WATER CYCLE Brain Pop MOVIE TRANSCRIPT

A submarine periscope, and then the entire submarine, surfaces in a body of water.
Text reads: The Mysteries of Life with Tim and Moby.
The camera zooms out to show a man, Tim, playing with a toy submarine in a bathtub. He is wearing goggles and a snorkel.
TIM: Plot a solution! Flood tubes 1 and 2! Incoming— A robot, Moby, appears, laughing.
MOBY: Beep!
TIM: Don't make fun of my hobbies!
Tim reads from a typed letter.
TIM: Dear Tim and Moby, Where does all the water in rain come from? Signed Steven.
Water vapor is shown.
TIM: Well, there's always a certain amount of water vapor in the atmosphere. It comes from the earth's surface water, like oceans, rivers, and lakes. A beach, a river, and a lake are shown.
TIM: Water from these sources evaporates, changing from a liquid to a gas. Water vapor is shown rising from a body of water.
TIM: Down here on the ground, you usually can't see the water vapor that's all around us. But higher up in the atmosphere, gaseous water cools down and condenses into clouds.
A mountain is shown. A section of air around the mountain is magnified to show water vapor. The camera moves up to show a cloud forming high over the mountain. A section of the cloud is magnified to show the water vapor inside.
TIM: When water molecules in clouds collect into big enough drops, they fall on us as rain. (rain falling) Or as snow, sleet, or hail, depending on the temperature.
The water molecules in the magnified section of the cloud combine into a larger drop, and then rain falls from the cloud. Next, snowflakes are shown in the magnified portion, and snow falls from the cloud.
TIM: Water is constantly cycling from land to air and back again.
An animation shows rain falling from a cloud over a piece of land, which is next to a body of water. Moving arrows indicate that the rain runs from the land into the water and then is drawn up into the air as water vapor, which then moves back into the cloud.
TIM: As you might have guessed, this process is known as the water cycle. Scientists study it because water is such an important part of the ecosystem. Every living thing on the planet depends on a supply of clean water!
A man holding a camera is shown standing in a field. He is surrounded by wildlife that includes a bear, a cat, a frog, a camel, a duck, a dog, a snake, a bird, and panda.
MOBY: Beep?
TIM: Well, you can think of the water cycle as the earth's circulatory system. Just like there is a fixed amount of blood circulating through your body, there is a fixed amount of water cycling around, over, and inside our planet! All that water is known as the hydrosphere.
A man and planet Earth are shown. The view changes to show the man's circulatory system and the flow of water on Earth. Then the camera zooms in on Earth.
TIM: The sun is the heart that pumps water around the hydrosphere. Its heat energy breaks the bonds between water molecules, causing them to evaporate from oceans, lakes, rivers...even plants!
The sun is shown. The camera zooms out to show that the sun is over a body of water. A section of the water is magnified to show water molecules. In this magnification, some of the water molecules begin to drift upward.
MOBY: Beep!
TIM: You're right, water returns to the earth through precipitation, also known as rain, snow, sleet, and hail.
Four drawings of rain, snow, sleet, and hail are shown.
TIM: Sometimes, water flows across the surface of the earth as something called runoff. Runoff adds to the flow of streams and rivers!
An animation shows water from snow running down rocks and into a river.
TIM: Or water can soak into the ground, in a process called infiltration. Water that is infiltrated the ground is called groundwater. It can stay beneath the surface anywhere from a few days to thousands of years! An animation shows the first four layers of Earth's surface. Rain falls and soaks into the ground, creating a flow of water in the deepest layer.
TIM: This groundwater feeds wetlands, lakes, and streams, and supplies us with water for drinking, farming, and lots of other stuff!
A body of water with tall grass jutting up from it is shown. A faucet and farmland in front of a barn and a silo are also shown.
MOBY: Beep?
TIM: The water cycle's been going on for billions of years, circulating the same supply of water over & over & over again. (gulping noise)
A brontosaurus is shown drinking water from a pond.
TIM: The same exact water molecule a dinosaur drank from a pond 100 million years ago...could be inside the glass of water you drink today!
A section of the pond that the brontosaurus is drinking from is magnified to show water molecules, one of which is wearing sunglasses and smiling.
Text reads: Jerry the water molecule.
Moby is shown drinking from a glass of water. Some of the water is magnified to show water molecules and the smiling water molecule. Moby frowns and spits out the water.
TIM: And check this out: even though water is constantly moving through the hydrosphere, the amount in any one part of the cycle never changes!
The complete water cycle is shown. Rain falls from a cloud onto a piece of land. Some of the water sinks into the soil to form groundwater, and some flows as runoff into a body of water. Water vapor rises from the water toward the sun.
MOBY: Beep?
TIM: Well, take the ocean. It contains about 97% of all the water in the hydrosphere. It loses a huge amount to evaporation every day, but it makes up that same amount from groundwater, precipitation, and rivers.
Earth is shown again with the water flow highlighted. Then the animation of the water cycle is shown again. Arrows show the movement of water. One arrow points from the water to the cloud. Another points from the cloud back to the water. A third points from the land down into the water. The last points from the groundwater to the body of water.
TIM: The same goes for other reservoirs, or storage places. So, the amount of water in the atmosphere and the amount of water on the earth's surface stays perfectly balanced all the time! It's kind of like a big, beautiful machine!
The arrows in the animation of the water cycle disappear and are replaced by two arrows moving in a circular motion through the water cycle.
MOBY: Beep?
TIM: No...no, not as beautiful as you.