

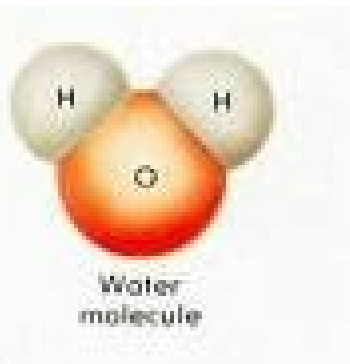
Name\_\_\_\_\_ Date\_\_\_\_\_

## Properties of Water Quiz Review

Structure:

1) Label which element would be positive (+) and which would be negative (-).

True-False:



- \_\_\_\_2) Water is made up of 2 atoms of hydrogen and 1 atom of oxygen to form a molecule.
- \_\_\_\_3) Water contains half as many hydrogen atoms as oxygen atoms.
- \_\_\_\_4) Water is a polar molecule which means it has slightly charged ends. This is why water has so many unique properties.
- \_\_\_\_5) Water molecules tend to repel each other and other molecules.
- \_\_\_\_6) The chemical formula for water is H<sub>2</sub>O.

Key Properties:

Word bank:

Buoyant	Solubility	Cohesion	Hot	Capillary action	Universal solvent
Polar	Slower	Cold	Surface tension	Adhesion	Solute
					Specific heat

- 7) A molecule that has electrically charged ends is called a \_\_\_\_\_ molecule. This means it bonds to like molecules and ionic molecules.
- 8) \_\_\_\_\_ describes how water moves against gravity and can travel up a plant's roots into its stem and leaves.
- 9) \_\_\_\_\_ describes how the surface of water acts like a skin and seals up quickly after being disturbed. This allows water striders and the Jesus Christ lizard to appear to "walk" on water.
- 10) \_\_\_\_\_ is the property of water that causes water molecules to "stick" to each other.
- 11) \_\_\_\_\_ is the property of water that causes water molecules to "stick" to other substances.
- Ex. Glass of water sweats and sticks to a coaster
- 12) A mixture forms when one substance, the \_\_\_\_\_, dissolves into the solvent. The property that describes the "dissolving" ability of water is \_\_\_\_\_.
- 13) Water is called the \_\_\_\_\_ because of its ability to dissolve so many different substances.
- 14) \_\_\_\_\_ water dissolves faster than \_\_\_\_\_ water.
- 15) \_\_\_\_\_ describes the capacity of water to hold on to its heat.
- 16) Water has a density of 1 g/cm<sup>3</sup>. Many substances will float in water. If a substance floats, this is due to its density and the \_\_\_\_\_ force.
- 17) Water's specific heat makes large bodies of water cool down \_\_\_\_\_ than the nearby land.

Name\_\_\_\_\_ Date\_\_\_\_\_

## States of Matter:

18) Describe the 3 common states of water:

\_\_\_\_\_ (solid)

\_\_\_\_\_ (Liquid)

\_\_\_\_\_ (gas)

19) Do all three states of water have the same density? \_\_\_\_\_

Complete the compare/contrast table below:

Type of Change	Starting State	Ending State
Melting	Solid	Liquid
Boiling	Liquid	20.
Evaporation	21.	22.
Condensation	23.	Liquid
Freezing	24.	25.

## Matching:

\_\_\_\_26) ice

a) it is invisible

\_\_\_\_27) liquid water

b) it takes the shape of its container and volume is easily measured

\_\_\_\_28) water vapor

c) it has a temperature less than 0°C