

Neha conducted an experiment with two aquatic animals – a fish and a frog. She observed that the fish struggled when taken out of water, but the frog survived for a while. She wanted to understand the difference in their respiratory systems.

Questions:

1. Why did the fish struggle more than the frog when taken out of water?
2. Compare the respiratory organs of fish and frog.
3. Explain why frogs are able to survive on land and in water.
4. What is cutaneous respiration, and which animal in the case shows it?
5. If the frog is in dry air for too long, what would happen and why?

1. During inhalation, the diaphragm moves:

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| A. Upward and becomes dome-shaped | B. Downward and flattens |
| C. Sideways | D. Randomly |

2. Which of the following is NOT a product of aerobic respiration?

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|-------------------|----------|----------------|-----------------|
| A. Carbon dioxide | B. Water | C. Lactic acid | D. Energy (ATP) |
|-------------------|----------|----------------|-----------------|

3. In which of the following parts of the human body does gaseous exchange actually take place?

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| A. Windpipe | B. Bronchi | C. Alveoli | D. Nose |
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4. Which of the following processes releases the most energy from one molecule of glucose?

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| A. Aerobic respiration | B. Anaerobic respiration in yeast |
| C. Anaerobic respiration in human muscles | D. Photosynthesis |

5. Which of the following is a characteristic feature of gills in aquatic animals?

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| A. They take in carbon dioxide from water | B. They release nitrogen into water |
| C. They extract dissolved oxygen from water | D. They produce oxygen in the body |

