



UNIT 7

Grade 6 Science EOG Quiz

Hydrology and Meteorology - (S6E4.a.) Land/water Heat Absorption, (S6E4.b.) Unequal Heating Land/water, (S6E4.c.) Moisture Evaporating, (S6E6.a.) Sun Energy Wind Water

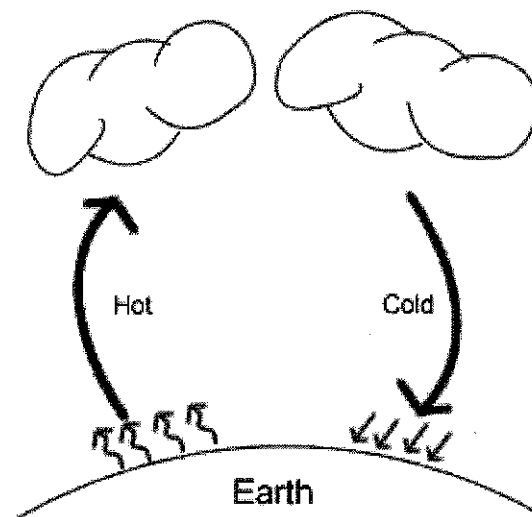
Student Name: _____

Date: _____

Teacher Name: BRITTANY DUDEK

Score: _____

1)



The heat transfer depicted in the image is MOST likely

- A) circulation.
- B) conduction.
- C) convection.
- D) radiation.

2) _____ currents are responsible for circulating hot and cold air in the atmosphere and causing local weather systems.

- A) Oceanic
- B) Radiation
- C) Conduction
- D) Convection

3) The Sun is the source of _____ that heats the tropical waters to fuel _____ in the Atlantic ocean.

- A) heat, waves
- B) wind, tsunamis
- C) light, tornadoes
- D) energy, hurricanes

4) When warm air from a large body of water moves quickly into a land area of cold air, we can expect _____ to occur where the two air masses meet.

- A) fog
- B) low humidity
- C) thunderstorms
- D) a gentle sea breeze

5)

Change in Temperature

Temperature light on °C			Temperature light off °C		
Time (min)	Sand	Water	Time (min)	Sand	Water
Start	22	22	Start	58	30
1	26	24	1	52	30
5	36	26	5	46	30
10	44	28	10	36	28
15	58	30	15	26	26

Mr. Kline's earth science class set up an experiment to compare the heating and cooling rates of land and water. They filled cups with sand and water and then recorded the temperature change while (a) a light was shining directly on the cups and (b) the light was turned off. The data one group collected is presented in the data table. Based on this data, we would expect _____ to have the LEAST changes in temperatures during a 24-hour period.

- A) cities
- B) deserts
- C) the oceans
- D) mountainous areas

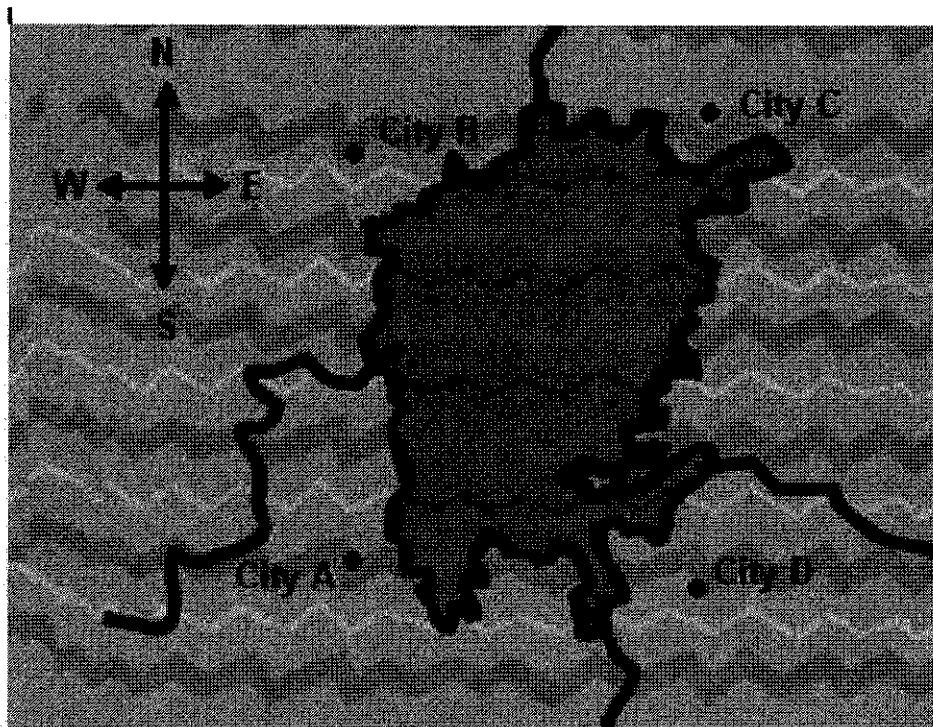
6) The ability of water to hold more heat than land keeps the temperature on Earth

- A) moderate.
- B) the same.
- C) very low.
- D) very high.

7) What process is a method of heat transfer but does NOT contribute significantly to heating the surface or atmosphere of the earth?

- A) conduction
- B) convection
- C) insulation
- D) radiation

8)



With a strong easterly wind pushing a snowstorm across the region, the cities that should receive the MOST snow because of the lake effect are

- A) cities C and D.
- B) cities B and C.
- C) cities A and B.
- D) cities D and A.

9) Why does a desert have a dramatic change in temperature during the day and at night? Because

- A) of the lack of water.
- B) of the lack of vegetation.
- C) sand is such a poor insulator.
- D) of the lack of nitrogen in the soil.

10)



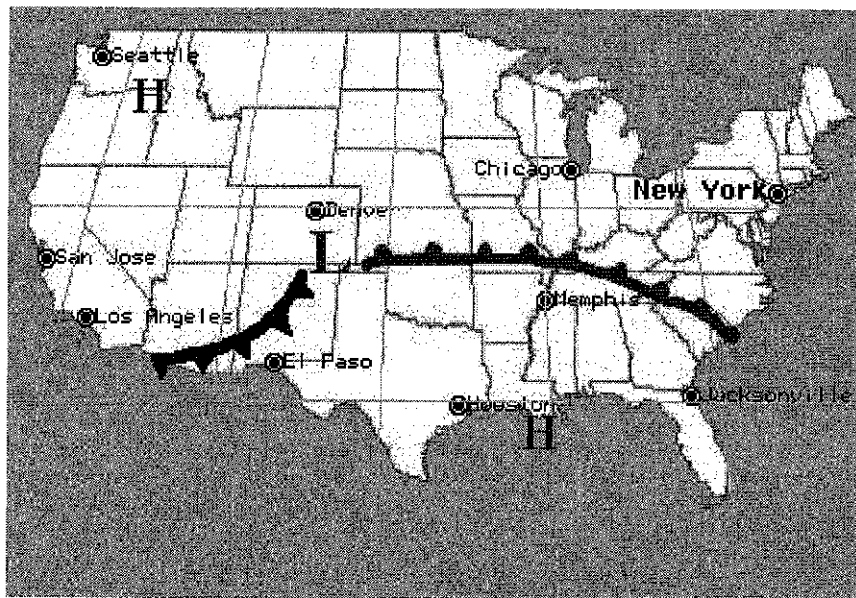
Take a look at the weather map. The front seen there causes short periods of storms and heavy rains. What type of front is this?

- A) cold front
- B) warm front
- C) occluded front
- D) stationary front

11) Air mass thunderstorms occur because of unequal heating of Earth's surface within one air mass. Where would an air mass thunderstorm MOST LIKELY occur?

- A) along coastal areas
- B) over warm ocean waters
- C) over large expanses of flat land
- D) in the area of a continental air mass

12)



According to the weather map seen here, we could expect weather conditions in El Paso to include

- A) cold temperatures, sunny skies.
- B) cold temperatures, cloudy, some precipitation.
- C) warm temperatures, sunny skies, and no rain.
- D) warm temperatures, increasing clouds, and showers.

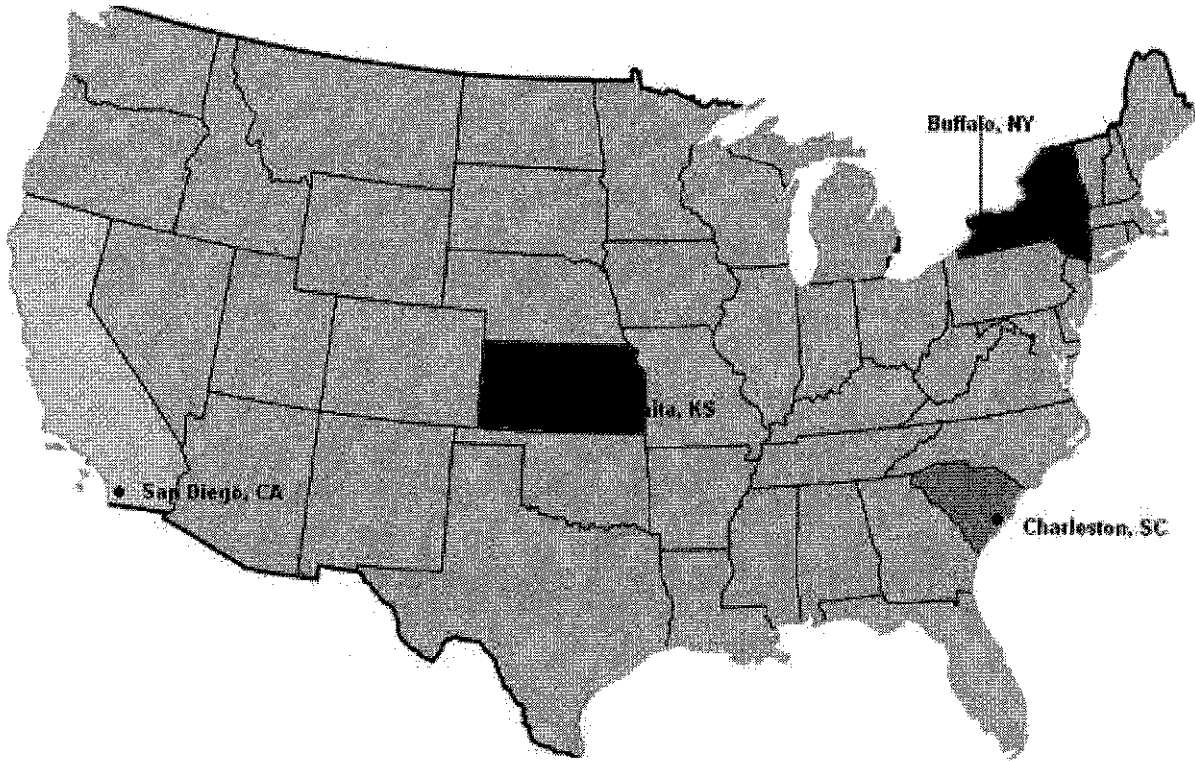
13) Typical United States weather patterns show the continental polar air mass moving south toward the Gulf of Mexico. Why does this air mass movement happen?

- A) Colder air masses move from north to south.
- B) Continental air masses always move in the direct of the nearest body of water.
- C) The polar air mass moves south to replace the rising maritime tropical air mass.
- D) The continental polar air mass is blocked in by maritime air masses on all sides.

14) The _____ blow from east to west, in both the southern and northern hemispheres, and move warm tropical air toward the equator.

- A) doldrums
- B) westerlies
- C) trade winds
- D) polar easterlies

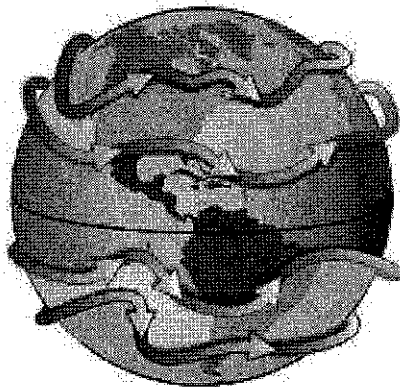
15)



A cold air mass that moves through the United States and reaches New York, Kansas, and even South Carolina is air that came from the

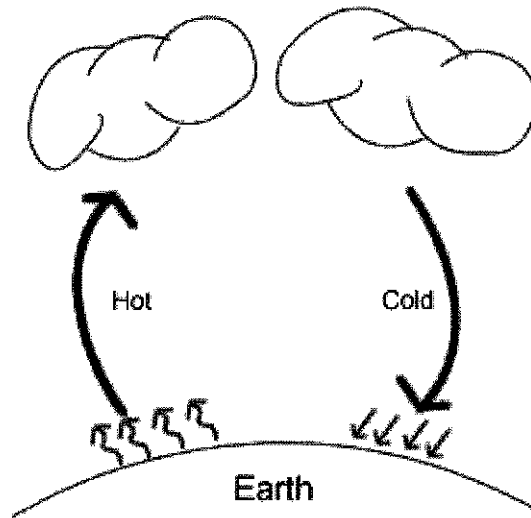
- A) polar convection region.
- B) arctic convection region.
- C) Canadian convection region.
- D) temperate convection region.

16)



This cold river of air travels from west to east in the northern hemisphere. Last winter, it dipped far south to bring cold air and snow to many southern states. This is the _____

17)



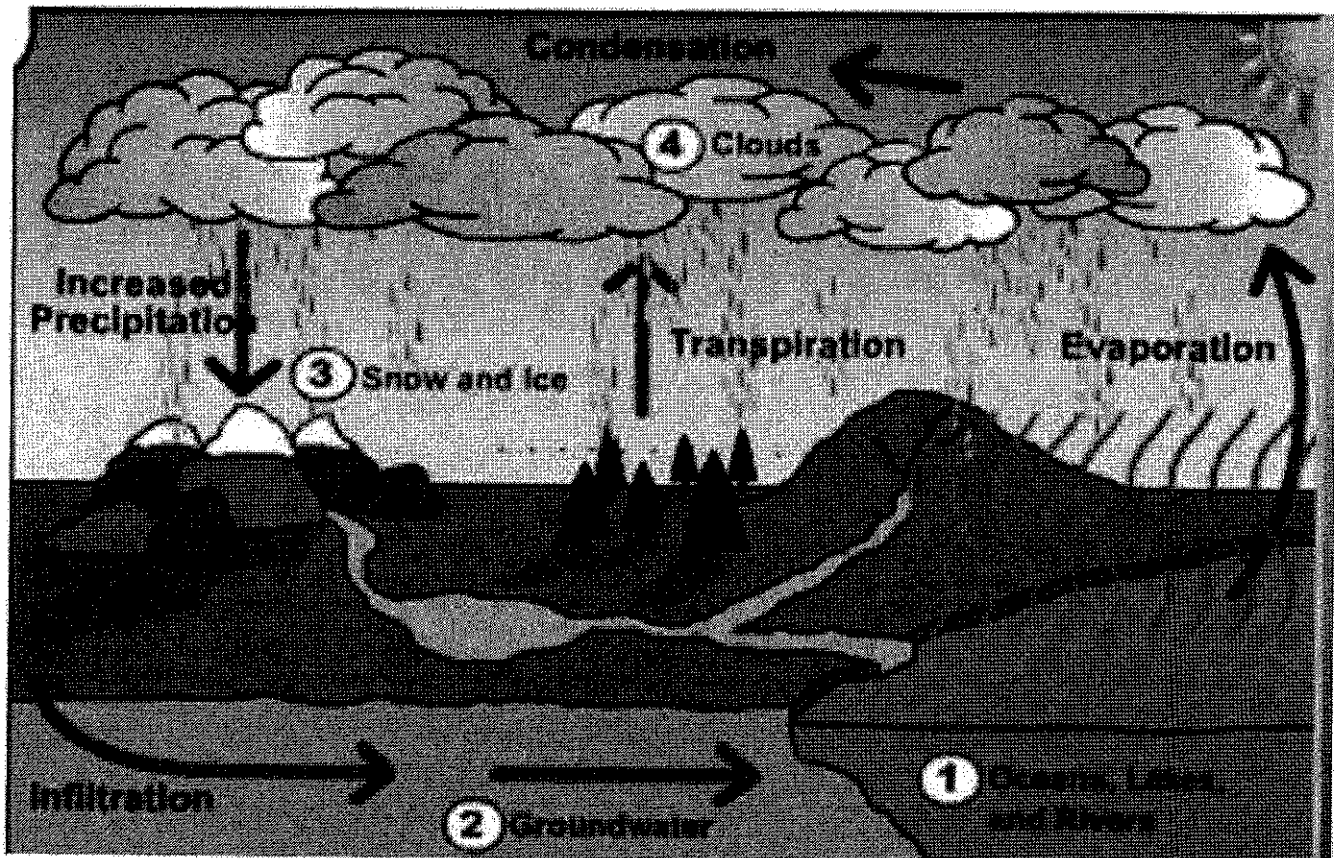
In the northern hemisphere, convection creates _____ large convection cells that produce _____ winds.

- A) one; global
- B) six; global
- C) three; global
- D) four; westerly

18) Weather patterns are caused MAINLY by the

- A) rotation of the Earth.
- B) uneven heating of the Earth.
- C) gravitational pull of the Moon.
- D) distance of the Earth's from the Sun.

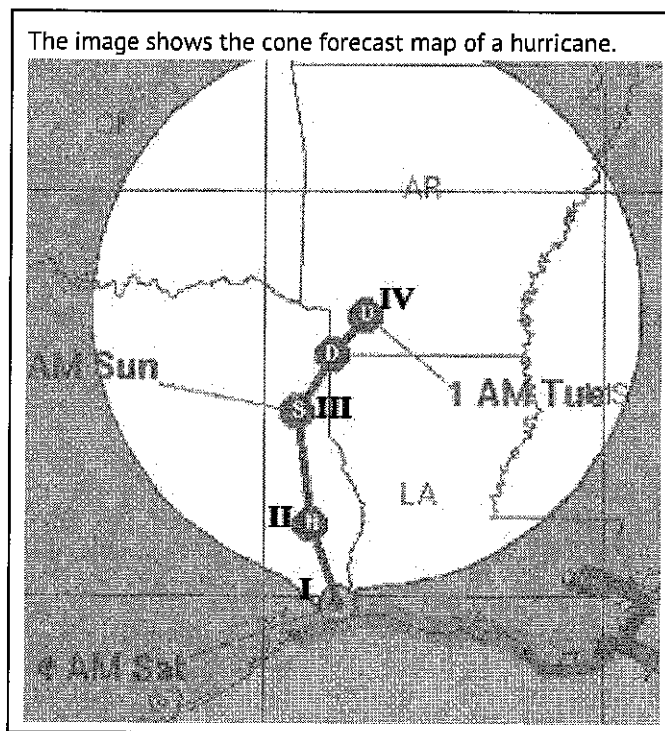
19)



How would global warming change the water cycle and the climate around bodies of water, like oceans and lakes?

- A) Warmer temperatures would cause in a drier, hotter climate.
- B) Warmer temperatures would cause more precipitation and less run-off.
- C) Warmer temperatures would cause more evaporation and more precipitation.
- D) Warmer temperatures would cause more evaporation and much less ground water.

20)



Four locations (I, II, III, IV) are labeled on the diagram. At which of the four locations is the hurricane predicted to be LEAST intense?

- A) I
- B) II
- C) III
- D) IV

21) During the summer months, the sun warms an area of tropical ocean water and a large amount of water evaporates into the air. Which of these weather events will MOST LIKELY will occur?

- A) blizzard
- B) hurricane
- C) tornado
- D) tsunami

22) In order for a hurricane or tropical storm to develop, the temperature of the ocean surface must be

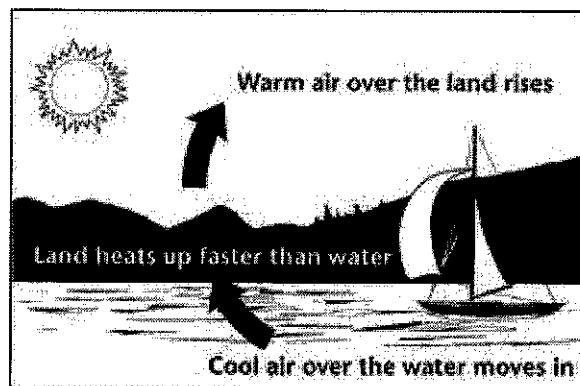
- A) 20°F.
- B) 40°F.
- C) 60°F.
- D) 80°F.

23) Scientists say that conditions must be "just right" for a hurricane to start up. Which is the first step of "just right" in the development of a hurricane?

- A) Cool ocean water replaces warmer surface water.
- B) Very warm ocean water evaporates into the atmosphere.
- C) Hot dry wind blows from land across the ocean surface.
- D) Humid ocean air cools and condenses to form precipitation.

- 24) Why are coastal areas cooler during the day than inland areas?
- A) It rains during the day in coastal areas.
 - B) A cool breeze blows from the sea during the day.
 - C) Coastal areas experience storms every other day.
 - D) The sea absorbs the heat of the air over coastal areas.
- 25) A storm that gets its energy from humid air at the ocean's surface is called a
- A) cyclone.
 - B) hurricane.
 - C) thunderstorm.
 - D) tornado.
- 26) Which continent never has hurricanes?
- A) Asia
 - B) Europe
 - C) Antarctica
 - D) North America
- 27) A storm that gets its energy from warm, humid air at the ocean's surface is called a
- A) blizzard.
 - B) hurricane.
 - C) thunderstorm.
 - D) tornado.
- 28) The large winds that circle the Earth occur because the equator
- A) has less energy than the Sun.
 - B) is perpendicular to the Sun's rays.
 - C) is warmer than the north and south poles.
 - D) is the place where the Earth bulges slightly.

29)



As shown in the diagram, winds are formed from the sun's uneven heating of the earth's atmosphere. The wind patterns are altered by bodies of water, different landforms, and plant cover. Because of this, the wind is considered a form of

- A) solar power.
 - B) nuclear power.
 - C) chemical energy.
 - D) potential energy.
- 30) What causes the wind?
- A) The earth's orbit around the sun
 - B) The earth's rotation on its axis.
 - C) The layers of the earth's atmosphere.
 - D) Uneven heating of the earth's surface by the sun.