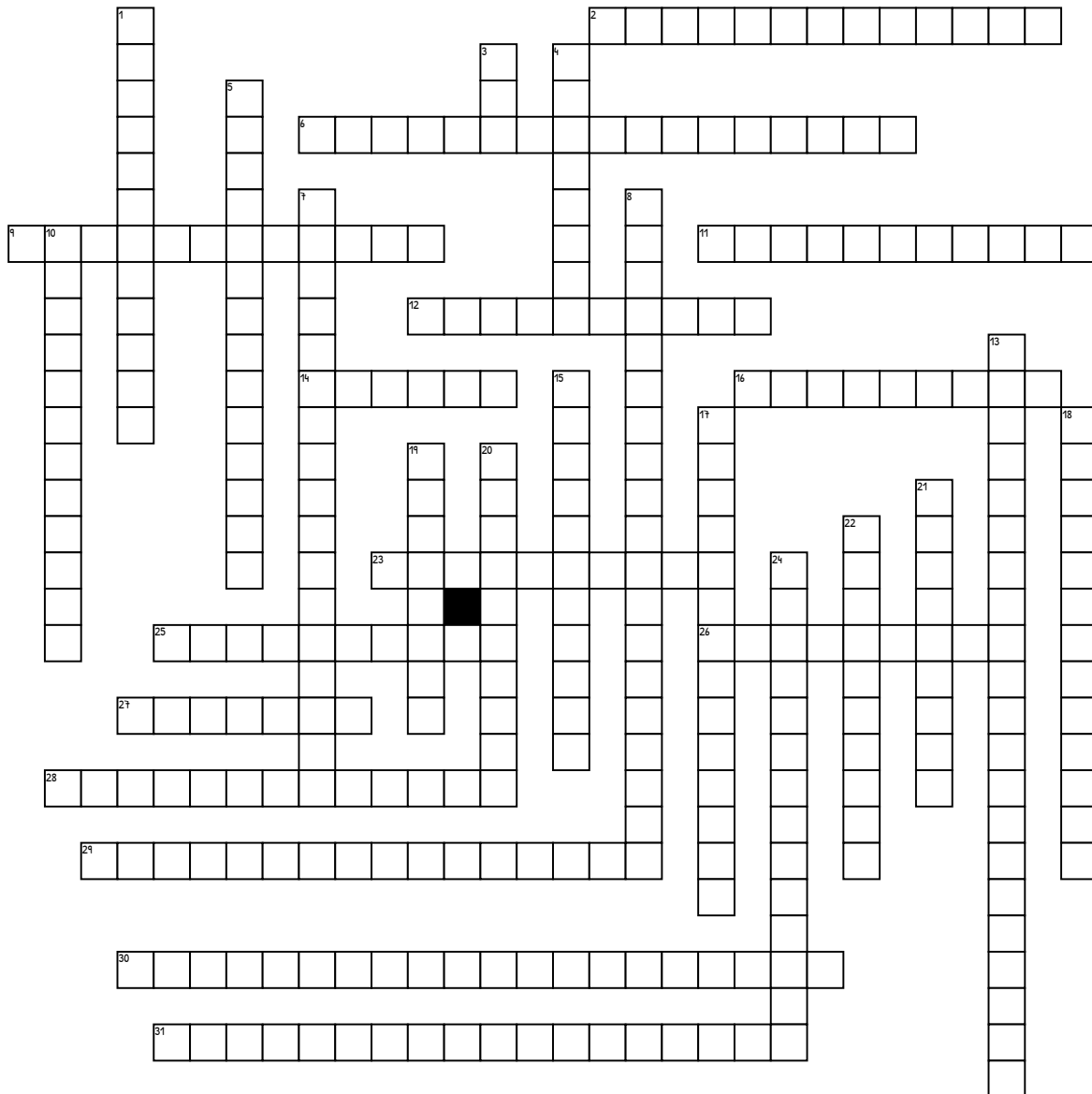


# AQA a-level biology topic 1 biological molecules



## Across

2. Molecules formed by the condensation of two monosaccharides
6. The way that the whole protein folds to make a three dimensional structure
9. A type of lipid formed by the condensation of one molecule of glycerol, two molecules of fatty acid and a phosphate group
11. Molecules formed by the condensation of many amino acids
12. A biochemical test used to test for the presence of starch
14. A protein molecule that acts as a biological catalyst and increases the rate of biochemical reactions
16. Molecules formed by the condensation of two amino acids.
23. Breaking a chemical bond between two molecules involving the use of a water molecule.
25. The amount of energy needed for a substance to change state
26. A polysaccharide made of beta glucose monomers that is used as a structural polysaccharide which provides strength to plant cell walls
27. The smaller units from which larger molecules are made
28. A biochemical test used to test for reducing sugars that produces a different colour based on the amount of reducing sugar present.

29. The individual sequence of amino acids in a protein

30. An information storing molecule made up of deoxyribonucleotide monomers joined by phosphodiester bonds to form a double helix

31. The local interactions of the amino acids in the polypeptide chain

## Down

1. A type of reaction that joins two molecules together with the formation of a chemical bond involving the elimination of a molecule of water
3. A relatively short molecule made up of ribonucleotide monomers joined by phosphodiester bonds
4. A highly branched polysaccharide made of alpha glucose monomers that is used as the main storage of energy in humans and animals
5. A bond between two monosaccharides formed in a condensation reaction
7. A biochemical test that produces a cloudy emulsion when performed on lipids
8. A structure only applicable to proteins with multiple polypeptide chains that describes the interactions of the different chains

10. The amount of energy needed to raise the temperature of a substance by a specific amount.

13. a molecule that acts as the energy currency of cells formed from a molecule of ribose, a molecule of adenine and three phosphate groups

15. An enzyme that breaks the hydrogen bonds between the two DNA strands in the DNA molecule that is going to be replicated

17. The individual sugar monomers from which larger carbohydrates are made

18. An enzyme that catalyses the condensation reactions between the new nucleotides in the synthesis of the new DNA strand

19. Molecules made from a large number of monomers joined together

20. A biochemical test that produces a purple solution in the presence of protein

21. The monomers containing an amino group (NH<sub>2</sub>), a carboxyl group (COOH) and a variable R group that make up proteins

22. A model of enzyme action that describes how enzymes undergo subtle conformational changes to better fit the substrate

24. Molecules formed by the condensation of many monosaccharides