Name: Score:

7 Multiple choice questions

Definition 1 of 13

When liquid flows through narrow spaces without external forces, such as gravity.

- ◯ **Capillary action**
- ◯ **Water cohesion**
- ◯ **Rewetting cell walls**
- ◯ **Cohesion in xylem**

Definition 2 of 13

Adhesion helping xylem vessels refill with water when air-filled, such as in deciduous trees during winter

- ◯ **Rewetting cell walls**
- ◯ **Xylem vessel refilling**
- ◯ **Floating objects on water**
- ◯ **Cohesion in xylem**

Definition 3 of 13

The property of the surface of a liquid that allows it to resist an external force, due to the cohesive nature of its molecules

- ◯ **Capillary action**
- ◯ **Surface tension**
- ◯ **Water cohesion**
- ◯ **Porous soil**

Definition 4 of 13

Use of water surfaces as a living environment

- ◯ **Conduction of water in xylem**
- ◯ **Water surfaces as habitat**
- ◯ **Adhesion to solid surfaces**
- ◯ **Breaking hydrogen bonds**

Definition 5 of 13

Soil with small spaces between particles that water can be attracted to and rise up from underground sources

- ◯ **Xylem vessel refilling**
- ◯ **Porous soil**
- ◯ **Capillary action**
- ◯ **Surface tension**

Term 6 of 13

Floating objects on water

- Ability of objects like steel pins to float on water's surface due to surface tension and cohesion between water molecules
- Adhesion helping xylem vessels refill with water when air-filled, such as in deciduous trees during winter
- Soil with small spaces between particles that water can be attracted to and rise up from underground sources
- Capillary action due to adhesion helping to moisten and rewet cell walls in plants

Definition 7 of 13

A raft spider is able to hunt on the surface of the water because of their water-repelling hairs and lightweight which keeps them from breaking surface tension on the water.

- Floating objects on water
- Explain why a raft spider is able to hunt on the surface of water?
- Adhesion to solid surfaces
- Xylem vessel refilling

6 Matching questions

8 13 of 13

Breaking hydrogen bonds	**A.** Water molecules like sticking together, requiring energy to break them.
Water cohesion	**B.** Transport of water through the xylem in plants
Adhesion to solid surfaces	**C.** Requiring energy to break the hydrogen bonds in water
Cohesion in xylem	**D.** Hydrogen bonds between water and solid surfaces causing adhesion and movement
Rewetting cell walls	**E.** Capillary action due to adhesion helping to moisten and rewet cell walls in plants
Conduction of water in xylem	**F.** Hydrogen bonds in water in xylem making it cohesive and able to withstand large tensions