### CHAPTER -7 EXPERIMENTS WITH WATER

### 1. Ayesha put a puffed puri in a bowl of water. Would it sink or float?

Ans. It would float.

# 2. You put a steel plate on water. Would it sink or float? What would happen to a spoon?

**Ans.** If the steel plate is put carefully over the surface of water, it would float. However, the spoon will sink.

### 3. Would the cap of plastic bottle cap sink or float on water?

Ans. It would float.

# 4. Have you seen that something float on water while of hers sink? Think how this happens!

**Ans.** Yes, I think that, when water displaced by any thing is greater than it weight, it floats on water otherwise it sinks.

### 5. Find out from the other groups which things float and which sank in the water?

Ans. A football, a piece of thermocol etc. float on water while a cricket ball, a spoon etc. sink.

After doing the experiment, write

1. The iron nail sank in the water but the katori floated. I think this happened because the weight of water displaced by the iron was less than it but the weight of water displaced by the katori was more than it.

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2. The empty plastic bottle floated on water. The bottle filled with water sank because the weight of water displaced by the empty plastic bottle was more than its weight but the weight of bottle filled with water was more that that of the weight of watered displaced by it.

3. The aluminum foil floated when it was spread out. When pressed tightly into a ball it sank. This may have happened because the weight of aluminum foil is less than that of water displaced by it but the weight of aluminum ball is more than that of the water displaced by it.

6. Take some water in a glass. Put a lemon in it. Now keep putting salt in the water, halfa-spoon at a time. Were you able to float your lemon in water?

Ans. Yes, the lemon starts to float on water.

### 7. What do you think, the lemon floated in salty water because....

Ans. Because after adding salt, water because sticker.

8. Make groups of four friends. For the experiment you will need 4-5 glasses or bowls or bowls and the things listed in the table. Take some water in each glass. Now try to dissolve one thing in one glass. Observe that happens and note in the table.

Ans.

Things	Did it dissolve or not?	What happened after Keeping for 2 minutes?
1. Salt	Yes	Salt and water got mix together completely.
2. Soil	No	Soil settled down at the bottom of the glass.
3. Chalk powder	No	Chalk settled down at the bottom of the glass.
4. 1 Spoon milk	Yes	Milk and water got mixed together completely.
5. Oil	Yes	Oil floats on the surface of water.

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#### 9. Could you see the salt after it dissolved in water? If no, why?

Ans. No, because salt got dissolved completely into the water.

#### 10. Does that mean the water does not have salt? If it has, then where is the salt?

Ans. Of course, water contains salt. It is completely mixed up with water.

## 11. What difference did you see in water with salt and water with chalk powder after keeping for sometime?

**Ans.** Water and salt got mixed together completely while chalk powder settle down at the bottom of water.

## 12. Which of the two would you be able to separate from the water by straining with a cloth-salt or chalk powder?

Ans. We can separate chalk powder by straining with a cloth.

#### 13. Do you think the oil dissolved in the water? Why do you think so?

Ans. I do not think so because oil is insoluble in water.

## 14. You also try to do the same and then which drop went ahead? Why did it slide faster?

**Ans.** The water drop went ahead. It happens because water does not stick to the tiffin box but the oil drop sticks.