

Heat Transfer in Natural Phenomena

Chapter 7: Heat Transfer in Nature · Topic 2

Key Concept

This same principle of uneven heating drives much larger-scale weather patterns, including monsoon winds, which are crucial to India's climate and agriculture. Convection currents in the atmosphere also help distribute heat around the globe, moderating temperatures between the equator (which receives the most direct sunlight) and the poles (which receive the least), preventing extreme temperature differences from being even greater than they already are.

Quick Revision Notes

- Sea breeze (daytime): warm air over land rises, cooler sea air moves in.
- Land breeze (night-time): warm air over sea rises, cooler land air moves out.
- Uneven heating of land and sea drives these convection-based breezes.
- Similar principles drive larger patterns like monsoon winds.

Practice Questions

- 1 Explain why land breezes occur at night.
- 2 Describe how convection currents help distribute heat around the globe.
- 3 Why does land heat up and cool down faster than the sea?