Chapter 6 Textbook Questions Solved

1. To walk through a waterlogged area, you usually shorten the length of your dress by folding it. Can this change be reversed?

Ans: Yes, it can be reversed by unfolding the dress.

2. You accidentally dropped your favourite toy and broke it. This is a change you did not want. Can this change be reversed?

Ans: No, this change (breaking of toy) cannot be reversed.

3. Some changes are listed in the following table. For each change, write in the blank column, whether the change can be reversed or not.

S. No.	Change	Can be reversed (Yes/No)		
1.	The sawing of a piece of wood	-15-1-2		
2.	The melting of ice candy			
3.	Dissolving sugar in water			
4.	The cooking of food			
5.	The ripening of a mango	* e - ax		
6.	Souring of milk			

Ans. 1. No 2. Yes 3. Yes 4. No 5. No 6. No.

4. A drawing sheet changes when you draw a picture on it. Can you reverse this change?

Ans: No, we cannot get fresh drawing sheet once a picture is drawn on it with paint/ oil or water. However, we can reverse the change, if soft pencil is used to draw the picture.

5. Give examples to explain the difference between changes that can or cannot be reversed.

Ans: Examples of reversible and irreversible changes

Reversible changes	Irreversible changes			
Glowing of electric bulb. (It glows when switched on and becomes dark when switched off.)	Burning of paper or wood. (It gives smoke and ash, which cannot form paper or wood again).			
2. Distillation of liquid: evaporation condensation vapour	Rusting of iron. (Rust cannot be changed into iron again.)			
3. Sublimation Solid heat cool Vapour	3. Making of curd from milk.			
 Collapsing of mimosa (touch me not) leaves on touching and opening up on removing the finger. 	4. Growth of plants and animals.			

6. A thick coating of a paste of Plaster of Paris (POP) is applied over the bandage on a fractured bone. It becomes hard on drying to keep the fractured bone immobilised. Can the change in POP be reversed?

Ans: No, the change in POP cannot be reversed since it is a chemical change.

7. A bag of cement lying in the open gets wet due to rain during the night. The next day the sun shines brightly. Do you think the changes, which have occurred in the cement, could be reversed?

Ans. No, these are irreversible chemical changes.

Class 6 Science Chapter 6 VERY SHORT ANSWER TYPE QUESTIONS

1. Give two examples of slow changes.

Ans:

- (a) Growing of plants
- (b) Ripening of fruits.
- 2. Give two examples of fast changes.

Ans:

- (a) Blowing of balloon
- (b) Rolling out roti from dough ball.
- 3. Give two examples of reversible changes.

Ans:

- (a) Drying of wet clothes
- (b) Heating of milk.
- 4: Give two examples of irreversible changes.

Ans:

- (a) Milk to cheese
- (b) Cooking of food.
- 5. Can you say deforestation is an irreversible or reversible change? Ans: It is an irreversible change.
- 6. Does the size of the paper change after making an aeroplane by folding it or by cutting it?

Ans: Yes.

7. Can you change the shape of a eraser after erasing?

Ans: Yes.

8. Why does a blacksmith heat the metal rim to fix it on a cart wheel?

Ans: 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. What are slow and fast changes? Give examples.

Ans: The changes which take place in a long period of time are called slow changes whereas that 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. 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.

Ans:

- (i) Fast change
- (ii) Slow change
- (iii) Slow change
- (iv) Slow change
- (v) Fast change.

11. Classify the following as slow or fast change:

- (i) Bearing of heart
- (ii) Change of seasons
- (iii) Burning of paper
- (iv) Weathering of rocks
- (v) Melting of wax
- (vi) Cooking of food
- (vii) Burning of wax
- (viii) Melting of ice cream
- (ix) Curding of milk
- (x) Formation of day and night

Ans:

- (i) Fast
- (ii) Slow
- (iii) Fast
- (iv) Slow
- (v) Fast
- (vi) Slow
- (vii) Fast
- (viii) Fast
- (ix) Slow
- (x) Slow

Class 6 Science Chapter 5

1. Why do we need to separate different components of a mixture? Give two examples.

Ans: Among different components of mixture there are many substances which are harmful or not useful for us. To remove these harmful or unuseful components we need to separate them. For example:

- (a) Tea leaves are separated from the liquid with a strainer while preparing tea.
- (b) Stone pieces from wheat, rice or pulses are picked out by hand.

2. What is winnowing? Where is it used?

Ans: Winnowing is used to separate heavier and lighter components of a mixture by wind or by blowing air. This process is used by farmers to separate lighter husk particles from heavier seeds of grain.

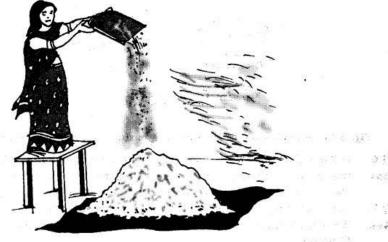


Fig. 5.9 Winnowing

3. How will you separate husk or dirt particles from a given sample of pulses before cooking?

Ans: Husk or dirt particles can be separated by winnowing, being lighter they wall fly away from pulses.

4. What is Sieving? Where can it be used?

Ans. Sieving is a process by which fine particles are separated from bigger particles by using a sieve. It is used in flour mill or at construction sites. In flour mill, impurities like husks and stones are removed from wheat. Pebbles and stones are removed from sand by sieving.



Fig. 5.10 Sieving

5. How will you separate sand and water from their mixture?

Ans. We will separate sand and water by sedimentation and decantation method. First we leave this mixture for some time. After some time, the sand which is; heavier is settled down at the bottom. After that we wall pour water into another container and the mixture will be separated.

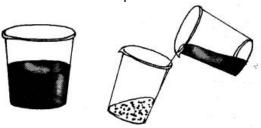


Fig. 5.11 Separating two components of a mixture by sedimentation and decantation.

7. How would you obtain clear water from a sample of muddy water?

Ans. We will obtain clear water from a sample of muddy water by the process of filtration.

A filter paper is one such filter that has very fine pores in it. Figure 5.12(a, b) shows the steps involved in using a filter paper. A filter paper folded in the form of a cone is fixed in a funnel. The mixture is then poured on the filter paper. Solid particles in the mixture do not pass through it and remain on the filter.

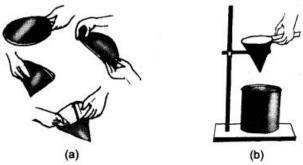


Fig. 5.12 (a) Folding a filter paper to make a cone (b) Filtration using a filter paper

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- (a) The method of separating seeds of paddy from its stalks is called .
- (b) When milk, cooled after boiling, is poured onto a piece of cloth the cream (malai) is left behind on it. This process of separating cream from milk is an example of
- (a) Salt is obtained from sea water by the process of ______.
- (b) Impurities settled at the bottom when muddy water was kept overnight in a bucket. The clear water was then poured off from the top. The process of separation used in this example is called _____. Ans.
- (a) threshing
- (b)filtration
- (b) evaporation
- (d) sedimentation and decantation

9. True or false?

- (a) A mixture of milk and water can be separated by filtration.
- (b) A mixture of powdered salt and sugar can be separated by the process of winnowing.
- (c) Separation of sugar from tea can be done with filtration.
- (d) Grain and husk can be separated with the process of decantation. Ans.
- (a) False
- (b) False
- (c) False
- (d) False