simple building blocks. In the case of photosynthesis, plants use solar energy to convert carbon dioxide (CO₂) and water (H₂O) to sugars and other organic molecules, releasing oxygen (O₂) as a by-product. It's the reverse of the catabolic process like cellular respiration where larger compounds like sugar/glucose are broken down to release energy.



7. **Answer:** A

Explanation: The output of the Calvin cycle is an energy-rich three-carbon sugar, glyceraldehyde-3-phosphate (G3P). Plants make use of this G3P to form glucose, sucrose, and other organic molecules as needed.

8. **Answer:** C

Explanation: In the light-dependent reaction phase of photosynthesis, there are two types of photosystems that cooperate in light reactions. Each of these photosystems has a distinct reaction-center complex, which contains the special pair of *chlorophyll a* molecules that are named according to the maximum wavelength of light they can absorb: P700 is the name of the *chlorophyll a* in photosystem I **while those of photosystem II is called P680.**

9. **Answer:** D

Explanation: C₄ plants are plants in hot, dry climates that keep their stomata mostly closed to conserve water. They continue making sugars by photosynthesis where they fix carbon in mesophyll cells and **proceed with the Calvin cycle in the bundle sheath cells.**

10. **Answer:** C

Explanation: CAM (Crassulacean Acid Metabolism) plants like pineapples, many cacti, and other succulent plants are well-adapted to very dry climates. The acronym for CAM refers to the plant group where the phenomenon was first examined, which belongs to the **succulents known as the Crassulaceae.**