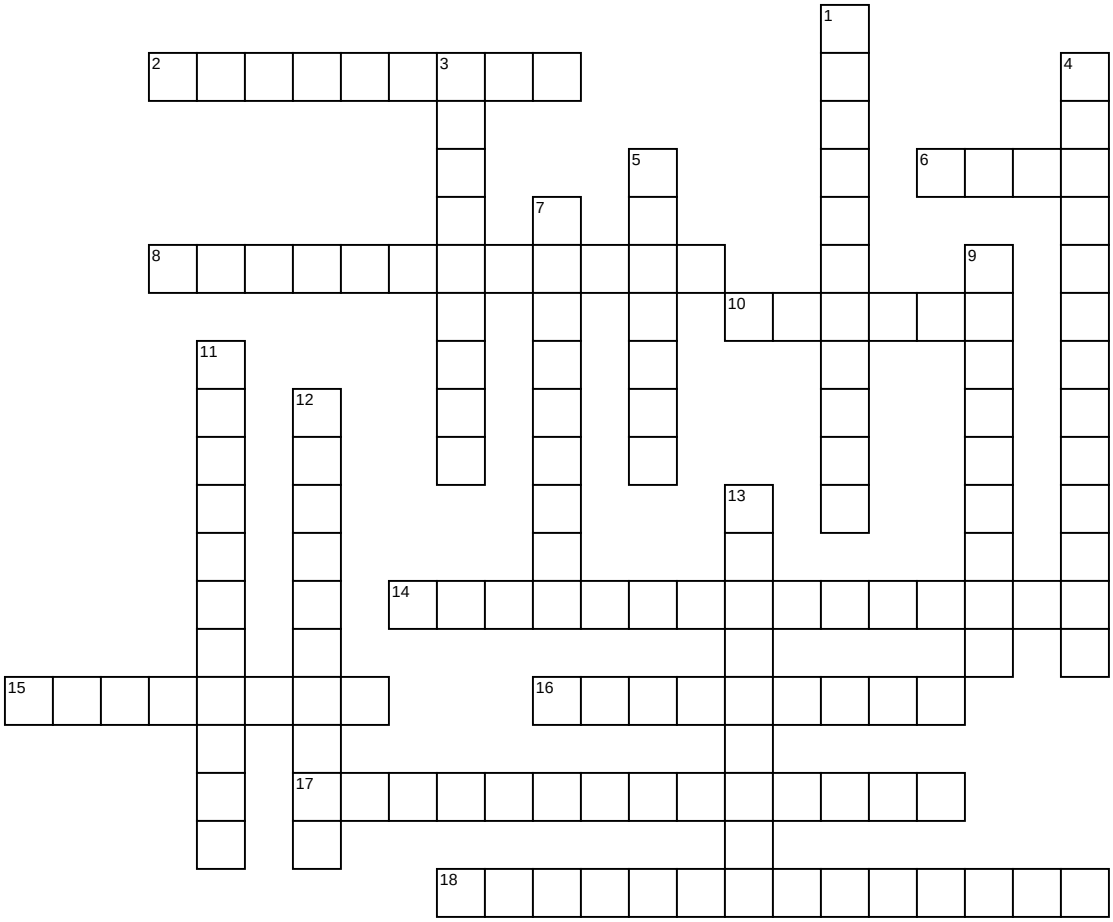

ACROSS

2 _____ is the process by which an amine group is introduced into an organic molecule.
6 The _____ cycle (also known as the ornithine cycle) is a cycle of biochemical reactions occurring in many animals that converts ammonia into a less toxic substance.
8 _____ is the process of glycogen synthesis, in which glucose molecules are added to chains of glycogen.
10 A _____ cycle is when two metabolic pathways run simultaneously in opposite directions and have no overall effect other than wasting energy.
14 _____ is the generation of glucose from non-sugar carbon substrates like pyruvate, lactate, glycerol, and glucogenic amino acids.
15 The triterpene isoprenoid compound _____ is the biochemical precursor to the whole family of steroids.
16 The pentose _____ pathway is a process that serves to generate NADPH and the synthesis of pentose sugars.
17 _____ (or aminotransfer) is the reaction between an amino acid and an alpha-keto acid in which the amino group is transferred from the former to the latter.
18 _____ is the catabolism of glycogen by removal of a glucose monomer and addition of phosphate to produce glucose-1-phosphate.

DOWN

1 _____ pyrophosphate is an intermediate in the mevalonate pathway used by organisms in the biosynthesis of terpenes and terpenoids, and thence a host of other substances such as steroids.
3 Glucose _____ is an enzyme that catalyzes the conversion of glucose into fructose or the reverse process.
4 The enzyme _____ connects the pentose phosphate pathway to glycolysis in mammals, feeding excess sugar phosphates into the main carbohydrate metabolic pathways.
5 _____ diphosphate glucose is a nucleotide that is used as an activated form of glucose, a substrate for glycosyltransferases.
7 _____ acid is a key organic compound in biochemistry. It is a precursor in the biosynthetic pathway, known as the HMG-CoA reductase pathway, that produces terpenes and steroids.
9 HMG-CoA _____ is the first enzyme of the mevalonate pathway that produces terpenes, terpenoids, steroids and various other biomolecules.
11 Pyruvate _____ is an enzyme of the ligase class that catalyzes the irreversible carboxylation of pyruvate to form oxaloacetate. Oxaloacetate can then either proceed to the citric acid cycle or to gluconeogenesis.
12 The _____ pathway is an important cellular metabolic pathway for the production of dimethylallyl pyrophosphate and isopentenyl pyrophosphate, substances which are the building blocks of a large variety of biomolecules.
13 Glucose 6-_____ (also known as Robison ester) is glucose sugar phosphorylated on carbon 6.