

Chp- 2 Understanding the weather

Answer Key

GEAR UP

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	Weather	Clothes	Food
Shimla	Very cold, snowy	Woollen clothes, jackets, sweaters	Hot food like soup, tea, parathas
Jaisalmer	Cold days, very cold nights	Warm clothes, shawls, jackets	Bajra roti, dal, ghee-based food
Mumbai	Mild and pleasant	Light cotton clothes	Rice, fish, vegetables, street food

PROGRESS MILESTONE

PAGE 21

1. (✓) 2. (✗) 3. (✓) 4. (✓)
5. (✗)

PROGRESS MILESTONE

PAGE 27

1. (✗) 2. (✓) 3. (✗) 4. (✓)
5. (✗)

LET US PRACTISE

PAGES 29–30

- A. 1. (a) Tides 2. (b) wind direction 3. (c) Humidity 4. (c) Rain guage
- B. 1. Atmospheric Pressure 2. Weather stations
1. Anemometer 4. Cherrapunji and Mawsynram
- C. 1. Rainguage measures the amount of rainfall received in an area.
2. Atmospheric pressure is the pressure exerted by weight of air on the Earth's Surface.
3. Automated weather stations automatically measures and records weather data using sensor without human help.
4. Thermometer measures temperature by detecting the rise or fall of liquid or electronic sensors based on heat.
- D. 1. Weather is the condition of the atmosphere at a Particular place and time. Five types of weather are Sunny, Cloudy, Rainy, Windy, Stormy.
2. Rain is a form of precipitation in which water droplets fall from clouds. It forms when water vapour condenses into droplets that become heavy and fall to the earth due to gravity.
3. It makes the weather feel hotter, causes sweating and discomfort, slows the drying of clothes, can spoil food faster, and often leads to cloudy weather or rain.
4. The two natural signs that help predict rain are:
(i) Animal behaviour: Ants move their eggs to higher ground and frogs croak loudly before rain.
(ii) Clouds: Dark grey nimbus clouds usually indicate approaching rain.

- E. 1.** Weather is the condition of the atmosphere at a particular place and time. It describes changes in temperature, rainfall, wind, cloudiness, humidity, etc.

Weather is beneficial because it helps us decide what clothes to wear and what activities to plan guides farmers in farming work, affects travel and daily schedules, and warns us about extreme conditions like storms, heavy rain, or heat waves so we can stay safe.

- 2.** The five elements of weather are:

Temperature: Measures how hot or cold the air is. Affects clothing, lifestyle, and agriculture.

Precipitation: Water falling from the sky as rain, snow, hail, or graupel. Essential for water supply and farming.

Wind: Movement of air from high to low pressure. Distributes heat and moisture; affects travel and crops.

Humidity: Amount of water vapor in the air. Influences comfort and cloud formation.

Atmospheric Pressure: Weight of air on Earth. Changes in pressure influence wind, storms, and rainfall.

- 3.** The amount of water vapor present in the air is known as humidity. Effects of humidity are as:

- High humidity makes the air feel sticky and hotter; sweat evaporates slowly.
- Low humidity makes the air dry and can cause skin dryness.
- Humidity affects cloud formation and rainfall.
- Farmers and meteorologists use humidity data to predict rain and crop conditions.

- 4.** Importance of Weather Stations: are as:

- Collect accurate data on temperature, rainfall, wind, humidity, and air pressure.
- Help in forecasting weather for daily life, agriculture, aviation, and fisheries. Issue early warnings for natural disasters like cyclones, floods, and heatwaves.
- Study climate patterns and environmental changes over time.
- Prediction: Meteorologists analyze the data from instruments and satellites to detect changes in the atmosphere and predict future weather conditions.

- F. 1.** The three changes in the weather that were observed in Delhi on that day are: The sky changed from clear and sunny to dark and cloudy. Heavy rainfall began. Strong winds and thunder occurred; temperature dropped sharply.

- 2.** The weather affected daily life as people had to take shelter in shops and bus stops, roads became waterlogged causing slow traffic, and daily plans and travel were disrupted.

- 3.** The Meteorological Department had predicted the change a day earlier. It allowed some people to prepare in advance, reducing inconvenience and risk.

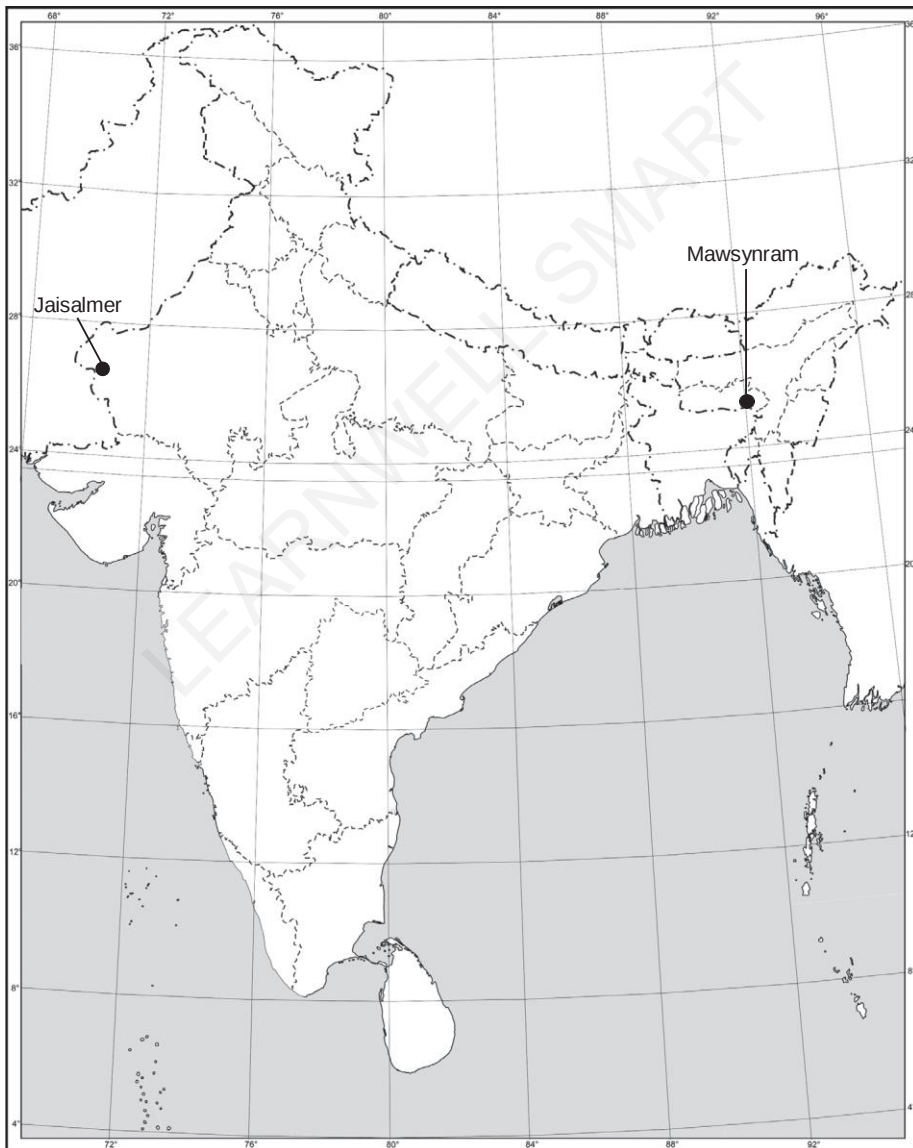
- 4.** The elements of weather described in the passage are:

- Temperature: Dropped sharply in the afternoon.
- Clouds: Clear in the morning, dark grey in the afternoon.
- Rainfall: Heavy rain began.
- Wind: Strong gusts accompanied the storm.

1. (c) (A) is true but (R) is false.
2. (c) (A) is true but (R) is false.

PICTURE-BASED QUESTIONS

1. (c) The picture shows stormy and rainy weather.
2. The two precautions that people should take during such weather are:
 - (i) People should stay indoors or take proper shelter to avoid getting wet or injured.
 - (ii) They should avoid flooded roads and open areas to stay safe during stormy or rainy weather.
3. Mumbai (frequently experiences heavy rainfall during monsoon).

MAP SKILLS

Check weather forecasts before planning.

Select a day with clear skies and no rain warnings.

Choose a place safe from extreme weather (like indoor parks or hills with good drainage). This ensures safety and enjoyment for everyone.

Pilots: Use weather data to ensure safe flying conditions.

Fishermen: Avoid rough seas during storms.

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