

ENZYME WORKSHEETS

Name :

Date :

Fill in the gaps in the following sentences using the words in the box below.

1. Enzymes are biological _____ that speed up chemical reactions in living organisms.
2. Enzymes are protein molecules, which are made up of long chains of _____
3. The sequence and type of amino acids are _____ in each protein, so they produce enzymes with many different shapes and functions.
4. The shape of an enzyme is very important to its _____

different

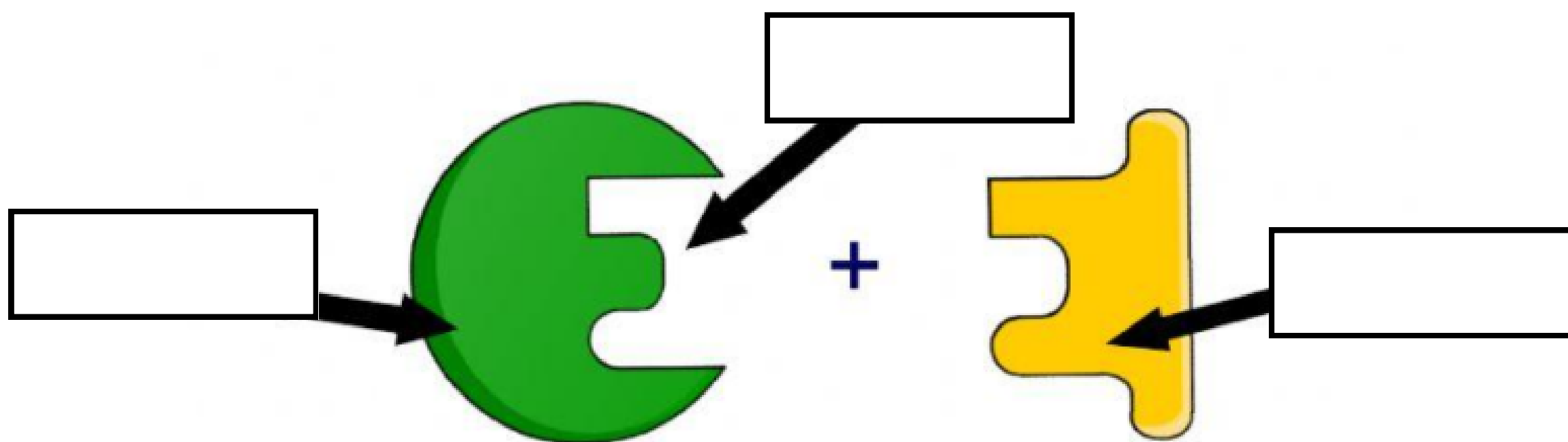
catalysts

function

the same

amino acids

Label the image below with the following terms: active site, substrate, enzyme.



5. Enzymes and their substrates are often compared to a lock and key. This is called the Lock and Key Model. Label the lock and key in the image above.
6. Explain what would happen if a substrate molecule with a different shape to the enzyme came into contact with the enzyme's active site.

ENZYME WORKSHEETS

Fill in the gaps in the following sentences using the words in the box below.

1. Enzymes are biological catalysts that speed up chemical reactions in living organisms.
2. Enzymes are protein molecules, which are made up of long chains of amino acids
3. The sequence and type of amino acids are different in each protein, so they produce enzymes with many different shapes and functions.
4. The shape of an enzyme is very important to its function

different

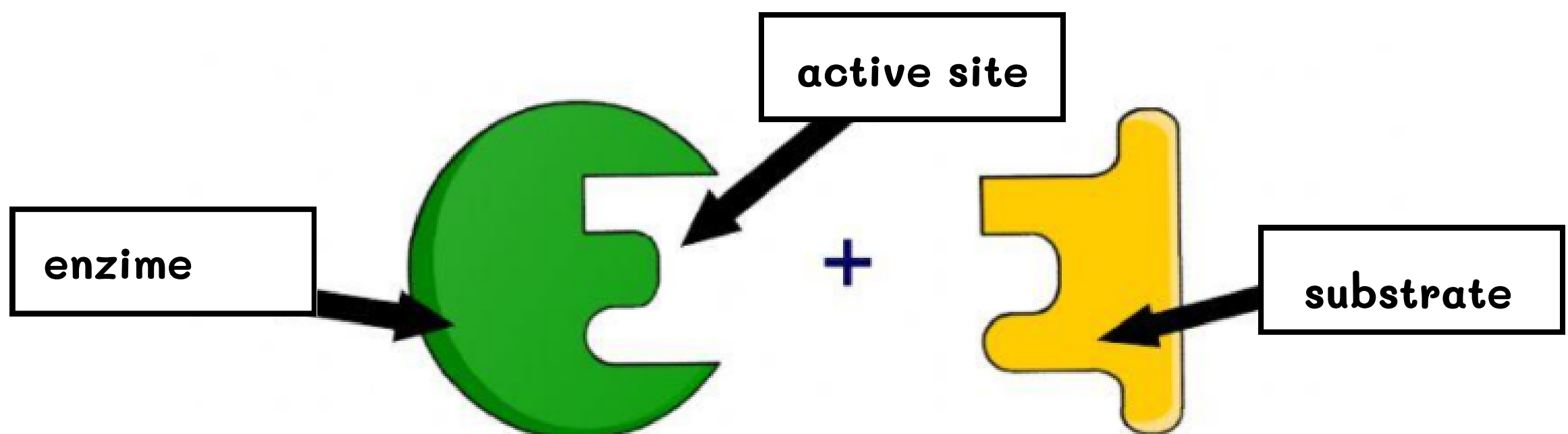
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6. Explain what would happen if a substrate molecule with a different shape to the enzyme came into contact with the enzyme's active site.

In case of lock and key model of enzyme-catalyzed reactions, active site is a rigid site. A different shape of a substrate would not be entertained, hence there will be no reaction