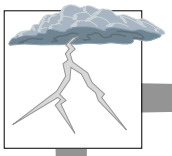


Practice

Use the list below to complete the following statements.

10	**exosphere**	**oxygen**	**thermosphere**
aerosol cans	**ionosphere**	**ozone**	**troposphere**
atmosphere	**jet stream**	**skin cancer**	**ultraviolet rays**
blindness	**mesosphere**	**stratosphere**	

1. The blanket of air that surrounds Earth is the _____ .

2. The layer of the atmosphere closest to Earth that contains our weather is the _____ .

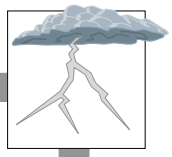
3. The troposphere extends for about _____ kilometers.

4. A narrow band of winds that blow from west to east, just above the troposphere, in which airplanes sometimes fly, is called the _____ .

5. The _____ is the layer above the troposphere.

6. The upper layer of the stratosphere is about the same temperature as Earth at sea level because of the presence of _____ .

7. Ozone heats the atmosphere by absorbing the sun's _____ .



8. Ultraviolet rays from the sun can cause _____ and _____ .

9. CFCs used in _____ destroy the ozone layer.

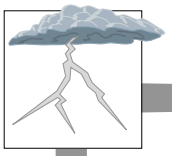
10. The coldest part of the atmosphere is the _____ .

11. Beyond the mesosphere is the _____ , which extends to 500-700 kilometers and is very hot.

12. Within the thermosphere, the part that contains electrically charged particles is called the _____ .

13. The last layer of the atmosphere extends for thousands of kilometers into space and is called the _____ .

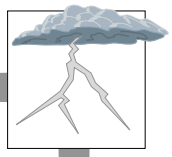
14. Ozone is a gas that contains three atoms of _____ per molecule instead of two atoms, as does the gas that we breathe.



Practice

Complete the chart below. Beside each layer of the **atmosphere**, *record the* **distance** *each extends into* **space**, *and list the important* **characteristics** *of each.*

Layer	Distance	Characteristics
1. troposphere		
2. stratosphere		
3. mesosphere		
4. thermosphere		
a. ionosphere		
b. exosphere		



Practice

Answer the following using complete sentences.

1. How does ozone differ from the oxygen we breathe?

   _____

   _____

2. How does ozone smell?

   _____

   _____

3. When can you smell ozone?

   _____

   _____

4. How does the ozone layer protect us?

   _____

   _____

   _____

5. What can be done to stop people from destroying the ozone layer?

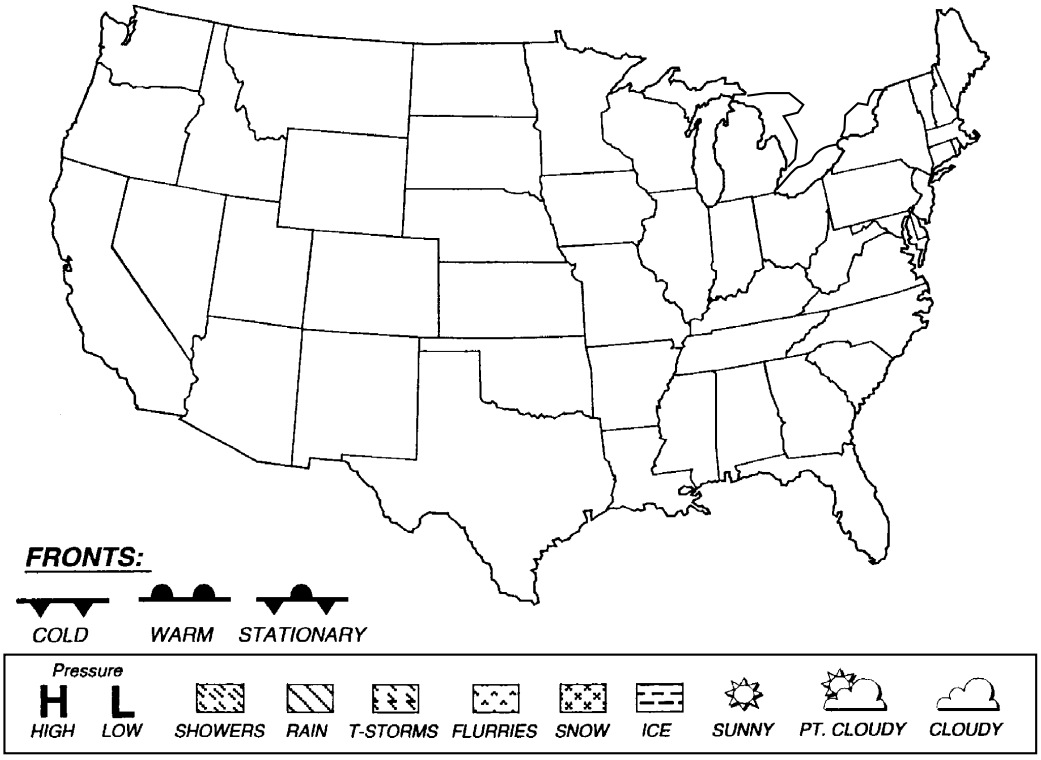
   _____

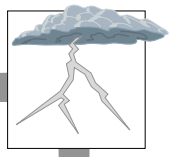
   _____

   _____

Practice

Use data from the newspaper to construct a **weather map** *for a particular day. Use your knowledge of* **air masses** *to predict the weather for the* **southeast region**.





Practice

Use the list below to complete the following statements.

convection current	**heat**	**radiation**
counterclockwise	**indirect rays**	**sun**
currents	**low-pressure**	**wind**
direct rays		

1. Earth gets its heat from the _____ .

2. The process by which the sun's energy reaches Earth in the form of waves is called _____.

3. Light waves are absorbed by Earth and returned to the atmosphere as _____ .

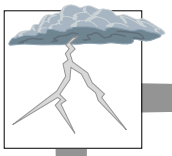
4. A _____ is formed when warm air rises and cold air rushes in to take its place.

5. Rays of the sun that hit Earth at a 90° angle are called _____ .

6. Rays that strike Earth at an angle of greater than 90° are called _____ .

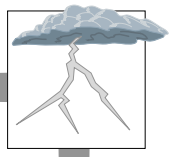
7. _____ are vertical movements of air.

8. Horizontal movements of air are called _____ .



9. Air that is heated is less dense; it rises and forms a _____ area.

10. The winds of a low-pressure area move _____ in the Northern Hemisphere.



Practice

Use the list below to complete the following statements.

air mass	**high-**	**occluded**
barometer	**high pressure area**	**stationary**
cold	**low-**	**warm**
front		

1. Cloudy, rainy weather is caused by a _____ pressure system.

2. Cool air that is heavy sinks and creates a _____ .

3. Cool, clear skies with dry weather accompany a _____ pressure area.

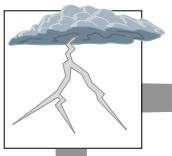
4. A _____ is used to measure air pressure.

5. A large body of air having the same amount of moisture and temperature is called a(n) _____ .

6. A boundary called a _____ forms when two different types of air masses meet.

7. After a(n) _____ front, the weather is usually cool and clear.

8. A(n) _____ front forms when two fronts meet but neither moves for a period of time.



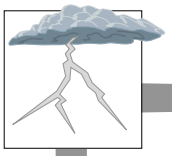
9. A(n) _____ front brings rain or snow that lasts for a long period of time.

10. When a cold front overtakes and merges with a warm front, a(n) _____ front forms.

Practice

Match the **front** *with the correct* **symbol**. *Write the letter on line provided.*

_____	1.	Warm Front	A. 
_____	2.	Cold Front	B. 
_____	3.	Occluded Front	C. 
_____	4.	Stationary Front	D. 



Lab Activity 1: The Earth's Rotation Creates Winds and Currents

Purpose	Materials
Observe the effects of rotation on water.	• bowl • water • lazy Susan tray or rotating piano stool

1. Place a bowl of water on a lazy Susan tray or a rotating piano stool.

2. Gently spin in a counterclockwise direction.

3. Let the water become still.

4. Rotate in the opposite direction.

5. What did you see happen when the water was spun counterclockwise?

   _____

   _____

   _____

6. What did you see happen to the water when it was rotated in the opposite direction?

   _____

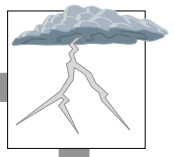
   _____

   _____

7. How did the water movement change? _____

   _____

   _____



Lab Activity 2: Water Currents

Purpose	Materials
Observe water currents that result from heating water.	• ice cubes • rectangular pan • water • food coloring • Bunsen burner

1. Place ice cubes in the center of a rectangular pan.
2. Fill pan with water.
3. Put an immersion heater just below the surface of the water on one side of the pan. (A Bunsen burner can be used. Make sure to heat one side of the pan, not the center.)
4. Add several drops of food coloring close to the heated side.
5. Continue to heat until you can see the movement of the color.
6. In what direction does the colored water move? _____
7. Does the clear water move? _____
8. Does the colored water stay at the top? _____
9. What climate zone does the ice represent? _____
10. What climate zone does the heater represent? _____
11. Considering what you have observed, in what direction do you think the ocean currents should move?

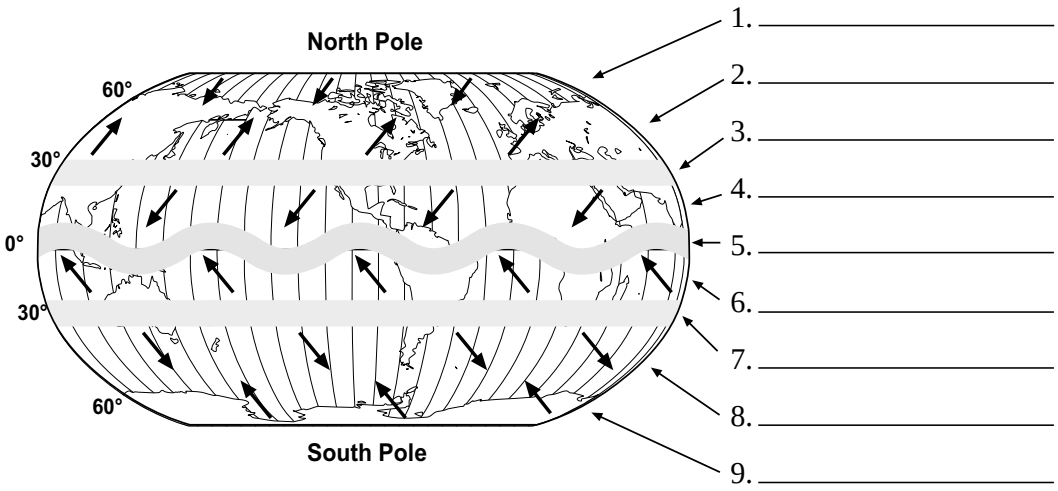
_____

_____

_____

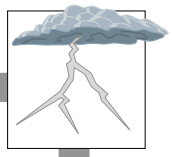
Practice

Label the **major wind systems** *on Earth. Write* **North**, **South**, **East**, *or* **West** *on each line in the chart to show the direction of the* **major air movements**. *The arrows indicate the direction of the movement.*



10.-15.

Wind		
Direction of movement for latitudes:	Northern Hemisphere	Southern Hemisphere
60° - 90°		
30° - 60°		
0° - 30°		



Practice

Match each definition with the correct term. Write the letter on the line provided.

_____ 1. instrument used to indicate from which direction the wind is coming

_____ 2. instrument used to measure the speed of the wind

_____ 3. breeze formed when the air on land warms and rises and cooler wind from the ocean rushes in to replace it

_____ 4. breeze that blows at night when cool air from the land moves out to sea replacing the warmer air found there

_____ 5. system of wind found just north and south of the equator where there is a steady wind flow that early sailors depended on

_____ 6. seasonal winds that bring rainy weather in the summer and dry weather in the winter

_____ 7. area around the equator where there is little or no wind

_____ 8. system of winds found in the areas of Earth where there are large land masses; these winds blow from the west

_____ 9. narrow band near 30° latitude with very little wind

_____ 10. system of winds that extends from the poles to 65° north and south latitude that blow cold winds from an easterly direction

A. anemometer

B. doldrums

C. horse latitudes

D. land breeze

E. monsoons

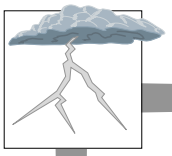
F. polar easterlies

G. prevailing westerlies

H. sea breeze

I. trade winds

J. wind vane



Practice

Use the **hurricane tracking map** *on the next page to* **plot** *the* **paths** *of hurricanes* **Bonnie** *and* **Andrew**. *Then answer the questions below with a short answer.*

Hurricane Bonnie			**Hurricane Andrew**		
Date	Position at 6:00 a.m.		Date	Position at 6:00 a.m.	
1998	Latitude	Longitude	1992	Latitude	Longitude
Aug. 22	21.8° N	68.7° W	Sept. 20	20.7° N	60.0° W
23	23.8° N	71.3° W	21	23.9° N	63.3° W
24	25.2° N	72.1° W	22	25.6° N	67.0° W
25	27.8° N	73.8° W	23	25.5° N	72.5° W
26	31.7° N	77.3° W	24	25.4° N	79.3° W
27	34.5° N	77.5° W	25	26.6° N	86.7° W
28	36.2° N	75.1° W	26	29.2° N	91.3° W
29	39.2° N	69.6° W	27	32.1° N	90.5° W
30	44.3° N	57.0° W	28	35.4° N	84.0° W

1. Where did Bonnie hit land? _____

2. Where did Andrew hit land? _____

3. In which general directions do hurricanes move? _____

4. Where do most of the hurricanes form that affect Florida?

   _____

5. Which areas of the United States are most affected by hurricanes?

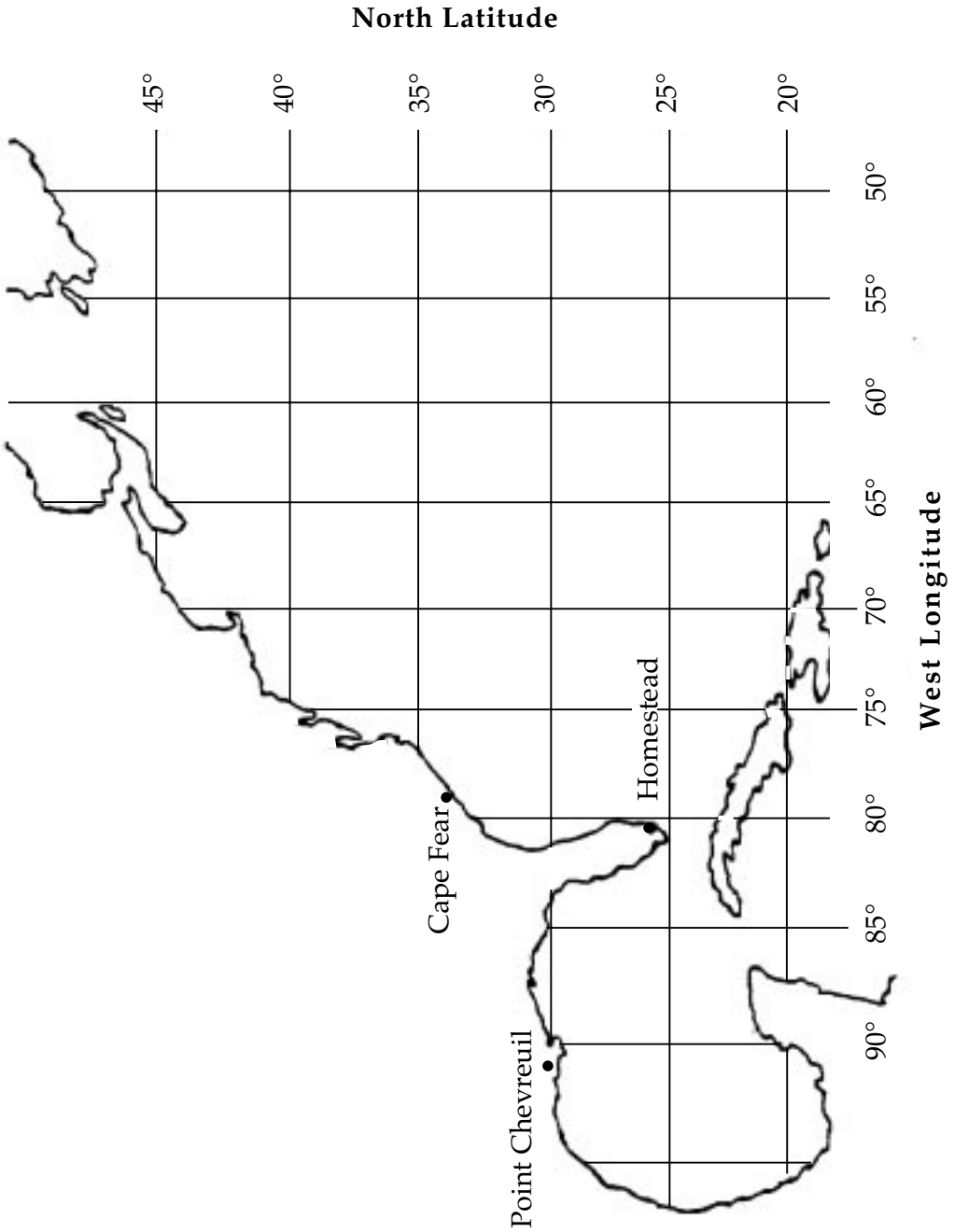
   _____

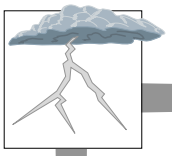
6. What causes the most damage from a hurricane, wind or water?

   _____

Practice

Use the information on the previous page to **plot** *the* **paths** *of* **hurricanes Bonnie** *and* **Andrew** *on the map below.*





Practice

Use the list below to complete the following statements. One or more terms will be used more than once.

75	**cyclones**	**thunder**
200	**hurricane**	**tornado**
anticyclones	**lightning**	**tropical depression**
blizzard	**opposite**	**tropical storm**
cumulonimbus	**rainstorm**	**waterspout**

1. A storm formed when two fronts meet that causes steady rainfall lasting for hours is called a _____ .

2. A snowstorm with strong winds is called a _____ .

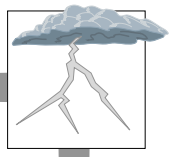
3. Thunderstorms are caused by the formation of _____ clouds.

4. A sudden discharge of electricity from the clouds is called _____ .

5. _____ is the sound made by lightning.

6. Low-pressure areas that contain warm air rising in a counterclockwise circular motion are called _____ .

7. High-pressure areas that have cool, dry air moving downward in a clockwise motion are called _____ .



8. High- and low-pressure systems move in _____ directions in the Southern Hemisphere.

9. A large powerful cyclone that begins as a low-pressure system over the ocean in summer or early fall is called a _____ .

10. A low-pressure system with winds less than 35 mph is called a(n) _____ .

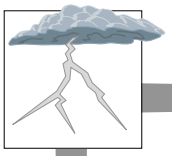
11. A large, low-pressure system with winds from 35 to 74 mph is a _____ .

12. A hurricane is formed when sustained winds reach _____ mph. Hurricane winds can reach speeds of over _____ mph.

13. A violent, funnel-shaped windstorm with winds that reach 300 mph is a _____ .

14. A _____ is a tornado that forms over the ocean.

15. The path of a _____ is smaller than that of a _____ , but because of the high winds it can do more damage.



Practice

Answer the following using complete sentences.

1. What danger exists in thunderstorms? _____

   _____

   _____

2. What should you do if you are caught outside during a thunderstorm?

   _____

   _____

   _____

3. What are three precautions to take in the event of a hurricane?

   _____

   _____

   _____

4. What is the difference between a hurricane watch and a hurricane warning?

   _____

   _____

   _____

5. Where should you seek shelter indoors during a tornado?

   _____

   _____

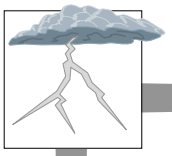
Practice

Match each description with the correct **type of cloud**. *Write the letter on the line provided.*

_____	1.	thin, feathery clouds found at high altitudes	A. cirrus
_____	2.	clouds that contain rain	B. cumulonimbus
_____	3.	gray, smooth, layered clouds found low in the sky	C. cumulus
_____	4.	clouds that cause thunderstorms	D. nimbostratus
_____	5.	puffy clouds with flat bottoms found at middle altitudes	E. nimbus
_____	6.	low-lying, black, layered clouds that bring long periods of rain	F. stratus

Label the three basic **types of clouds**:

7. _____ 8. _____ 9. _____

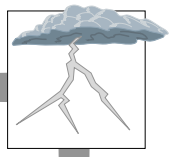


Practice

Complete the chart below for **five** *consecutive days.*

Cloud Observation Chart

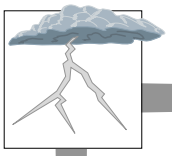
Date and time of day	Direction of wind	Type of cloud observed	Description of clouds observed (puffy? wispy? dark? flat? etc.)	Weather conditions at the time
	north			
	east			
	south			
	west			
	north			
	east			
	south			
	west			
	north			
	east			
	south			
	west			
	north			
	east			
	south			
	west			
	north			
	east			
	south			
	west			



Practice

Match each definition with the correct term. Write the letter on the line provided.

_____	1. moisture that falls to Earth as rain, hail, sleet, or snow	A. cloud
_____	2. condensation on particles of dust, smoke, or salt	B. drizzle or mist
_____	3. temperature of the air below the clouds is above 32° F	C. freezing rain
_____	4. six-pointed crystals of ice that fall when the temperature of both the clouds and the land is below freezing	D. hailstones
_____	5. rain that falls in very tiny droplets	E. precipitation
_____	6. rain that freezes after it hits the ground	F. rain
_____	7. snow melts and freezes again on its way down	G. sleet
_____	8. the most damaging form of precipitation	H. snowflakes



Practice

Write **True** *if the statement is correct. Write* **False** *if the statement is* not *correct.*

_____ 1. Water droplets must condense on particles such as dust or smoke in order to form clouds.

_____ 2. Precipitation forms when water droplets become so heavy that they can no longer stay suspended in the air.

_____ 3. Snow is the most common type of precipitation.

_____ 4. Rain that forms very large droplets is called drizzle or mist.

_____ 5. In order for snowflakes to form, both the temperature of the clouds and the temperature of the air must be below freezing.

_____ 6. Snowflakes can have four, five, or six points.

_____ 7. Sleet and freezing rain are the same thing.

_____ 8. Sleet only falls in the winter.

_____ 9. The form of precipitation that causes the most damage is sleet.

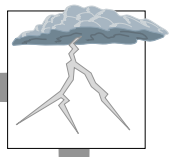
_____ 10. Hailstones are formed in cumulonimbus clouds.

_____ 11. Hailstones are usually the size of golf balls.

_____ 12. Hailstones move up and down in the clouds several times, forming new layers of ice until they are finally heavy enough to fall.

_____ 13. Snow that melts on its way down and refreezes is called sleet.

_____ 14. The type of precipitation that falls is only determined by the temperature on the ground where it falls.



Practice

Answer the following using complete sentences.

1. What three factors influence the climate of an area? _____

   _____

   _____

2. Why are areas near the equator warmer? _____

   _____

3. How do mountains near coastal regions help in the formation of deserts?

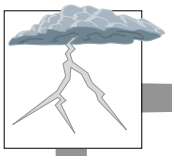
   _____

   _____

   _____

4. Describe the temperature and precipitation in each of the three major climate zones. Fill in the chart below.

Zone	Temperature	Precipitation



5. Describe the following climate types.

Desert: _____

_____

_____

_____

_____

_____

Marine climate: _____

_____

_____

_____

_____

_____

Continental climate: _____

_____

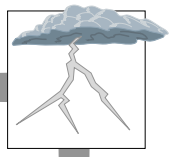
_____

_____

_____

_____

_____



Practice

Use the list below to write the correct **atmosphere** *and* **climate** *term for each definition on the line provided. One or more terms will be used more than once.*

atmosphere	**jet stream**	**stratosphere**
climate	**marine climate**	**temperate zone**
continental climate	**mesosphere**	**thermosphere**
desert	**ozone**	**troposphere**
exosphere	**polar zone**	**weather**
ionosphere		

_____ 1. type of climate found where there are huge land masses

_____ 2. type of climate found when an area is located near a large body of water

_____ 3. day-to-day changes in temperature, humidity, wind, and air pressure

_____ 4. the blanket of air surrounding Earth

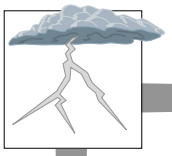
_____ 5. the part of the thermosphere that contains electrically charged particles called ions

_____ 6. the zone of moderate climate with distinct seasonal changes located between 30° and 60° latitude

_____ 7. coldest layer of the atmosphere, just above the stratosphere

_____ 8. dry areas that receive less than 25 cm of rainfall per year

_____ 9. area of Earth that extends from the poles to 60° north and south latitude and has a very cold climate



_____ 10. the weather of an area over a long period of time

_____ 11. the layer of the atmosphere above the mesosphere where the air is very thin and hot

_____ 12. type of oxygen with three oxygen atoms (O_3) found in the upper areas of the stratosphere

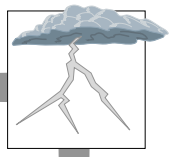
_____ 13. the layer of air closest to Earth

_____ 14. the upper part of the thermosphere

_____ 15. the lowest layer of the atmosphere that contains most of our weather

_____ 16. the layer of Earth's atmosphere that contains ozone

_____ 17. narrow band of winds that blow from west to east just above the troposphere



Practice

Use the list below to write the correct **solar radiation** *and* **air mass** *term for each definition on the line provided.*

air masses	**currents**	**occluded front**
barometer	**direct rays**	**radiation**
cold front	**front**	**stationary front**
conduction	**high-pressure system**	**warm front**
convection	**indirect rays**	**wind**
convection current	**low-pressure system**	

_____ 1. front that forms when two unlike air masses face each other, but neither moves

_____ 2. process by which the sun's rays reach Earth in the form of waves

_____ 3. front that forms when a cold front overtakes and merges with a warm front

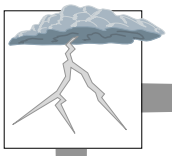
_____ 4. system that brings cloudy, rainy, and often stormy weather

_____ 5. rays of the sun that hit Earth at greater than 90°; they produce less heat

_____ 6. system that brings cool, clear skies and dry weather

_____ 7. the boundary formed when two different masses of air meet

_____ 8. rays of the sun that hit Earth at a 90° angle; they create the greatest amount of heat



_____ 9. vertical movements of air or water caused by the uneven heating of Earth

_____ 10. vertical movement of air or water caused by differences in temperature

_____ 11. front formed when a mass of cold air meets a mass of warm air and moves beneath it

_____ 12. an instrument used to measure air pressure

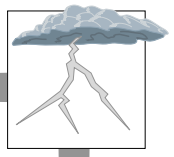
_____ 13. large bodies of air having the same temperature and amount of moisture

_____ 14. front that forms when a mass of warm air meets a mass of cold air and moves over it

_____ 15. horizontal movements of air caused by the uneven heating of Earth

_____ 16. direct transfer of heat energy from one substance to another

_____ 17. transfer of heat energy by moving air or fluid



Practice

Use the list below to write the correct **wind** *and* **current** *term for each definition on the line provided.*

anemometer	**monsoons**	**sea breeze**
doldrums	**polar easterlies**	**trade winds**
horse latitudes	**prevailing westerlies**	**wind vane**
land breeze		

_____ 1. an instrument used to measure wind speed

_____ 2. area at about 30° north and south latitude where there is very little wind

_____ 3. the area around the equator where air moves straight up and there is very little wind

_____ 4. system of winds that blows cold air from the poles

_____ 5. cool air that moves from sea to land during the day

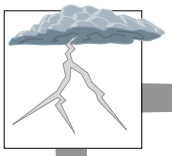
_____ 6. cool air blowing from land to sea at night

_____ 7. system of winds found just north and south of the equator that blows toward the equator from the northeast and southeast

_____ 8. winds that blow inland during summer bringing rainy weather and that blow out to sea in winter bringing dry weather

_____ 9. an instrument that tells from which direction the wind is coming

_____ 10. wind system formed over large land areas that blow from the west to the east



Practice

Use the list below to write the correct **storm** *and* **precipitation** *term for each definition on the line provided.*

anticyclone	**hurricane**	**stratus**
blizzard	**lightning**	**thunder**
cirrus	**nimbostratus**	**tornado**
cloud	**nimbus**	**tropical depression**
cumulonimbus	**precipitation**	**tropical storm**
cumulus	**saturated**	**waterspout**
cyclone		

_____ 1. a large, powerful low-pressure storm system; a cyclone with sustained winds of 75 mph or more

_____ 2. puffy, white clouds with flat bottoms

_____ 3. high-pressure system with winds moving clockwise

_____ 4. a cloud that causes rain to fall

_____ 5. a sudden discharge of electricity from clouds

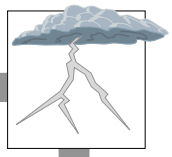
_____ 6. a severe snowstorm with high winds

_____ 7. a term used when the air has all the moisture it can hold

_____ 8. tiny droplets of water suspended in the air

_____ 9. very high, thin, feathery clouds made of ice crystals

_____ 10. a low-pressure system with winds moving in a counterclockwise direction



_____ 11. smooth, layered clouds found low in the sky

_____ 12. a dark, low-lying stratus cloud that contains rain

_____ 13. the sound made by lightning

_____ 14. cumulus clouds that bring rain; also called thunderheads

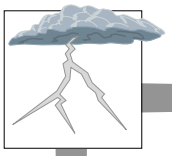
_____ 15. moisture that falls to Earth as rain, hail, sleet, or snow

_____ 16. a tornado that forms over water

_____ 17. a violent, funnel-shaped windstorm

_____ 18. a storm formed when the winds of a tropical depression are between 35 and 74 mph

_____ 19. a storm formed by a large, low-pressure system over water with winds less than 35 mph



Practice

Circle the letter of the **atmosphere** *and* **climate** *term that correctly completes each statement below.*

1. A dry area that receives less than 25 cm of rainfall per year is a(n) _____ .

   a. equinox
   b. ozone
   c. polar zone
   d. desert

2. The upper part of the thermosphere is called the _____ .

   a. ionosphere
   b. jet stream
   c. exosphere
   d. mesosphere

3. The coldest layer of the atmosphere, just above the stratosphere is called the _____ .

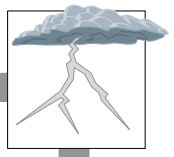
   a. exosphere
   b. ozone
   c. polar zone
   d. mesosphere

4. The _____ is the lower part of the thermosphere that contains electrically charged particles called ions.

   a. ozone
   b. mesosphere
   c. exosphere
   d. ionosphere

5. The _____ is a layer of Earth's atmosphere above the troposphere; it contains the ozone layer.

   a. thermosphere
   b. temperate zone
   c. stratosphere
   d. tropical zone



6. The layer of the atmosphere above the mesosphere where the air is very thin and hot is called the _____ .

   a. tropical zone
   b. thermosphere
   c. ionosphere
   d. troposphere

7. The day-to-day changes in temperature, humidity, wind, and air pressure are called _____ .

   a. temperate zones
   b. tropical zones
   c. weather
   d. marine climates

8. The _____ is mixture of gases surrounding Earth.

   a. equinox
   b. polar zone
   c. tropical zone
   d. atmosphere

9. The _____ is a narrow layer of strong winds that blow from west to east just above the troposphere.

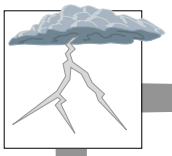
   a. mesosphere
   b. jet stream
   c. polar zone
   d. ozone

10. The weather of an area over a long period of time is called the _____ .

    a. climate
    b. seasons
    c. solstice
    d. tropical

11. The type of climate found when an area is located near a large body of water is called _____ .

    a. seasons
    b. continental climate
    c. tropical zone
    d. marine climate



12. The type of climate found where there are huge land masses is called _____ .

    a. continental climate
    b. marine climate
    c. tropical zone
    d. seasons

13. The zone of moderate climate with distinct seasonal changes located between 30° and 60° latitude is a _____ .

    a. polar zone
    b. temperate zone
    c. tropical zone
    d. solstice

14. The type of oxygen with three oxygen atoms (O_3) found in the upper areas of the stratosphere is called _____ .

    a. ozone
    b. seasons
    c. climate
    d. solstice

15. The _____ is the layer of air closest to Earth.

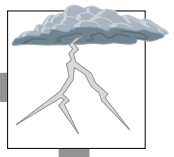
    a. troposphere
    b. temperate
    c. thermosphere
    d. mesosphere

16. The area of Earth that extends from the poles to 60° north and south latitude and has very cold climate is called the _____ .

    a. temperate zone
    b. stratosphere
    c. tropical zone
    d. polar zone

17. The lowest layer of the atmosphere that contains most of our weather is called the _____ .

    a. stratosphere
    b. polar zone
    c. troposphere
    d. temperate zone



Practice

Circle the letter next to the **solar radiation** *and* **air mass** *term that correctly completes each statement below.*

1. An instrument used to measure air pressure is a _____ .

   a. barometer
   b. convection current
   c. direct ray
   d. current

2. The vertical movement of air or water caused by differences in temperature is a _____ .

   a. current
   b. front
   c. direct ray
   d. convection current

3. Rays of the sun that hit Earth at a 90° angle are called _____ .

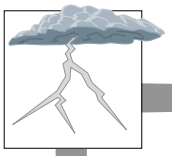
   a. fronts
   b. indirect rays
   c. high-pressure systems
   d. direct rays

4. A system that brings cool, clear skies and dry weather is a(n) _____ .

   a. low-pressure system
   b. indirect ray
   c. high-pressure system
   d. stationary front

5. A system that brings cloudy, rainy, and often stormy weather is a(n) _____ .

   a. stationary front
   b. occluded front
   c. convection current
   d. low-pressure system



6. The process by which the sun's rays reach Earth in the form of waves is called _____ .

   a. wind
   b. warm front
   c. radiation
   d. stationary front

7. Large bodies of air having the same temperature and amount of moisture are _____ .

   a. currents
   b. convection currents
   c. warm fronts
   d. air masses

8. A front formed when a mass of cold air meets a mass of warm air and moves beneath it is a _____ .

   a. cold front
   b. current
   c. front
   d. direct ray

9. Vertical movements of air caused by the uneven heating of the Earth are _____ .

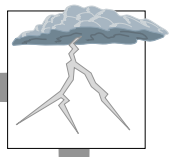
   a. fronts
   b. direct rays
   c. currents
   d. indirect rays

10. The boundary formed when two different masses of air meet is a(n) _____ .

    a. occluded front
    b. low-pressure system
    c. high-pressure system
    d. front

11. The rays of the sun that hit Earth at more than 90° and produce less heat are called _____ .

    a. radiation
    b. low-pressure systems
    c. occluded fronts
    d. indirect rays



12. A front that forms when a cold front overtakes and merges with a warm front is a(n) _____ .

    a. occluded front
    b. stationary front
    c. low-pressure system
    d. warm front

13. A front that forms when two unlike air masses face each other, but neither moves is a(n) _____ .

    a. warm front
    b. high-pressure system
    c. stationary front
    d. occluded front

14. The horizontal movements of air caused by the uneven heating of Earth are called _____ .

    a. stationary front
    b. radiation
    c. occluded front
    d. wind

15. A front that forms when a mass of warm air meets a mass of cold air and moves over it is a(n) _____ .

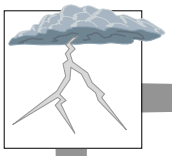
    a. occluded front
    b. warm front
    c. stationary front
    d. low-pressure system

16. The transfer of heat energy by moving air or fluid is _____ .

    a. convection
    b. current
    c. conduction
    d. radiation

17. The direct transfer of heat energy from one substance to another is _____ .

    a. radiation
    b. conduction
    c. current
    d. convection



Practice

Circle the letter next to the **wind** *and* **current** *term that correctly completes each statement below.*

1. A system of winds that blows cold air from the poles is called _____ .

   a. sea breezes
   b. prevailing westerlies
   c. polar easterlies
   d. horse latitudes

2. Cool air blowing from land to sea at night is a _____ .

   a. monsoon
   b. trade wind
   c. land breeze
   d. sea breeze

3. The area around the equator where air moves straight up and there is very little wind is called _____ .

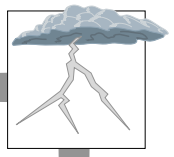
   a. monsoons
   b. doldrums
   c. land breezes
   d. horse latitudes

4. An instrument used to measure wind speed is a(n) _____ .

   a. sea breeze
   b. land breeze
   c. anemometer
   d. wind vane

5. The area at about 30° north and south latitude where there is very little wind is the _____ .

   a. horse latitudes
   b. monsoons
   c. prevailing westerlies
   d. trade winds



6. Winds that blow inland during summer bringing rainy weather and that blow out to sea in winter bringing dry weather are called _____ .

   a. sea breezes
   b. monsoons
   c. polar easterlies
   d. trade winds

7. An instrument that tells from which direction the wind is coming is a(n) _____ .

   a. anemometer
   b. land breeze
   c. monsoon
   d. wind vane

8. A wind system formed over large land areas that blows from the west to the east is the _____ .

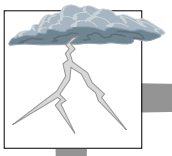
   a. polar easterlies
   b. monsoons
   c. trade winds
   d. prevailing westerlies

9. Cool air that moves from sea to land during the day is a _____ .

   a. sea breeze
   b. land breeze
   c. doldrum
   d. trade wind

10. A system of winds just found north and south of the equator that blows toward the equator from the northeast and southeast is the _____ .

    a. trade winds
    b. polar easterlies
    c. doldrums
    d. prevailing westerlies



Practice

Circle the letter next to the **storm** *and* **precipitation** *term that correctly completes each statement below.*

1. Tiny droplets of water suspended in the air are _____ .

   a. clouds
   b. blizzards
   c. hurricanes
   d. cyclones

2. A high-pressure system with winds moving clockwise is a(n) _____ .

   a. anticyclone
   b. cyclone
   c. tornado
   d. hurricane

3. _____ clouds are clouds that bring rain—they are also called thunderheads.

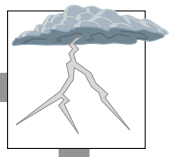
   a. Cumulus
   b. Cumulonimbus
   c. Hurricanes
   d. Cyclones

4. Moisture that falls to Earth as rain, hail, sleet, or snow is _____ .

   a. saturated
   b. thunder
   c. stratus
   d. precipitation

5. A sudden discharge of electricity from clouds is called _____ .

   a. thunder
   b. precipitation
   c. waterspout
   d. lightning



6. A severe snowstorm with high winds is a _____ .

   a. tornado
   b. blizzard
   c. cloud
   d. tropical depression

7. Any type of low-pressure system with winds moving in a counterclockwise direction is a _____ .

   a. hurricane
   b. tropical storm
   c. tropical depression
   d. cyclone

8. Very high, thin, feathery clouds made of ice crystals are _____ .

   a. cumulus
   b. stratus
   c. cirrus
   d. nimbostratus

9. Puffy, white clouds with flat bottoms are _____ .

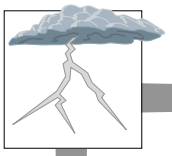
   a. cumulus
   b. stratus
   c. cirrus
   d. nimbostratus

10. A large, powerful low-pressure storm system is a _____ .

    a. blizzard
    b. cyclone
    c. hurricane
    d. tornado

11. A storm formed when the winds of a tropical depression are between 35 and 74 mph is a _____ .

    a. tornado
    b. tropical storm
    c. blizzard
    d. cyclone



12. The sound made by lightning is _____ .

    a. cyclone
    b. tornado
    c. thunder
    d. nimbus

13. A dark, low-lying stratus cloud that contains rain is called _____ .

    a. nimbostratus
    b. precipitation
    c. nimbus
    d. stratus

14. Smooth, layered clouds found low in the sky are called _____ .

    a. tornados
    b. nimbus
    c. stratus
    d. cumulus

15. A cloud that causes rain to fall is called _____ .

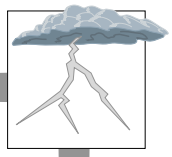
    a. precipitation
    b. stratus
    c. cirrus
    d. nimbus

16. A tornado that forms over water is a _____ .

    a. tropical depression
    b. blizzard
    c. cyclone
    d. waterspout

17. A term used when the air has all the moisture it can hold is _____ .

    a. stratus
    b. tornado
    c. thunder
    d. saturated



18. A storm formed by a large, low-pressure system over water with winds less than 35 mph is a _____ .

    a. tropical storm
    b. blizzard
    c. tropical depression
    d. tornado

19. A violent, funnel-shaped windstorm is a _____ .

    a. hurricane
    b. tropical storm
    c. tornado
    d. cyclone