

PRACTICE WORKSHEET 1: EXPERIMENTS WITH WATER | CLASS 5 ENVIRONMENTAL STUDIES

Multiple Choice Questions

1. What happens when you add sugar to water and stir it?
 - a. The sugar floats on top
 - b. The sugar dissolves completely
 - c. The water becomes colored
 - d. The sugar forms lumps
 2. Which of the following will sink in water?
 - a. Oil
 - b. A small stone
 - c. A plastic bottle cap
 - d. A piece of paper
 3. What is the term for a substance that dissolves in water?
 - a. Soluble
 - b. Insoluble
 - c. Immiscible
 - d. Dense
 4. What happens to oil when added to water?
 - a. It dissolves
 - b. It sinks
 - c. It floats on top
 - d. It changes color
 5. Which factor affects the rate at which a substance dissolves in water?
 - a. The amount of sunlight
 - b. The temperature of the water
 - c. The type of container
 - d. The color of the water
-

Fill in the Blanks

1. Substances that _____ in water are called soluble.
 2. A _____ will float on water because it is less dense.
 3. Oil and water do not mix because they are _____.
 4. _____ speeds up the process of dissolving a substance in water.
 5. A coin will _____ in water because it is denser than water.
-

PRACTICE WORKSHEET 1: EXPERIMENTS WITH WATER | CLASS 5 ENVIRONMENTAL STUDIES

True or False

1. Salt dissolves faster in warm water than in cold water. (True/False)
 2. Paper will sink in water immediately. (True/False)
 3. Oil forms a layer on top of water because it is less dense. (True/False)
 4. Water can dissolve all substances. (True/False)
 5. Substances that are insoluble in water can still float. (True/False)
-

Short Questions

1. Why do some substances dissolve in water while others do not?
 2. What happens when oil is poured into water, and why?
 3. How does the temperature of water affect the dissolving process?
 4. Why does a plastic bottle cap float in water while a stone sinks?
 5. How can you separate oil from water if they are mixed in a container?
-

Long Questions

1. Explain the difference between soluble and insoluble substances with examples.
 2. Describe an experiment to test which materials sink or float in water.
 3. Discuss the importance of understanding which substances dissolve in water and provide examples of its everyday applications.
-

PRACTICE WORKSHEET 1: EXPERIMENTS WITH WATER | CLASS 5 ENVIRONMENTAL STUDIES

Answer Key

Multiple Choice Questions

1. b. The sugar dissolves completely
 2. b. A small stone
 3. a. Soluble
 4. c. It floats on top
 5. b. The temperature of the water
-

Fill in the Blanks

1. Dissolve
 2. Light object
 3. Immiscible
 4. Warm water
 5. Sink
-

True or False

1. True
 2. False
 3. True
 4. False
 5. True
-

Short Questions

1. Some substances dissolve in water because they are soluble, meaning their particles mix well with water molecules. Insoluble substances do not mix because their particles are not attracted to water molecules.
2. When oil is poured into water, it floats on top because oil is less dense and immiscible, meaning it does not mix with water.
3. Warm water increases the movement of water molecules, allowing substances to dissolve faster. Cold water slows down this process.
4. A plastic bottle cap is less dense than water, so it floats. A stone is denser than water, so it sinks.
5. Oil can be separated from water by using a spoon to skim the oil off or by pouring the water carefully from the bottom of the container.

Long Questions

1. **Soluble and Insoluble Substances:** Substances like sugar and salt dissolve in water and are called soluble. Substances like sand and oil do not dissolve and are insoluble. Solubility depends on the substance's properties and its interaction with water.
 2. **Experiment on Sink or Float:** Collect objects like a stone, a plastic cap, and a paper clip. Fill a bowl with water and place each object in it. Observe which items sink and which float. Record your results and analyze why this happens based on density.
 3. **Importance of Solubility:** Knowing which substances dissolve in water helps in cooking (e.g., sugar and salt), medicine (e.g., dissolving tablets), and cleaning (e.g., soaps). Understanding solubility also aids in separating mixtures and treating water.
- 1.