Name: _____ Date: _____

Respiration in Organisms

Q1. List the similarities and differences between aerobic and anaerobic respiration.

Ans. _____

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Q2. How do we breathe?

Ans. _____

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Education with Fun

Respiration in Organisms

Q1. List the similarities and differences between aerobic and anaerobic respiration.

Ans. Similarities

i. Both aerobic and anaerobic respirations are types of cellular respiration.

ii. Both generate energy by breaking down glucose and produces byproducts.

Differences

Aerobic Respiration	Anaerobic respiration
1. It occurs in the presence of oxygen.	1. It occurs in the absence of oxygen.
2. Large amount of energy is released.	2. Small amount of energy is released.
3. Glucose breaks down into water and carbon dioxide.	3. Glucose breaks down into alcohol and carbon dioxide.
4. It is a slow process.	4. It is a fast process.
5. It occurs in most of the plants and animals.	5. It occurs in human muscles cells, yeast, bacteria etc.

Q2. How do we breathe?

Ans. Normally we take in air through our nostrils. When we inhale air, it passes through our nostrils into the nasal cavity. From the nasal cavity, the air reaches our lungs through the windpipe. Lungs are present in the chest cavity. This cavity is surrounded by ribs on the sides. A large, muscular sheet called diaphragm forms the floor of the chest cavity. Breathing involves the movement of the diaphragm and the rib cage. During inhalation, ribs move up and outwards and diaphragm moves down. This movement increases space in our chest cavity and air rushes into the lungs. The lungs get filled with air. During exhalation, ribs move down and inwards, while diaphragm moves up to its former position. This reduces the size of the chest cavity and air is pushed out of the lungs.