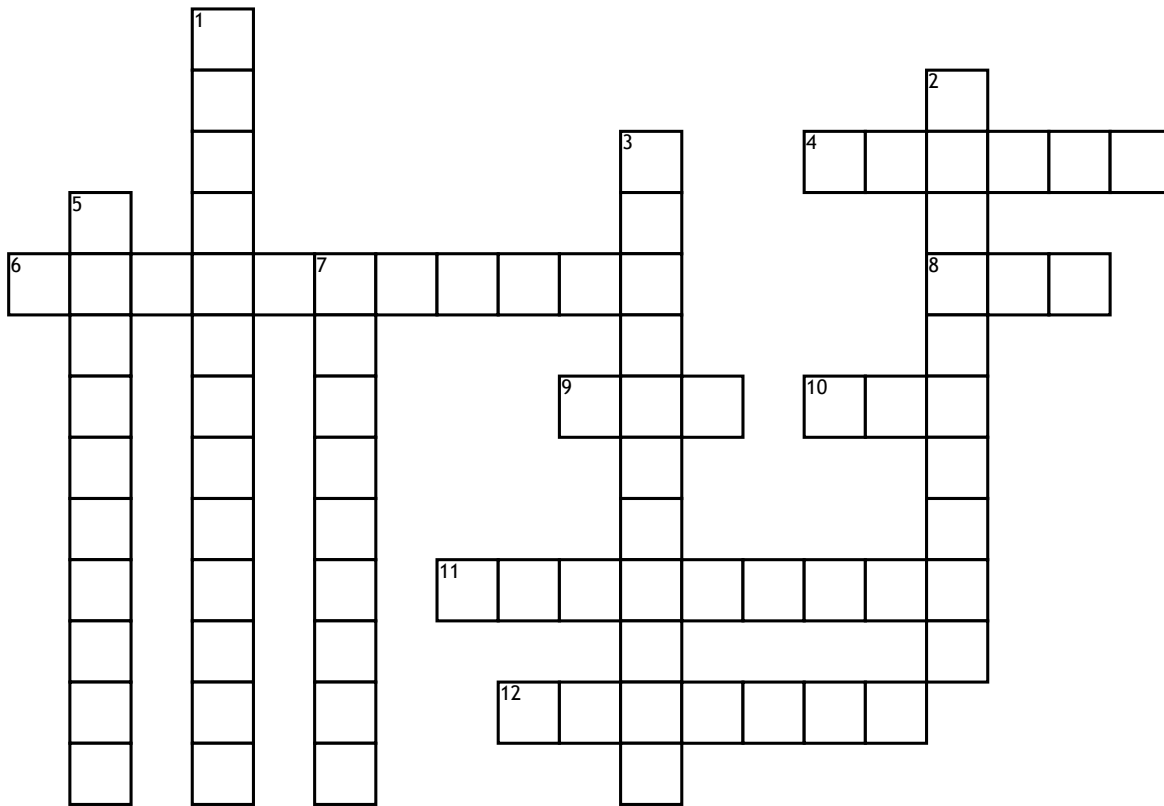


Metabolism



Across

4. Metabolism involves the conversion of chemical _____, which is both produced and consumed in metabolic processes
6. Metabolism is the sum of total of all chemical reactions involved in _____ the dynamic state of the cell
8. The coupled process of electron transport with the phosphorylating of ADP into _____ is the metabolic pathway known as oxidative phosphorylation

9. Two agents for transfer of electrons in biological oxidation-reduction reactions include NAD^+ and _____
10. ATP contains _____ “high energy” phosphoric anhydride bond(s) that release energy through hydrolysis to drive biological processes
11. Metabolism functions to generate “building blocks” for the _____ of proteins, nucleic acids, carbohydrates, and lipids
12. Metabolism functions to _____ and/or modify biological molecules required for specialized functions in specialized cells

Down

1. _____ is the study of energy use in biological systems
2. _____ is the sum of catabolism and anabolism
3. Metabolism functions to obtain energy from _____ of nutrients
5. The metabolic process in which large nutrient molecules are broken down into smaller molecules to supply energy is known as _____
7. The metabolic process of synthesizing larger molecules from smaller ones is known as _____