Name _____

Water's Invisible Skin: Understanding Surface Tension

Multiple Choice Questions

1. What is surface tension?

a) The force of gravity acting on the surface of a liquid

b) The tendency of a liquid to flow freely

c) The force that acts on the surface of a liquid and minimizes its area

d) The property of a liquid to stick to solid surfaces

2. What causes surface tension in water?

a) The repulsive forces between water molecules

b) The unequal distribution of water molecules in the liquid

c) The cohesive forces between water molecules, including hydrogen bonding

d) The presence of air bubbles in the liquid

3. What role do hydrogen bonds play in surface tension?

a) They weaken the surface tension.

b) They have no effect on surface tension.

c) They strengthen the cohesive forces between water molecules, contributing to surface tension.

d) They create a repulsive force that opposes surface tension.

4. Which of the following phenomena is NOT a result of surface tension?

a) Capillary action in narrow tubes

b) Spherical water droplets

c) The formation of ocean waves

d) Floating objects on the water's surface

5. How do water striders utilize surface tension to stay afloat?

a) They create holes in the water's surface.

b) They have special waterproof leg coverings.

c) Their body shape allows them to "push" against the water.

d) They use their legs to disturb the surface tension.