

Content Vocabulary

Chapter 13.3 Review

LESSON 3

Weather Forecasts

Directions: On each line, write the term from the word bank that correctly replaces the underlined words in each sentence. NOTE: You may need to change a term to its plural form.

computer model

Doppler radar

isobar

surface report

upper-air report

1. Tornadoes and thunderstorms, as well as other types of weather, can be tracked using a special system of measurement that can detect precipitation and can estimate wind speed.

2. On a weather map, high- and low-pressure systems are indicated by lines that connect all places where pressure is the same. _____
3. Weather forecasts use information from sets of mathematical formulas calculated by computer programs. _____
4. Information gathered by a weather station and by human observers is used to put together a(n) summary of weather measurements on Earth's surface.

5. A(n) summary of weather conditions above Earth's surface is based on measurements made by a weather balloon. _____

Key Concept Builder **LESSON 3**

Weather Forecasts

Key Concept What instruments are used to measure weather variables?

Directions: On the line before each weather-related detail, write the letter of the term that matches it correctly. Some terms may be used more than once.

- | | |
|---|----------------------------|
| _____ 1. uses symbols to display information from surface and upper-air reports | A. surface report |
| _____ 2. can be visible or infrared | B. upper-air report |
| _____ 3. describes measurements of weather variables on Earth's surface | C. satellite image |
| _____ 4. orbit about 35,000 km above Earth | D. radar image |
| _____ 5. is especially useful for measuring wind speed during severe weather | E. station model |
| _____ 6. describes what was measured by a radiosonde | F. isobars |
| _____ 7. measures the radiation given off by Earth | G. isotherms |
| _____ 8. measures precipitation by bouncing radio waves off raindrops | H. Doppler radar |
| _____ 9. detects precipitation as well as the movement of small particles | I. satellite |
| _____ 10. lines on a map that connect places of similar air pressure | |
| _____ 11. includes a measurement of wind speed, air pressure, and precipitation | |
| _____ 12. given twice daily at many locations around the world | |
| _____ 13. show the location of high- and low-pressure systems | |
| _____ 14. lines that connect places of similar temperatures | |
| _____ 15. describes conditions above Earth's surface | |

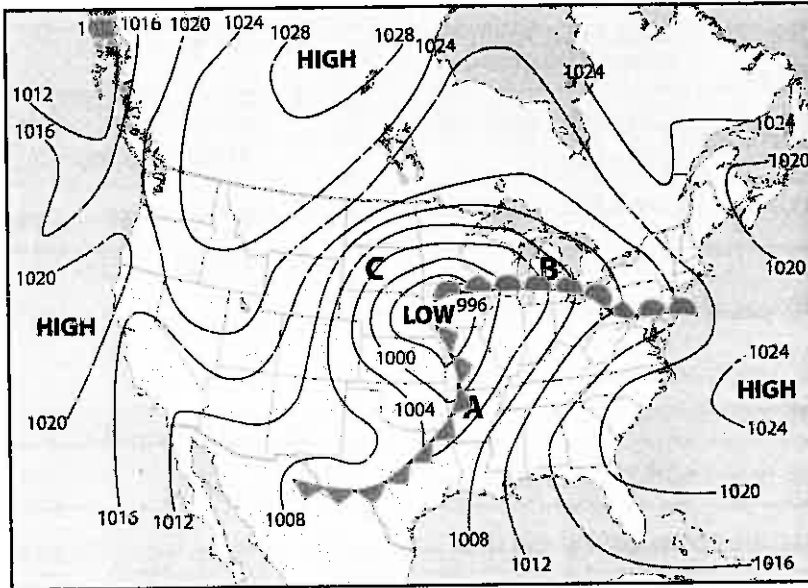
Key Concept Builder 








LESSON 3

Weather Forecasts

Key Concept What instruments are used to measure weather variables?

Directions: Use the map to answer each question.



KEY	
	Cold front
	Warm front
	Stationary front
	Occluded front
	Precipitation
	Light snow
	Light rain
H	High-pressure system
L	Low-pressure system

1. Which two types of fronts are shown on the weather map?

2. What type of air pressure system is located in the center of the country?

3. What pattern do the numbers on the map make?

4. Where are areas of high pressure located?

5. Where might a precipitation symbol be placed on this map?

6. How can this map be used to forecast the weather?

Lesson Quiz A**LESSON 3****Weather Forecasts****Multiple Choice**

Directions: On the line before each question, write the letter of the correct answer.

- _____ 1. Which instrument measures air temperature?
A. a barometer
B. a thermometer
C. an anemometer
- _____ 2. Which tool would gather information for an upper-air weather report?
A. a radiosonde
B. a station model
C. an anemometer
- _____ 3. Which situation is **NOT** a use of Doppler radar?
A. measuring wind speed
B. detecting precipitation
C. identifying weather fronts
- _____ 4. What do closely spaced isobars indicate about wind?
A. no wind
B. weak winds
C. strong winds

True or False

Directions: On the line before each statement, write T if the statement is true and F if the statement is false.

- _____ 5. Visibility is often measured using a radiosonde.
- _____ 6. A visible satellite image is useful for determining cloud cover.
- _____ 7. A station model is put together using only data from surface weather reports.
- _____ 8. A cold front on a weather map is shown by a line of triangles.
- _____ 9. Computer weather models are made by solving complex math formulas.
- _____ 10. Isotherms connect places that have the same air pressure.