Enzymes

IGCSE Biology · Vocabulary in context

Word	Example
catalyst /ˈkætəlɪst/	A **catalyst** speeds up a reaction without being used up.
rate /reɪt/	The **rate** of reaction is faster when it is warm.
chemical reaction /ˈkemɪkl rɪˈækʃn/	Digestion is a **chemical reaction**.
enzymes /ˈenzaɪmz/	**Enzymes** speed up reactions in the body.
proteins /ˈprəʊtiːnz/	Meat, eggs and beans are rich in **proteins**, which are made from amino acids.
metabolism /məˈtæbəlɪzəm/	**Metabolism** is all the chemical reactions in a living thing.
active site /ˈæktɪv saɪt/	The substrate fits into the **active site** of the enzyme.
molecule /ˈmɒlɪkjuːl/	A water **molecule** has two hydrogen atoms and one oxygen atom.
substrate /ˈsʌbstreɪt/	Starch is the **substrate** of amylase.
complementary /ˌkɒmplɪˈmentəri/	The active site has a **complementary** shape to the substrate.
enzyme-substrate complex /ˈenzaɪm ˈsʌbstreɪt ˈkɒmpleks/	The substrate joins the enzyme to form an **enzyme-substrate complex**.
products /ˈprɒdʌkts/	Glucose molecules are the **products** of starch digestion.

exercises.lol exercises.com.cn

Word	Example
specific /spə'sɪfɪk/	Enzymes are **specific**: each one works on only one substrate.
temperature /'temprɪtʃə/	The thermometer shows the water's **temperature**.
kinetic energy /kɪ'netɪk 'enədʒi/	A fast car has a lot of **kinetic energy**.
collisions /kə'lɪʒnz/	More **collisions** between enzyme and substrate speed up the reaction.
optimum temperature /'ɒptɪməm 'temprɪtʃə/	Human enzymes have an **optimum temperature** of about 37 °C. 37 °C
denatured /'denətʃəd/	Heat changes the shape of a **denatured** enzyme.
spotting tile	Put a drop of iodine in each hole of the **spotting tile**.
water bath	Heat the test tube in a **water bath** at 80 °C. 80 °C
catalase /'kætəleɪz/	**Catalase** breaks down hydrogen peroxide into water and oxygen.
variable /'veərɪəbl/	A **variable** stores a value that can change.
independent variable /ˌɪndɪ'pendənt 'veərɪəbl/	The **independent variable** is the one you change.
dependent variable /dɪ'pendənt 'veərɪəbl/	The **dependent variable** is the one you measure.
controlled variable /kən'trəʊld 'veərɪəbl/	pH is a **controlled variable**: keep it the same. pH
buffer solutions	Use **buffer solutions** to keep the pH steady. pH

exercises.lol exercises.com.cn

Word	Example
control /kən'trəʊl/	Use boiled enzyme as a **control**.

exercises.lol exercises.com.cn