

very easily if something else touches it. Things can also move easily through fluids. This does not only mean fluids are like the water that you drink. Fluids can also float like a gas. The air around you is a fluid, too. You turn your leaves up to the sky.

Rumble. This sound makes your roots ache. Big gray shapes fill the sky. Clouds. You know that they are made of water. When it gets very hot, all of the water puddles shrink and the bits of water get so hot they sail up into the sky. **Condensation** happens when molecules come together. Sometimes, when it's cold, you will feel bits of water come together in drops on your leaves. The same thing happens with a cup of ice water. Water in the air starts to form drops on the outside. In the clouds, the cold air makes the water gather around dust. That makes them heavy enough to fall down as raindrops. Plip.

Plip Plip pliplip PLIP Plippliplipliplipliplip

You are a plant. You are a very happy plant. It is raining. Water may not come to you all of the time. When it flows, the shape of the land decides where it goes. This means you have to wait until the sky is just cold enough for the water in clouds to come together and fall down as rain. You are a plant, and you are no longer sitting on a dry little hill. You are sitting on a wet little hill, with all the water your roots can drink.

References:

School For Champions. "Characteristics of Fluids" School for Champions, 2013.
<<http://www.school-for-champions.com/science/fluids.htm>>

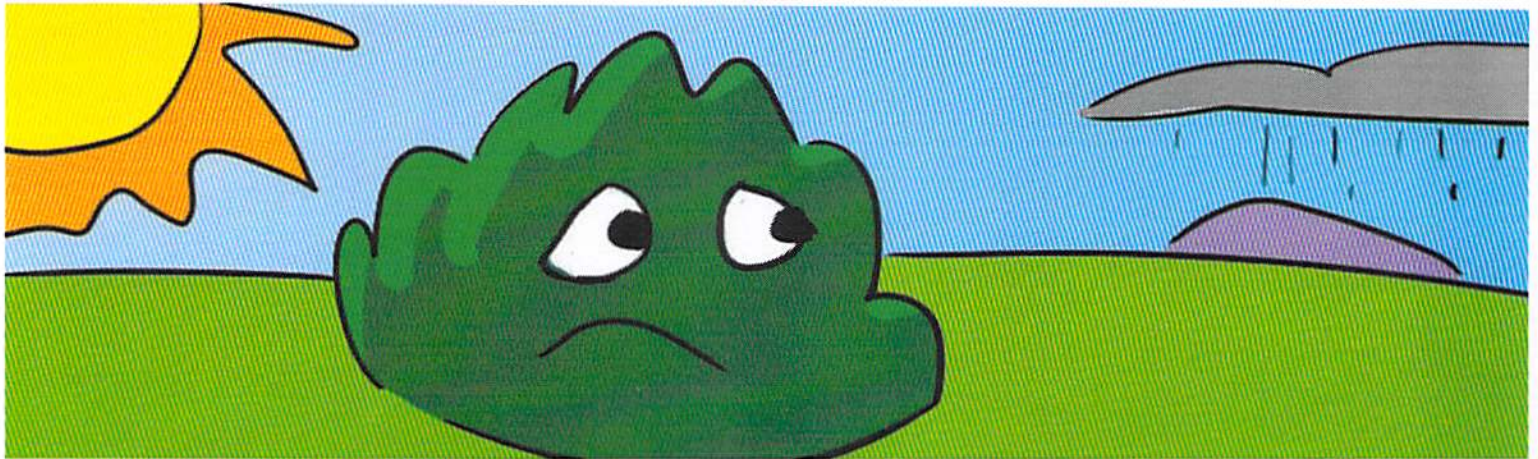
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Name _____

Period _____

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Waiting For Water

attractive forces, fluid, condensation, flow

Structure of Matter Unit

You are a plant. A very thirsty plant. You sit on a small, dry hill, all alone. Since your roots are fixed into the dirt, you cannot go and find water. You have to wait for water to come to you. Sometimes water takes its sweet time. It cannot run to the top of your hill, and conditions have to be just right for rain to come down from the sky. As a plant, all you have to do all day is sit, wait, and dream about water.

Water is tricky. If it is too warm, it will fly up into the air and will not stay in one place. If it is too cool, it will stick together as ice. This means it can't fly up into the sky to turn into clouds that will rain on you. Water wants to hang out with other water. It takes a lot of heat to push it apart. **Attractive forces** pull things together. In ice, these forces are strong enough to keep the little bits of water locked together in the same place where your roots can't reach them. If they are too weak, the water will have so much energy that it will break away and flies up into the sky. It would be nice for a plant if water would make up its mind.

What is that sound? It sounds like a trickle. It sounds like a gurgle. Water is coming this way! **Flow** means to be able to move around smoothly. Someone poured some water out of a bucket and now it's rushing right toward you! If that was ice, all the building blocks would not move unless we broke them up and pushed each chunk down the hill. Ice is locked together, but the building blocks in water can move around each other and flow. Thankfully, this water flows down the hill. When it comes to your hill, it runs right around you in two streams and keeps going toward the other plants below you. Your roots stretch down to try and soak some up. Not a drop.

Water is a liquid, you know. That means it splashes and it runs down hills and when it is inside of a watering can, it takes the shape of a watering can. A **fluid** does not have any one shape, and can change