

Cellular Respiration Worksheet

1. ____ When living cells break down molecules, energy is
 - a. stored as ADP.
 - b. stored as ATP.
 - c. released as heat.
 - d. Both b and c
2. ____ In cellular respiration, the most energy is transferred during
 - a. glycolysis.
 - b. lactic acid fermentation.
 - c. the Krebs cycle.
 - d. the electron transport chain
3. ____ Electrons are donated to the electron transport chain by
 - a. ATP and NADH.
 - b. FADH₂ and NADH.
 - c. ATP and NAD⁺.
 - d. NAD⁺ and ATP.
4. ____ The breakdown of organic compounds to produce ATP is known as
 - a. cellular respiration
 - b. alcoholic fermentation
 - c. lactic-acid fermentation
 - d. photosynthesis
5. ____ Glycolysis begins with glucose and produces
 - a. PGAL
 - b. lactic acid
 - c. acetyl CoA
 - d. pyruvic acid
6. ____ The electron transport chain is driven by two products of the Krebs cycle-
 - a. oxaloacetic acid and citric acid
 - b. H₂O and CO₂
 - c. NADH and FADH₂
 - d. acetyl CoA and ATP
7. ____ What happens to electrons as they are transported along the electron transport chain?
 - a. They lose energy.
 - b. They gain energy.
 - c. They are pumped into space between the inner and outer mitochondrial membranes.
 - d. They combine with O₂ and protons to form water.
 - e. None of the above.
8. ____ Cellular respiration takes place in two stages:
 - a. glycolysis and fermentation.
 - b. Stage 1 and Stage 2 of photosynthesis.
 - c. glycolysis, then respiration.
 - d. respiration, then glycolysis.
9. ____ In cellular respiration, a two-carbon molecule combines with a four-carbon molecule to form citric acid as part of
 - a. glycolysis.
 - b. carbon fixation.
 - c. the Krebs cycle.
 - d. the electron transport chain.
10. ____ Acetyl coenzyme A
 - a. is formed from the breakdown of pyruvic acid.
 - b. enters the Krebs cycle.
 - c. can be used in synthesis of needed molecules.
 - d. All of the above
11. ____ Which of the following is not formed during the Krebs cycle?
 - a. CO₂
 - b. NADH
 - c. FADH₂
 - d. NADPH