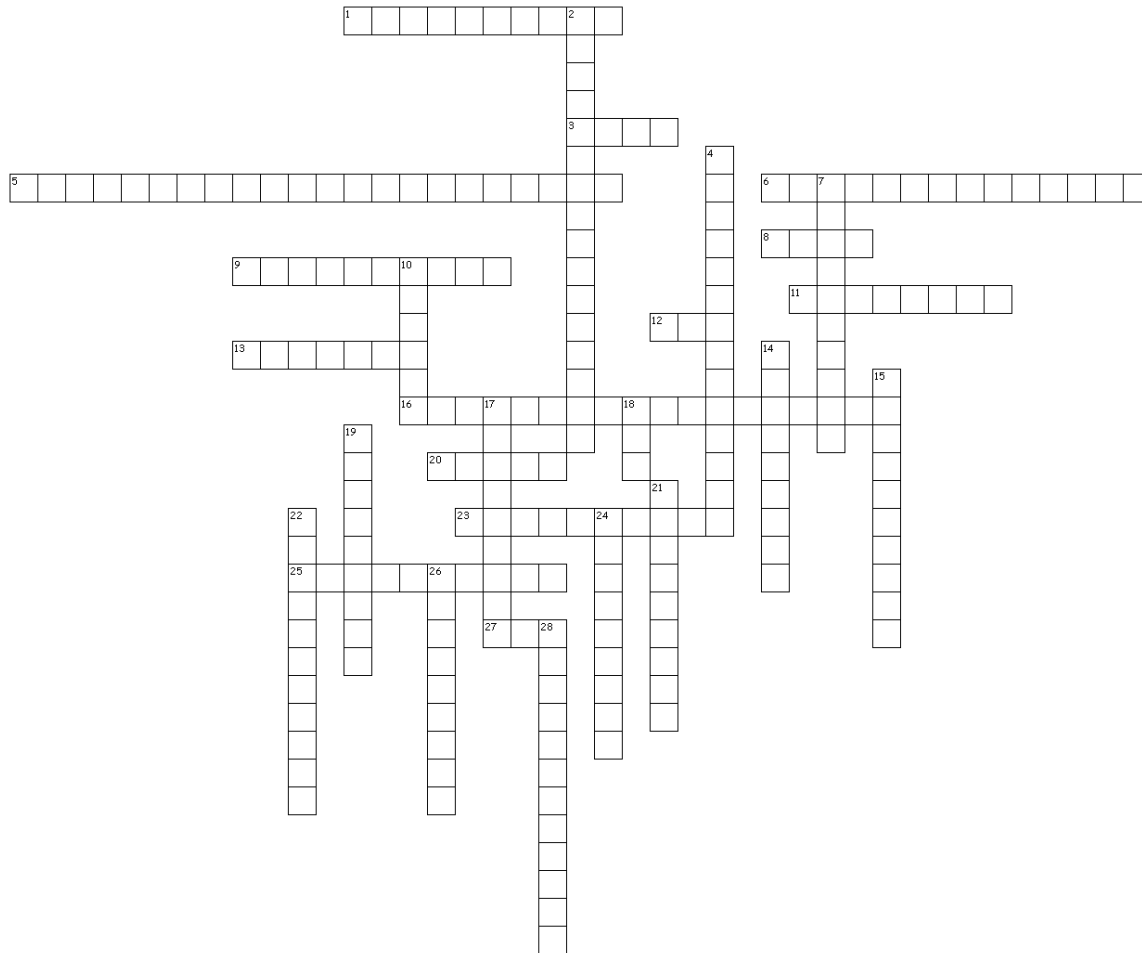


Chapter 6 Crossword - Metabolism, Energy, and Enzymes



Across

1. reactants of an enzymatic reaction
3. the molecular weight of a molecule expressed in grams
5. a series of membrane-bound carriers that pass electrons from one carrier to another via redox reactions
6. law that explains how energy is transferred in the environment
8. coenzyme that receives 2 electrons and a hydrogen atom during photosynthesis
9. the amount of energy left in the environment to do work after a chemical reaction has occurred
11. substances that form as a result of a reaction
12. the molecule left over after ATP has been broken down
13. used to indicate the relative amount of disorganization in a system
16. the amount of energy needed for molecules to react with one another in a closed system
20. a type of reaction involving oxidation and reduction
23. the portion of an enzyme that directly interacts with the substrate
25. the sum of all the chemical reactions that occur in a cell
27. coenzyme that receives 2 electrons and a hydrogen atom during cellular respiration

Down

2. occurs when an inhibitor molecule binds to enzyme which decreases its activity
4. a type of inhibition where the inhibitor binds to a non-active site of the enzyme preventing substrate to bind
7. reactions that require an input of energy to occur
10. a protein whose primary function is to speed up chemical reactions
14. substances participating in a reaction
15. model that suggests the enzyme modifies its shape to achieve a more stable interaction with the substrate
17. gain of electrons
18. common energy "currency" of cells
19. organic or inorganic molecules that assist the enzyme at the active site
21. like enzymes, can speed up biological processes but are made of ribosomes instead of proteins
22. a type of inhibition where the inhibitor binds to the active site preventing the substrate to bind
24. reactions that are spontaneous and release energy
26. loss of electrons
28. a rapid decomposition of a molecule