

Board – CBSE

Class – 8

Topic – Wind, Storms and Cyclones

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

- (a) Wind is _____ air.
- (b) Winds are generated due to _____ heating on the earth.
- (c) Near the earth's surface warm air rises up whereas _____ air comes down.
- (d) Air moves from a region of _____ pressure to a region of _____ pressure.

Ans. (a) Wind is moving air.

- (b) Winds are generated due to uneven heating on the earth.
- (c) Near the earth's surface, warm air rises whereas cold air comes down.
- (d) Air moves from a region of high pressure to a region of low pressure.

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

Ans. The following are the two methods to find out the direction of the wind.

- (i) While flying a kite, air exerts pressure on the kite due to which the kite flies. The direction in which the kite flies in the direction of blowing of the wind.
- (ii) While riding a bicycle, the direction in which it is difficult to ride is opposite the direction of the blowing wind.

Therefore, while flying a kite or riding a bicycle, the wind direction at a given place can be determined.

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

Ans. We have experienced that when we blow a balloon, the balloon becomes tight. If we try to fill more air, then the balloon will burst after an extent. This happens because air exerts pressure.

We have also experienced the movement of fringes of windows and doors of our houses when the wind blows at high speed. This also happens because air exerts pressure.

4. You want to buy a house. Would you like to buy a house having windows but no ventilators? Explain your answer.

Ans. A house with windows but no ventilators should not be bought. This is because warm air is lighter than cold air, and therefore, it goes up. This warm air can go outside the house, mostly through ventilators. If there are no ventilators, then the warm air cannot go outside easily.

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

Ans. Air exerts pressure. Wind blowing at high speed may break or displace many things. If holes are made in hanging banners and hoardings, air can pass through these holes, reducing the pressure exerted on the banners and hoardings. That is why holes are made in hanging banners and hoardings.

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

Ans. When a cyclone approaches, the neighbours should be helped in the following ways.

(i) By helping in moving to cyclone shelters and other safer places.

(ii) By asking them to take necessary steps to shift animals, vehicles and household goods to safer places.

(iii) By calling the emergency services such as police, fire brigade and medical centre's when required.

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

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

(i) Facilities for cyclone prediction and forecasting, which can give cyclone warnings in advance.

(ii) Quick information and communication linkages so that information can be spread quickly.

(iii) Construction of cyclone shelters and arrangements for moving people to safer places for safety during a cyclone.

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

(i) Chennai

(ii) Mangaluru (Mangalore)

(iii) Amritsar

(iv) Puri

Ans. (iii) Amritsar

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.

- Ans.**
- (i) **Correct.** In winter, the winds flow from the land to the ocean. This is called land breeze.
 - (ii) **Not Correct.** In summer, the winds flow from the ocean towards the land. This is called sea breeze.
 - (iii) **Not Correct.** A very low-pressure system forms a cyclone with very high-speed winds revolving around it. The low-pressure region is called the eye of the cyclone.
 - (iv) **Not Correct.** The coastline of India is very vulnerable to cyclones.