**Properties of Water Concept Map: Properties and Connections**

AP Biology

**Properties of Water:** Fill in the following properties of water in the appropriately placed boxes on your concept map.

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| High Specific Heat / Heat Capacity |
| Universal Solvent |
| Hydrogen Bonding |
| Cohesion |
| Polar Molecule |
| Capillary Action |
| Less Dense as a Solid |
| Surface Tension |
| Adhesion |

**Connections:** Fill in the numbers corresponding to the correct connections in the circles on your concept map.

|  |  |
| --- | --- |
| 1 | Which allows water to experience extreme temperature changes in the environment without having correspondingly large temperature changes |
| 2 | Which allows water to isolate different parts of ionic compounds (like the Na+ and Cl- in salt) and dissolve them.  |
| 3 | The oxygen in water holds shared electrons more tightly than hydrogen, which gives oxygen a slightly negative charge and hydrogen a slightly positive charge.  |
| 4 | Which allows water molecules to stick to each other. |
| 5 | Which allows water molecules to stick to any other polar molecule. |
| 6 | Which allows water molecules to form a type of bond between one another. This type of bond is weaker than ionic bonds and covalent bonds, which are found inside molecules, rather than between them.  |
| 7 | When water freezes, more hydrogen bonds form, resulting in larger spaces between water molecules within ice.  |
| 8 | Which allows the movement of water up a narrow tube. |
| 9 | Which causes a film to form on the surface of a body of water.  |