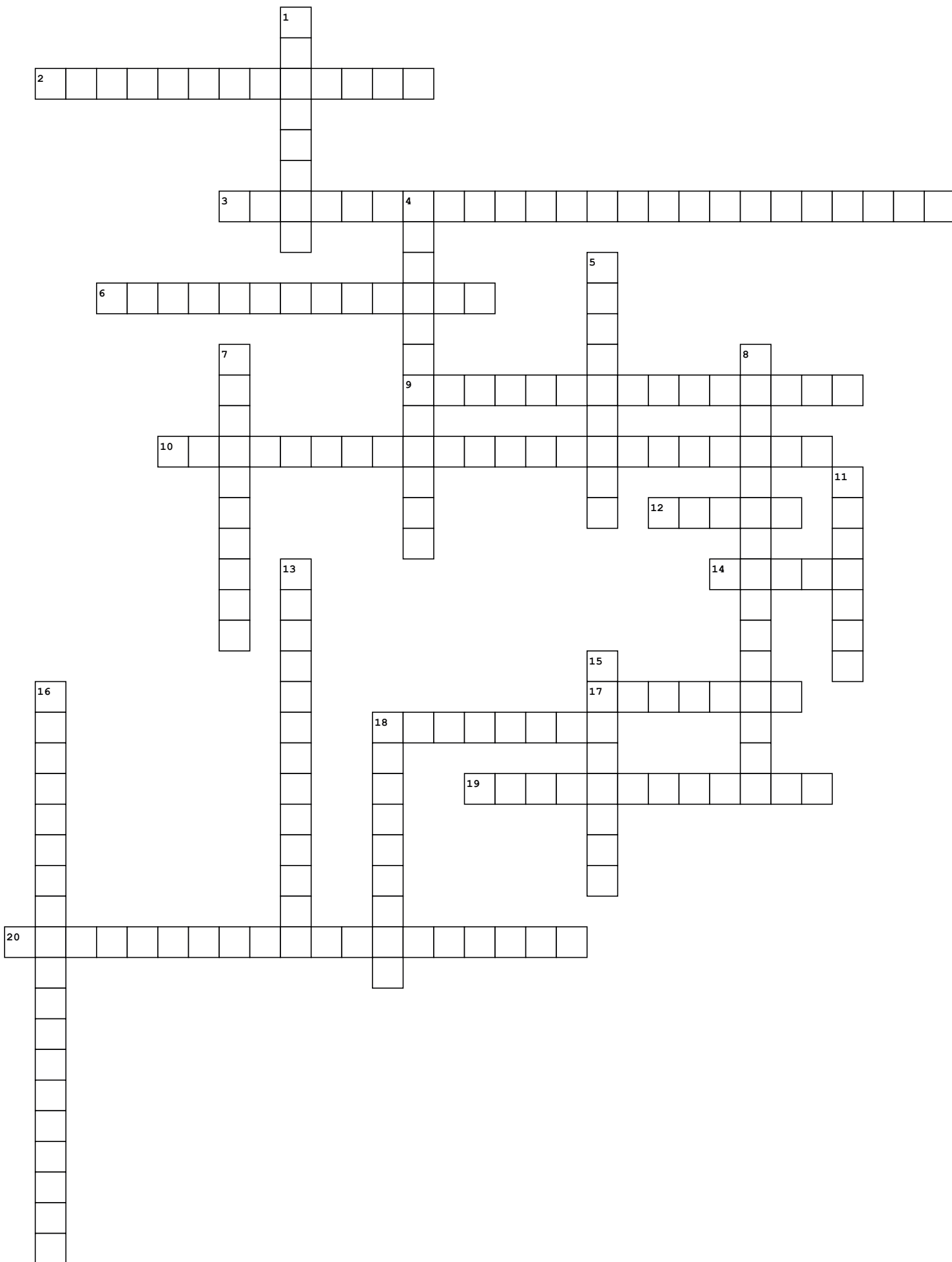


# **Cellular Respiration Tutorial**





### Across

2. it's this type of reaction because of the movement of electrons within the cycle. Glucose is oxidized into carbon dioxide and oxygen is reduced into water.
3. what causes the production of 32-34 ATP at the end of cellular respiration (other final products are carbon dioxide and water)
6. examples of things made through alcohol fermentation
9. gradient that the protons make up going from high to low
10. happens in the cytoplasm, final products are lactic acid, and this happens in humans when there isn't enough oxygen for aerobic respiration
12. undergoes alcohol fermentation during anaerobic respiration (mushrooms.)
14. cycle within the matrix of the mitochondria, and its products per glucose are 2 ATP, 2 Carbon Dioxide, 6 NADH, and 2 FADH.
17. a type of cellular respiration the cell undergoes with the availability of oxygen.
18. what oxygen is, due to collection of electrons, being reduced and combined with hydrogens to make water.
19. used to move hydrogens up the concentration gradient, which goes through the ATP synthase
20. how a cell makes energy/ATP

### Down

1. Undergoes alcohol fermentation during anaerobic respiration (archaea is a kind of this)
4. step in aerobic respiration within where pyruvate becomes acetyl CoA, produces NADH from NAD and releases carbon dioxide
5. they get energized from electron movement
7. happens in the cytoplasm, where glucose is split into 2 pyruvate, 2 ATP (net of 4-2), and converts 2 NAD to NADH
8. the things that do the process of cellular respiration
11. part of mitochondria where the electron transport chain is located
13. space where hydrogen protons get pumped out from the matrix
15. this is what NADH and FADH are, as they do this to electrons throughout the cellular respiration cycle, and to the electron transport chain
16. happens in the cytoplasm, final products are carbon dioxide and ethanol
18. a type of cellular respiration the cell undergoes when there isn't/isn't enough oxygen available