

## **NCERT SOLUTIONS- WINDS, STORMS AND CYCLONES**

NCERT Solutions for Class 7 Science Chapter 8 Winds, Storms and Cyclones is the essential study material to perfect Winds, Storms and Cyclones topics. The NCERT Class 7 Science solutions provided here correctly answer NCERT textbook questions. Solutions curated in a comprehensive manner will help students understand the subtopics in this chapter in a better way.

## **IMPORTANT SUB-TOPICS MENTIONED IN THE NCERT CLASS 7 SCIENCE CHAPTER 8 WINDS, STORMS AND CYCLONES:**

NCERT Solutions for Class 7 Science Chapter 8 Winds, Storms and Cyclones has the following sub-topics as given below:

Sr. no	Topics
1.	Air exerts pressure
2.	High-speed winds are accompanied by reduced air pressure
3.	Air expands on heating
4.	Wind currents are generated due to uneven heating on the earth
5.	Uneven heating between the equator and the poles
6.	Uneven heating of land and water
7.	thunderstorms and cyclones
8.	How does a thunderstorm become a cyclone?
9.	The destruction caused by the cyclones
10	Effective safety measures
11	Advanced technology has helped

## **NCERT SOLUTIONS CLASS 7 SCIENCE CHAPTER 8 WINDS, STORMS AND CYCLONES:**

1. Fill in 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, \_\_\_\_\_ air rises up, whereas \_\_\_\_\_ air comes down.

(d) Air moves from a region of \_\_\_\_\_ pressure to a region of \_\_\_\_\_ pressure.

ANS-

- Moving
- Uneven
- Warm, Cold
- high air, low air

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

ANS- There are two ways to determine the direction of the wind at a specific location:

- i. By observing the direction in which the leaves that are dry are flying.
- ii. By observing the direction in which riding a bicycle is challenging.

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

ANS- i. The balloon bursts when we try to add more air because it becomes too tight, demonstrating that air exerts pressure.

ii. When there is wind, windows, doors, and curtains all move in the same direction. This illustrates how air applies pressure.

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

ANS- Buying a home without ventilators is not a smart idea since warm air escapes via the ventilators because it is lighter than cold air. As a result, the house will stay warm without ventilators because warm air will not escape.

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

ANS- The hoardings and banners have holes that allow air to move through. As a result, banners can withstand air pressure while remaining intact.

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

ANS- In the event of a cyclone, we can help our neighbours by taking any of the following actions:

- by helping them move to a secure area.
- by helping people move their vehicles, necessary homes, and pets to a safer location.
- by contacting an emergency number for the police, fire department, hospital, etc.

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

ANS-

- The weather department's warnings that are broadcast on TV, radio, or in the newspaper should not be disregarded.
- We need to make the necessary preparations to move the necessary household items, domestic animals, automobiles, etc., to safer locations.
- Avoid travelling on roadways that have standing water on them as flood damage may have occurred.
- Keep the phone numbers for all emergency services, including the police, fire department, and medical facilities, close to hand.
- Always keep water on hand for emergencies.
- Avoid touching fallen electrical cables and wet switches.
- Avoid placing excessive demands on the rescue team.
- Help your friends and neighbours by working together.

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

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

ANS- (iii) Amritsar, as it is distant from the ocean, whereas the other three are coastal regions and are more susceptible to cyclone damage.

**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) In winter, the winds flow from the land to the ocean