

# SCIENCE

## CHAPTER 6: CHANGES AROUND US



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## Important Questions

### Multiple Choice Questions:

Question 1. When ice melts into water, what types of changes do you observe?

- (a) Physical changes
- (b) Chemical changes
- (c) Both (a) and (b)
- (d) None of these

Question 2. Cooked food is the:

- (a) Chemical change
- (b) Physical change
- (c) Both (a) and (b)
- (d) None of these

Question 3. If we burn a candle, the height of a candle will.

- (a) Decreased
- (b) Increased
- (c) Remain same
- (d) None of these

Question 4. For making the curd, we should the milk.

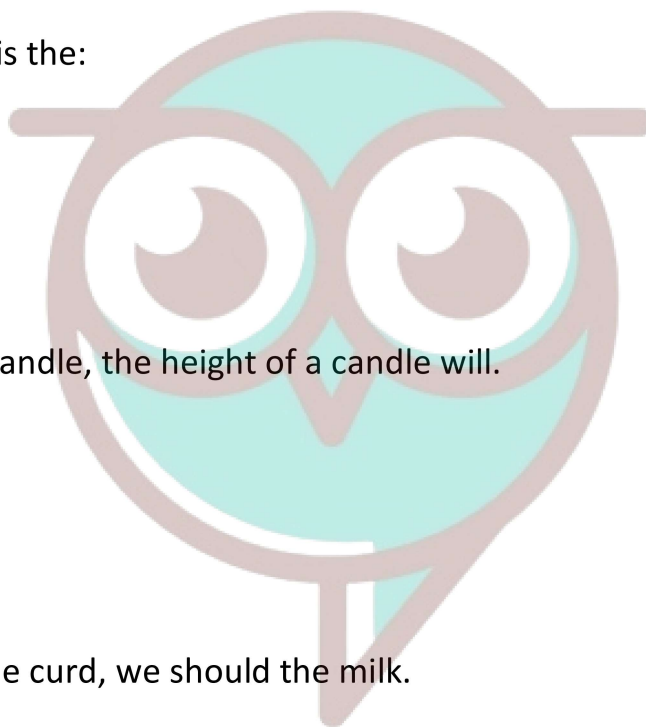
- (a) Heat
- (b) Cool
- (c) Boil
- (d) None of these

Question 5. Metal rim is made slightly than the wooden wheel.

- (a) Bigger
- (b) Smaller
- (c) Equal
- (d) None of these

Question 6. The metal rim expands and fits into the wheel.

- (a) On boiling
- (b) On cooling
- (c) On heating



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(d) All of these

Question 7. The black material (tar) for repairing road is.

(a) Heated

(b) Cooled

(c) Heated and cooled

(d) None of these

Question 8. The incense stick has burnt to give off.

(a) Gases

(b) Ashes

(c) Both (a) and (b)

(d) None of these

Question 9. Metal expand on heating and contract on.

(a) Boiling

(b) Washing

(c) Cooling

(d) Both (a) and (b)

Question 10. A change in a substance can be brought by heating it or by it with other substances.

(a) Cooling

(b) Boiling

(c) Washing

(d) Mixing

Question 11. An iron piece is heated red hot and beaten into a shape.

(a) Desired

(b) Undesired

(c) Same

(d) All of these

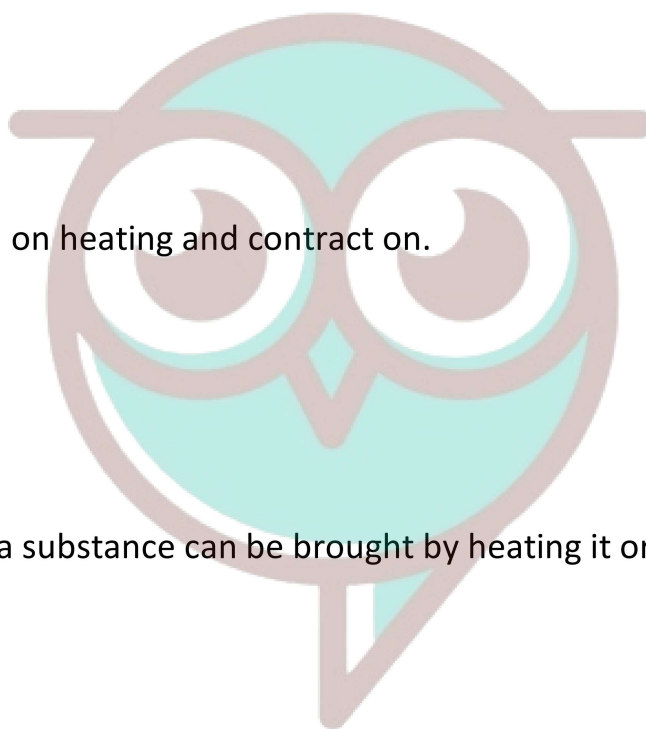
Question 12. The change which can be reversed is known as:

(a) Reversible change

(b) Irreversible change

(c) Both (a) and (b)

(d) None of these



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Question 13. The change which cannot be reversed is known as:

- (a) Reversible change
- (b) Irreversible change
- (c) Both (a) and (b)
- (d) None of these

Question 14. A process in which liquid changes into gas is known as:

- (a) Solution
- (b) Fusion
- (c) Condensation
- (d) Evaporation

Question 15. A process by which gas is turned into liquid is known as:

- (a) Solution
- (b) Fusion
- (c) Condensation
- (d) Evaporation

### Very Short Question:

1. Give two examples of slow changes.
2. Give two examples of fast changes.
3. Give two examples of reversible changes.
4. Give two examples of irreversible changes.
5. Can you say deforestation is an irreversible or reversible change?
6. Does the size of the paper change after making an aeroplane by folding it or by cutting it?
7. Can you change the shape of an eraser after erasing?
8. Why does a blacksmith heat the metal rim to fix it on a cart wheel?
9. What are slow and fast changes? Give examples.
10. Classify the following into slow and fast changes:
  - (i) Spinning of top
  - (ii) Formation of day and night
  - (iii) Formation of curd from milk
  - (iv) Change of season
  - (v) Making curd from milk by adding lemon juice.

### Short Questions:

1. What is a physical change? Explain with example.
2. What is a chemical change? Explain with example.
3. What happens when sugar is heated?

### Long Questions:

1. Explain how a metal rim slightly smaller than a wooden wheel can be fixed on it.
2. How does curd being set? Is this change reversible?

### Answer Key-

#### Multiple Choice Answers:

1. (a) Physical changes
2. (a) Chemical change
3. (a) Decreased
4. (a) Heat
5. (b) Smaller
6. (c) On heating
7. (a) Heated
8. (c) Both (a) and (b)
9. (c) Cooling
10. (d) Mixing
11. (a) Desired
12. (a) Reversible change
13. (b) Irreversible change
14. (d) Evaporation
15. (c) Condensation



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#### Very Short Answers:

1. Answer:
  - (a) Growing of plants
  - (b) Ripening of fruits.
2. Answer:
  - (a) Blowing of balloon
  - (b) Rolling out roti from dough ball.
3. Answer:

(a) Drying of wet clothes

(b) Heating of milk.

4. Answer:

(a) Milk to cheese

(b) Cooking of food.

5. **Answer:** It is an irreversible change.

6. **Answer:** Yes.

7. **Answer:** Yes.

8. **Answer:** A blacksmith heats the metal rim to fix it onto a cart wheel because a metal rim is made slightly smaller. On heating, the rim expands and fits onto the wheel. Then on cooling, the rim contracts and fits tightly onto the wheel.

9. **Answer:** The changes which take place in a long period of time are called slow changes whereas those changes which take place in a short period of time are called fast changes.

Examples:

(a) Rusting of iron, formation of day and night, ripening of fruits, growing of trees are slow changes.

(b) Burning of paper, stretching of rubber band, blowing of balloons, bursting of crackers are fast changes.

10. Answer:

(i) Fast change

(ii) Slow change

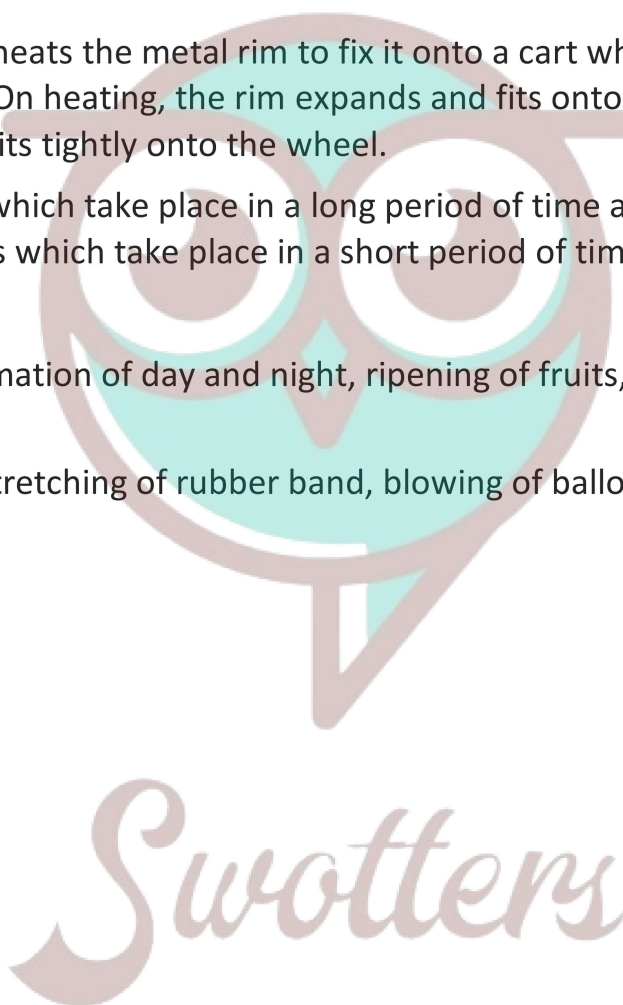
(iii) Slow change

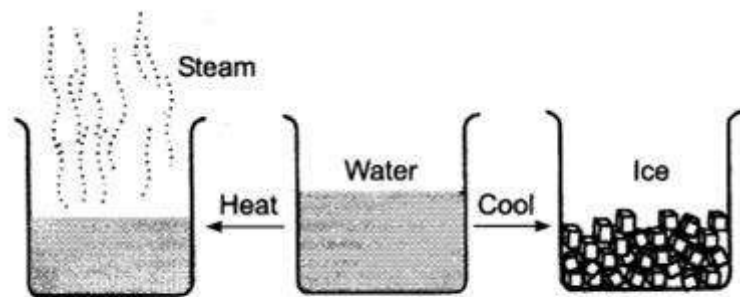
(iv) Slow change

(v) Fast change.

### Short Answer:

1. **Answer:** The changes in which only physical properties of substances are changed and no new substance is formed is called physical change. It is a reversible change. Example: Boiling and freezing of water.

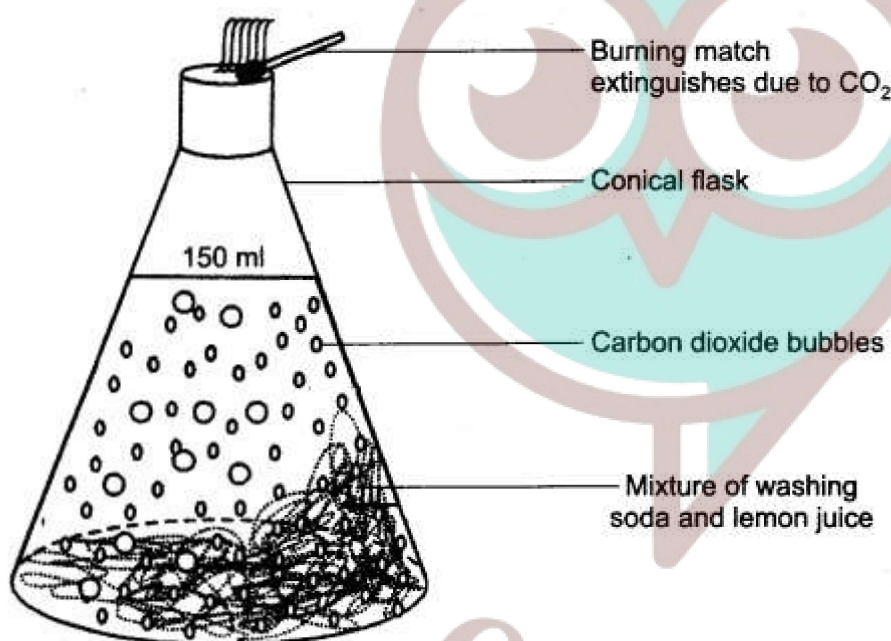




Physical changes

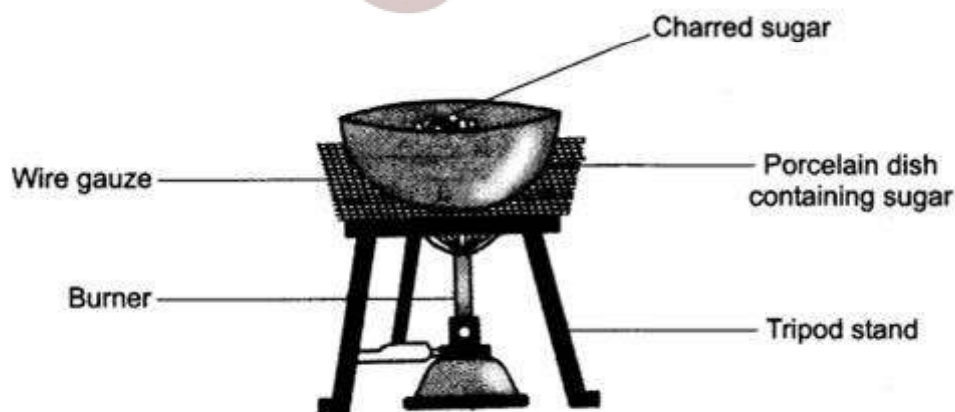
2. **Answer:** The changes in which new substance with new chemical properties are formed are called chemical changes.

Example: Reaction between washing soda and lemon juice in which CO<sub>2</sub> and other substances are formed.



Reaction between washing soda and lemon juice

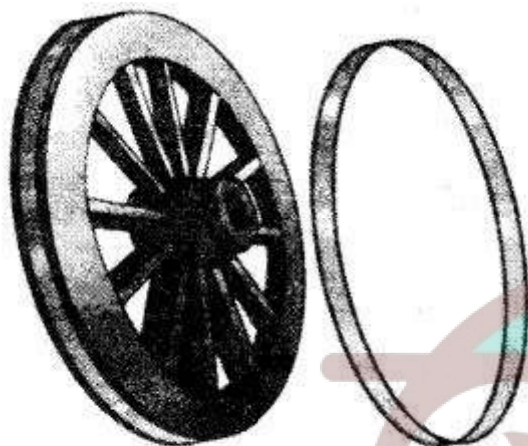
3. **Answer:** When sugar is heated continuously then a black powdery substance is formed. This is a chemical change.



Heating of sugar

## Long Answer:

- 1. Answer:** The metal rim is always made slightly smaller than the wooden wheel. The metal rim is heated. On heating, the rim expands and fit onto the wheel. Cold water is then poured over the rim. Due to cooling the metal rim contracts and fits tightly onto the wheel.



Cart wheel with metal rim fixed on it.

- 2. Answer:** A small quantity of curd is added to warm milk. The milk is stirred and is set aside undisturbed for a few hours at a warm place. In a few hours, the milk changes into curd. Curd formed from milk cannot be changed into milk again. So, this an irreversible (cannot be reversed) change.

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