

## CBSE NCERT Solutions for Class 7 Science Chapter 8

### Back of Chapter Questions

1. Fill the missing word in the blank spaces in the following statements:

- Wind is \_\_\_\_\_ air.
- Winds are generated due to \_\_\_\_\_ heating on the earth.
- Near the earth's surface \_\_\_\_\_ air rises up whereas \_\_\_\_\_ air comes down.
- Air moves from a region of \_\_\_\_\_ pressure to a region of \_\_\_\_\_ pressure.

**Solution:**

- Wind is **moving** air.  
When the air starts to move it is called wind.
- Winds are generated due to **uneven** heating on the earth.  
Uneven heating of air creates pressure difference, which makes the wind movement.
- Near the earth's surface **warm** air rises up whereas **cold** air comes down.  
Warm air rises because it is lighter, cold air comes down because it is heavier.
- Air moves from a region of **high** pressure to a region of **low** pressure.  
Air moves from high-pressure zone to low-pressure zone of air.

2. Suggest two methods to find out wind direction at a given place.

**Solution:**

Below given are two methods of finding wind direction at a given place

- Take some sand in your hand and pour it on the ground slowly from some height, the direction of in which sand particle flies will tell us the direction of the wind.
- When we fly a kite, the kite flies in the direction of the wind.

3. State two experiences that made you think that air exerts pressure (other than those given in the text).

**Solution:**

- Movement of a door could be seen during the time of high-speed wind which is an example of air exerting pressure.
  - When we expand a balloon, air exerts pressure on the inner surface of the balloon and balloon get expanded.
4. You want to buy a house. Would you like to buy a house having windows but no ventilators? Explain your answer.

**Solution:**

A house without ventilator should not be bought. The ventilation in our house helps warm air to escape. This is because warm air is lighter than cold air, rises up and escape through ventilators. If there are no ventilators, then the warm air cannot go out easily.

5. Explain why holes are made in hanging banners and hoardings.

**Solution:**

Holes are made in hanging banners and hoardings to pass the air and reduce the pressure exerted by the air on them. If there won't be any holes in the banner or hoarding, then in case of high wind banner or hoarding will experience very high pressure. This high pressure could damage the hoarding or banner. These holes help to maintain the integrity of the hoarding or banner in high wind.

6. How will you help your neighbours in case cyclone approaches your village/town?

**Solution:**

In case of cyclone approaches, the neighbours should be helped in the following ways.

- i. Make them aware of cyclone shelter, safe space and warning forecast.
- ii. Helping them to shift essential goods, domestic animals etc. to safer places.

7. What planning is required in advance to deal with the situation created by a cyclone?

**Solution:**

The following planning is required to deal with the situation created by a cyclone.

- i. We should not ignore the warnings issued by the meteorological department through TV, radio, or newspapers.
- ii. We should make necessary arrangements to shift the essential household goods, domestic animals and vehicles, etc. to safer places.
- iii. We should avoid driving on roads through standing water, as floods may have damaged the roads.
- iv. We should keep ready the phone numbers of all emergency services like police, fire brigade, and medical centres.

8. Which one of the following places is unlikely to be affected by a cyclone?

- (i) Chennai
- (ii) Mangaluru (Mangalore)
- (iii) Amritsar
- (iv) Puri

**Solution:** (iii) Amritsar

Cyclone is most likely to affect the coastal areas. Amritsar is a land locked area.

9. Which of the statements given below is correct?

- (i) In winter the winds flow from the land to the ocean.
- (ii) In summer the winds flow from the land towards the ocean.
- (iii) A cyclone is formed by a very high-pressure system with very high-speed winds revolving around it.
- (iv) The coastline of India is not vulnerable to cyclones.

**Solution:** (i) In winter the winds flow from the land to the ocean.

Explanation:

- (i) In winter, the temperature of the water in the ocean is higher than that of land.
- (ii) In summer the temperature of the land is higher than that of water in the oceans. The air over the land gets heated and rises.
- (iii) A cyclone is formed by a low-pressure system with very high-speed winds revolving around it.
- (iv) The coastline of India is vulnerable to cyclones.