

# Forecasting Weather

Climate meteorologist isobar isotherm station model temperate zones  
polar zones tropical zones watch warning

1. \_\_\_\_\_: Advisory to prepare for severe weather
  2. \_\_\_\_\_: Person who studies the weather
  3. \_\_\_\_\_: Average of all weather conditions of an area over a long period
  4. \_\_\_\_\_: Weather information at a specific location
  5. \_\_\_\_\_: Line connecting points of equal temperature on a weather map
  6. \_\_\_\_\_: Regions on Earth that have cold winters, hot summers, and mild springs and falls
  7. \_\_\_\_\_: Advisory that severe weather conditions exist
  8. \_\_\_\_\_: Regions on Earth that have hot temperatures all year
  9. \_\_\_\_\_: Line connecting points of equal atmospheric pressure on a weather map
  10. \_\_\_\_\_: Regions on Earth extending from the poles to 66 1/2° north and south
11. What can isobars tell you about wind speed?

## What Is Weather?

*In the word search puzzle, find and circle the word that completes each sentence. Write the word on the line.*

1. The present state of the atmosphere is the \_\_\_\_\_.
2. \_\_\_\_\_ is the amount of water vapor in the air.
3. Air is \_\_\_\_\_ when it is holding all the moisture it can at a certain temperature.
4. The temperature at which air is saturated and condensation begins is the \_\_\_\_\_ point.
5. \_\_\_\_\_ humidity is the amount of water vapor in air compared to the amount of water vapor air can hold at a certain temperature.
6. A \_\_\_\_\_ is an instrument that measures relative humidity.
7. When millions of tiny drops of water around dust particles form from condensed humid air, a \_\_\_\_\_ forms.
8. A stratus cloud that forms near the ground is \_\_\_\_\_.
9. Water droplets that become too heavy to remain suspended in the air fall out of the clouds as \_\_\_\_\_.
10. \_\_\_\_\_ forms when water drops freeze in layers around small nuclei of ice.
11. Water drops that fall when the temperature is above freezing fall as \_\_\_\_\_.
12. Water drops that fall when the temperature is below freezing fall as \_\_\_\_\_.
13. When snow passes through warm air, melts, and refreezes near the ground, it becomes \_\_\_\_\_.

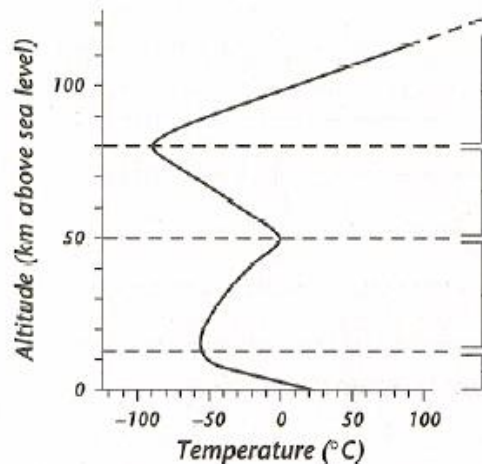
T S A T U R A T E D F Q Y M B  
B N O P S Y C H R O M E T E R  
Y O W Q L N W G A V H R L F I  
A W P R E C I P I T A T I O N  
J D B C E I T C N U I L N G A  
R E L A T I V E X C L O U D C  
K W U B L H U M I D I T Y U V  
Y J W E A T H E R G M R O M A

**The Atmosphere** ▪ *Review and Reinforce*

# Layers of the Atmosphere

## Understanding Main Ideas

The graph below shows altitudes and temperatures for the four main layers of the atmosphere. Label the four layers, and then complete the statements that follow.



1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

5. The temperature in the atmosphere approaches  $-90^{\circ}\text{C}$  at an altitude of about \_\_\_\_\_.
6. The highest temperatures in the atmosphere occur in the \_\_\_\_\_.
7. Temperatures generally rise as altitude increases in the \_\_\_\_\_ and \_\_\_\_\_ layers of the atmosphere.
8. As you move up through the mesosphere, the temperature \_\_\_\_\_.

## Building Vocabulary

If the statement is true, write true. If it is false, change the underlined word or words to make the statement true.

- \_\_\_\_\_ 9. The layer of the atmosphere where weather occurs is the thermosphere.
- \_\_\_\_\_ 10. The mesosphere is the layer of the atmosphere that contains ozone.
- \_\_\_\_\_ 11. The exosphere is the outer layer of the thermosphere.
- \_\_\_\_\_ 12. Most meteoroids burn up in the stratosphere.
- \_\_\_\_\_ 13. The troposphere is divided into the ionosphere and the exosphere.
- \_\_\_\_\_ 14. The ionosphere lies between the mesosphere and exosphere.