

NAME _____ CLASS _____ DATE _____

Water--Liquid Awesome

1. _____ is the only substance on all of Earth that occurs naturally in solid, liquid, and gas forms.
2. In a water molecule, the end with oxygen has a slight _____ charge, and the end with hydrogen has a slight _____ charge.
3. Because of water molecules' polarity, water molecules actually stick together due to _____ bonds.
4. _____ bonds result in high cohesion for water, which results in high surface tension.
5. _____ is the attraction between two like substances.
6. _____ is the attraction between two different substances.
7. The fact that water is a _____ molecule also makes it really good at dissolving things, which makes it a good solvent.
8. Substances that dissolve in water are called _____, and they are that way because they are polar.
9. A _____ substance lacks charged poles, so they are nonpolar and therefore do not dissolve in water.
10. Henry Cavendish was the first person to recognize _____ gas as a distinct substance and to determine the structure of water.
11. Ice is less dense than liquid water because of water's _____ bonds.
12. _____ has a high heat capacity, which means water is really good at holding on to heat. Therefore, it is hard to heat up and cool down the oceans significantly.

WORD BANK (words can be used more than once or not at all)

Adhesion	Covalent	Cohesion	Hydrogen
Hydrophilic	Hydrophobic	Ionic	Negative
Nonpolar	Oxygen	Polar	Positive
			Water

TEACHER KEY

Water--Liquid Awesome (11:16)

http://www.youtube.com/watch?v=HVT3Y3_gHGg

1. Water is the only substance on all of Earth that occurs naturally in solid, liquid, and gas forms.
2. In a water molecule, the end with oxygen has a slight negative charge, and the end with hydrogen has a slight positive charge.
3. Because of water molecules' polarity, water molecules actually stick together due to hydrogen bonds.
4. Hydrogen bonds result in high cohesion for water, which results in high surface tension.
5. Cohesion is the attraction between two like substances.
6. Adhesion is the attraction between two different substances.
7. The fact that water is a polar molecule also makes it really good at dissolving things, which makes it a good solvent.
8. Substances that dissolve in water are called hydrophilic, and they are hydrophilic because they are polar.
9. A hydrophobic substance lacks charged poles, so they are nonpolar and therefore do not dissolve in water.
10. Henry Cavendish was the first person to recognize hydrogen gas as a distinct substance and to determine the structure of water.
11. Ice is less dense than liquid water because of water's hydrogen bonds.
12. Water has a high heat capacity, which means water is really good at holding on to heat. Therefore, it is hard to heat up and cool down the oceans significantly.