

Cellular Respiration Worksheet

1. What are the 3 phases of the cellular respiration process?
Glycolysis, Krebs Cycle, Electron Transport
2. Where in the cell does the glycolysis part of cellular respiration occur?
in the cytoplasm
3. Where in the cell does the Krebs (Citric Acid) cycle part of cellular respiration occur?
in the mitochondria
4. Where in the cell does the electron transport part of cellular respiration occur?
in the mitochondria
5. How many ATP (net) are made in the glycolysis part of cellular respiration?
2 (net)
6. How many ATP are made in the Krebs cycle part of cellular respiration?
2
7. How many ATP are made in the electron transport part of cellular respiration?
32 – 34
8. In which phase of cellular respiration is carbon dioxide made?
Krebs Cycle
9. In which phase of cellular respiration is water made?
Electron Transport
10. In which phase of cellular respiration is oxygen a substrate?
Electron Transport
11. In which phase of cellular respiration is glucose a substrate?
Glycolysis
12. On average, how many ATP can be made from each NADH during the electron transport process?
3
13. On average, how many ATP can be made from each FADH₂ during the electron transport process?
2
14. What would happen to the cellular respiration process if the enzyme for one step of the process were missing or defective?
The entire process beyond that point could not happen.
15. What happens to the high-energy electrons (and hydrogen) held by NADH if there is no O₂ present? **If no oxygen is present, the pyruvic acid must take the electrons (and their hydrogens) back.**