Name _____ Date _____

Donald7thWaterandWeather

6f and 6g

1.
Which of the following is the property that makes water unique?

A. It is colorless, odorless, and tasteless
B. It exists, on Earth, in all of its states
C. It exists only on Earth
D. None of the above

2.
Water that is has a salinity (saltiness) less than ocean water but higher than average river or lake water is called

A. Salty
B. Fresh
C. stagnant
D. brackish

3.
Mount Everest is the highest point on Earth's surface. Which characteristic is the air at the peak of Mount Everest MOST LIKELY to share with air at sea level?

A. Pressure
B. Temperature
C. Weather
D. Composition

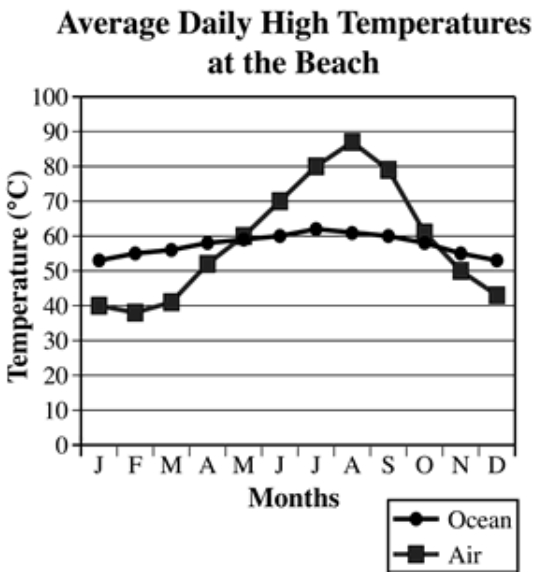
4.
A scientist analyzing past climates finds evidence that a certain region that was once very warm and wet became cooler and drier over time. Which of the following situations could MOST LIKELY be the cause of this climate change?

A. The water table could have dropped in the area.
B. Ocean evaporation rates could have increased in the area.
C. An ocean current could have changed direction away from the area.
D. An increase in the total amount of water on Earth caused more rain in the area.

5.
During the climatic phenomenon El Niño, surface seawater temperatures off the west coast of South America are higher than normal. This tends to increase rainfall in the western parts of North and South America because warm water —

A. precipitates more easily than cool water
B. evaporates at a higher rate than cool water
C. absorbs more heat energy than cool water
D. condenses at lower altitudes than cool water

6.
Carmen collects data about average daily high air and water temperature at the beach.



Which of these should Carmen infer from the graph?

A. The air temperature is always warmer than the water temperature.
B. The water temperature is unaffected by the seasonal changes.
C. The air temperature is measured using more accurate tools.
D. The water temperature changes more slowly than the air temperature.

7.
In 1815, tropical volcano Tambora erupted, sending tons of ash and dust into the atmosphere. The following year, 1816, was known in parts of Europe and North America as "the year without a summer." Which of the following would be an immediate effect of an eruption like Tambora's?

A. Heat from the eruption would melt ice caps, causing sea levels to rise.
B. Ash would absorb all water vapor in the air, leading to long droughts.
C. Heat from the eruption would radiate, heating climates worldwide.
D. Ash would block some sunlight, causing evaporation to decrease.

8.
Hurricanes are powerful tropical storms that develop over warm ocean water. Hurricanes draw their energy from the ocean and weaken as they move over land. Which of the following BEST explains how energy is transferred from the ocean to a hurricane?

A. Evaporating water adds heat to the atmosphere.
B. Rising tides change the level of the ocean surface.
C. Waves cause turbulence in the lower atmosphere.
D. Currents carry warm water along the ocean surface.

9.
In which will a toy boat float higher?

A. brackish water
B. distilled water
C. fresh water
D. saltwater

GO ON

10.
Weather in an area is MOST related to the amount of which gas present in the atmosphere?

A. Oxygen
B. Water vapor
C. Nitrogen
D. Carbon dioxide

11.
Earth's oceans are MOST helpful in stabilizing Earth's —

A. force of gravity
B. average temperature
C. nearly circular orbit
D. daily period of rotation

12.
Which of these types of water is in order from the most saline to the least saline?

A. brackish - salt - fresh
B. brackish - fresh - salt
C. salt - brackish - fresh
D. salt - fresh - brackish

13.
Because the Earth is a sphere, different regions receive different amounts of the Sun's energy. Which of the following is a direct result of this?

A. Most large rivers flow towards the ocean.
B. Warm ocean currents originate in the tropics.
C. Sea level rises when global temperatures rise.
D. Greenhouse gases are more concentrated at the poles.

14.
As a river dumps fresh water into the ocean, the waters mix. At what depth would you find the most saline water?

A. At the surface
B. About 5 centimeters below the surface
C. About 10 centimeters below the surface
D. About 15 centimeters below the surface

15.
EPA Drinking Water-Quality Standards

Substance	Limit (Parts per Million)
Arsenic	0.05
Copper	1.3
Lead	0.015
Nickel	0.14

Which water sample is unacceptable for drinking?

A.

Substance	Amount
Arsenic	0.04
Copper	0.9
Lead	0.02
Nickel	0.1

B.

Substance	Amount
Arsenic	0.03
Copper	0.85
Lead	0.01
Nickel	0.13

C.

Substance	Amount
Arsenic	0.035
Copper	1.2
Lead	0.012
Nickel	0.12

D.

Substance	Amount
Arsenic	0.02
Copper	1.1
Lead	0.011
Nickel	0.11

16.
Ocean currents move warm and cold water throughout the oceans, affecting weather systems and climates. Where do warm ocean currents originate?

A. Near the poles
B. Near the equator
C. Near continents
D. Near the middle of oceans

17.
Which of the following statements BEST explains how the oceans moderate the range of daily temperature fluctuations on Earth?

A. Ocean currents carry water from warmer areas to colder areas.
B. Ocean water evaporates during the day and condenses at night.
C. Ocean water expands when it is heated and contracts when it cools.
D. Ocean water absorbs heat during the day and releases heat at night.

Checklist List

3)

4)

5)

6)

7)

8)

10)

11)

13)

16)

17)