

Winds

Chapter 5: Winds · Topic 1

Key Concept

Wind occurs because air moves from areas of high atmospheric pressure to areas of low pressure, trying to balance pressure differences.

Local winds, like sea breezes and land breezes, occur due to temperature differences between land and water over short distances.

Global wind patterns, like trade winds and westerlies, occur due to the rotation of the Earth and uneven heating of the atmosphere.

Understanding wind patterns helps us predict weather, understand climate patterns, and explains phenomena like monsoons.

Quick Revision Notes

- Wind: air moves high pressure to low pressure.
- This balances pressure differences.
- Local winds: sea breeze, land breeze.
- Caused by land-water temperature differences.
- Global winds: trade winds, westerlies.
- Caused by Earth's rotation, uneven heating.
- Wind patterns help predict weather.
- They explain phenomena like monsoons.

Practice Questions

- 1 Discuss the difference between sea breeze and land breeze.
- 2 Research a global wind pattern.
- 3 Discuss how wind relates to pressure differences.
- 4 Discuss the monsoon and its connection to wind.
- 5 Observe wind direction on a day and note it.
- 6 Explain why wind occurs in your own words.