

H.W  
12/5/21  
2.

... breathing. ... stay open

what are the different ways in which glucose is oxidised to provide energy in various organisms?

Ans In diverse organisms different ways are followed ~~there~~ this involves two processes. In the first step, the breakdown of glucose, a six-carbon molecule, into a three-carbon molecule called pyruvate. Further, the pyruvate ~~is~~ broken down into energy.

1) Aerobic respiration

This respiration takes place in presence of air. This takes place in mitochondria. It breaks up the three-carbon pyruvate molecule to give three molecule of carbon dioxide.

2. Anaerobic respiration :- This <sup>respiration</sup> takes place in the absence of oxygen. further the pyruvate may be converted into ethanol and carbon dioxide.

8. What are the differences between aerobic and anaerobic respiration? Name some organisms that use the anaerobic mode of respiration.

Ans. Aerobic respiration	Anaerobic respiration
1. It takes place in the presence of oxygen.	1. It takes place in the absence of oxygen.
2. Complete breakdown of food occurs	2. Partial breakdown of food occurs
3. The end products are carbon dioxide and water.	3. The end products are ethanol and carbon dioxide or lactic acid.
4. Produces more or considerable amount of energy.	4. Produces less energy in anaerobic respiration.

→ Some organisms used in anaerobic



respiration and yeast, bacteria etc.