

Acids and Acidity

This is the sixth text which will be used for practicing dictation and translation in the written part of the exam.

The key words are emphasized in bold and there is a list of them at the end of the presentation.

Acids and Acidity

Strong acids are **corrosive** and burn clothes or skin. However, acids are found in fruit, ants and even our own stomach. Some acids dissolve metals. The strength of an acid is measured on the pH scale.

Acid rain – rainwater naturally contains weak **carbonic acid**, but pollution is now adding **sulphuric** and **nitric acid** to it. This creates a strong cocktail of acids that can kill trees and aquatic life, and **erodes** statues and buildings.

Alkalis, Bases and Salts

Bases are compounds that cancel out or neutralize acidity. When a base reacts with an acid, a substance called salt is created. Water is also produced. Pure water is neutral. It is neither **acidic** nor **alkaline**. Alkalis are bases that are soluble in water.

Ammonia

Fertilizers containing nitrogen are made from the alkali ammonia (NH_3). Ammonia is produced by the Haber process which causes nitrogen and hydrogen to react together.

Biochemistry

All cells regardless of type resemble each other in fundamental ways. The same classes of substances – proteins, **carbohydrates**, lipids and **nucleic acids** are present in all cells and have similar biochemical functions.

Carbohydrates

Commonly known as sugars, **starches** and cellulose, carbohydrates are important sources of food energy. There are two main categories: **monosaccharides** and **polysaccharides**.

Lipids

Lipids are a class of water-insoluble compounds of biochemical systems. The most common lipids are **fats** and **oils**. The main biochemical function of fats is **food storage**.

Proteins

Proteins are a particularly important class of compounds comprising **enzymes** and polymers of **amino acids**. The amino acids in a protein are joined to each other by **peptide bonds** in a **polypeptide chain**.

Key Words:

Corrosive – korozivni

Acid rain – kisela kisa (rain – uncountable noun)

Rainwater – kisnica

Carbonic acid – ugljena kiselina, karbonatna kiselina

Sulfuric acid – sumporna kiselina

Nitric acid – azotna kiselina

Alkalis – alkalije

Acidic – kiseo / Alkaline – alkalni

Key Words:

Ammonia – amonijak

Fertilizer – đubrivo

Carbohydrates – ugljeni hidrati

Nucleic acids – nukleinske kiseline

Starch – škrob

Monosaccharides/polysaccharides – mono/polisaharidi

Fats/oils – masti/ulja

Key Words

Food storage – skladištenje hrane

Enzyme – enzim

Peptide bond – peptidna veza

Polypeptide chain – polipeptidni lanac