

**CHAPTER 3**

**Chapter Tutorial  
Weather and Climate**

**IDENTIFYING TERMS** Choose the term that correctly matches each definition.

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|---------------------|---|
| _____ 1. weather    | <b>a.</b> community of plants and animals in an area            |
| _____ 2. cyclone    | <b>b.</b> center of low pressure                                |
| _____ 3. humidity   | <b>c.</b> amount of water vapor in the air                      |
| _____ 4. ecosystem  | <b>d.</b> permanently frozen soil                               |
| _____ 5. permafrost | <b>e.</b> condition of the atmosphere at a given time and place |

**UNDERSTANDING MAIN IDEAS**

1. Explain how Earth's atmosphere helps keep Earth warm.

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2. What are the four common forms of precipitation? How are they formed?

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3. How do high elevations and mountains affect weather and climate?

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4. What creates dry weather conditions in arid regions?

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5. Identify the middle-latitude climates.

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**Chapter 3 Tutorial, continued**

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**THINKING CRITICALLY**

**1. Identifying Cause and Effect** Why are hurricanes dangerous to people and property?

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**2. Contrasting** How do the two tropical climates differ?

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**3. Drawing Inferences** Why is it that trees cannot grow in tundra climate areas?

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**EXPLORING INTERDISCIPLINARY TOPICS**

**1. Meteorology** How is wind direction related to differences in air pressure?

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**2. Science and Technology** Why are weather satellites useful in places affected by hurricanes?

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**WRITING ABOUT GEOGRAPHY**

**Describing** Imagine that you are being considered for inclusion on an expedition to the South Pole. Demonstrate your qualifications for the trip by writing a short essay describing the climate, vegetation, and wildlife of the South Pole.