

Water, Water, Everywhere

Earth is called the “water planet.” Looking at this photo of Earth, it’s easy to see why.

In photos taken from space, our planet looks mostly blue. The large blue areas are oceans, which cover much of Earth. That’s a lot of water, but it’s not Earth’s only water. The white areas in the photo are clouds and ice, which are also made of water. Even more water flows deep underground, where it can’t be seen.





Earth is made mostly of water. Still, it is hard for many people to get the water they need for drinking, bathing, and cooking. Why? One reason is that very little of the water you see can be used by people. Most of it is ocean water, which is too salty to drink. It's also too salty to water gardens and farms where food is grown. Only a small amount of the water on Earth is salt-free, or fresh, water.

That leaves only a tiny amount of fresh water for drinking. This tiny amount of fresh water must be shared by everyone on Earth.

Only a Drop to Drink

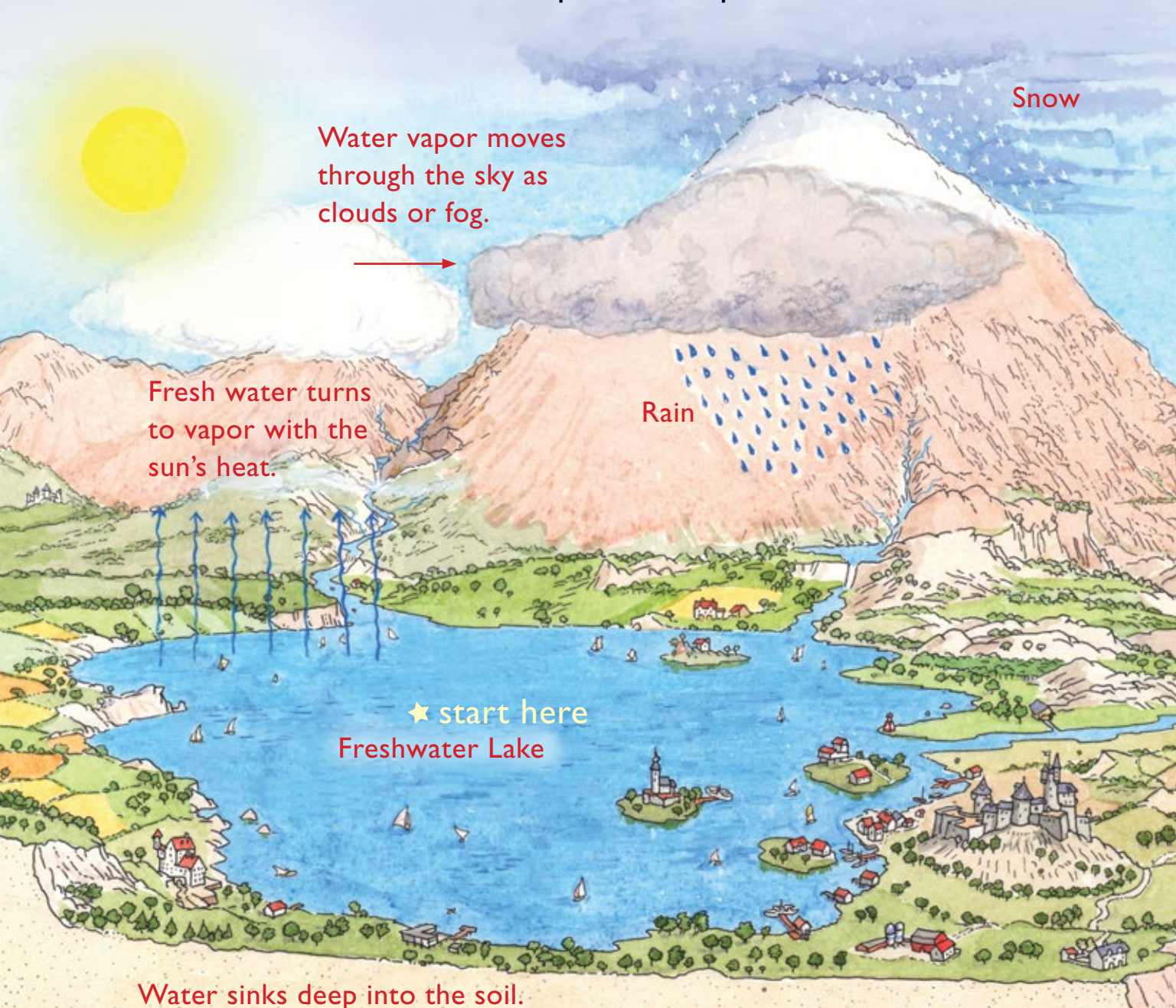
If all of the planet's water were in one bucket, only a spoonful would be drinkable.★



The Never-Ending Story

The water that we drink has been on Earth since our planet was formed. New water never gets made. The same water just keeps moving around and getting recycled.

How does that happen? The sun warms water in oceans and lakes. Some of the water gets so hot that it turns to vapor. Most of the time, we can't see the vapor. The vapor rises into the air.



Fresh water turns to vapor with the sun's heat.

Water vapor moves through the sky as clouds or fog.

Snow

Rain

★ start here

Freshwater Lake

Water sinks deep into the soil.

When vapor cools, it forms little drops of water. Those tiny drops are what make steam, fog, and clouds. When the drops of water get large and heavy, they become rain. If the water drops freeze in the cold air, they turn to snow or hail. Drops of fallen rain and melted snow trickle deep into the ground or flow into rivers, lakes, and oceans.

Water in the ocean is salty. When salt water turns to vapor, the salt gets left behind in the ocean. That's why rain is never salty!

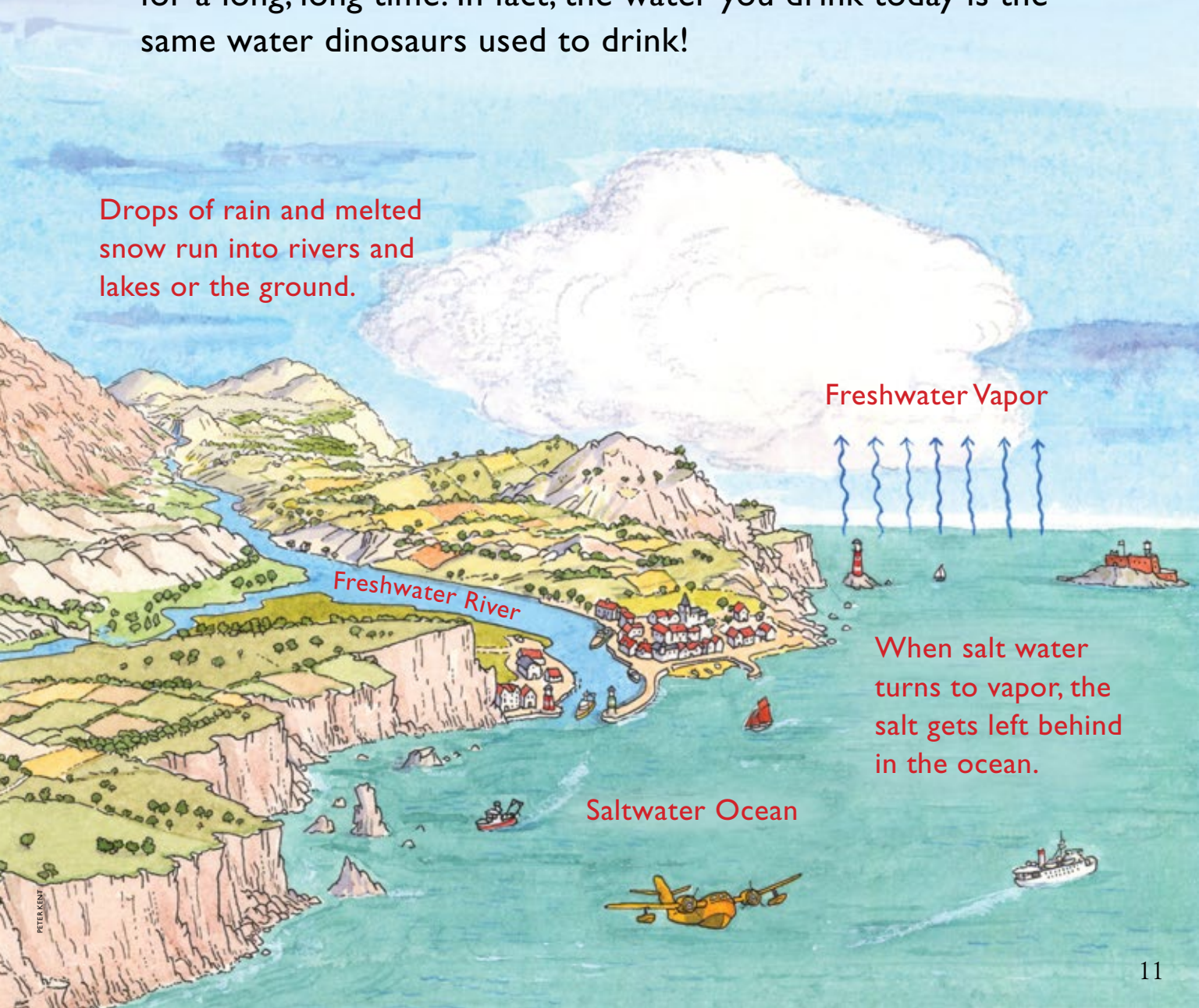
All of the water in the world has been going through this cycle for a long, long time. In fact, the water you drink today is the same water dinosaurs used to drink!

Drops of rain and melted snow run into rivers and lakes or the ground.

Freshwater Vapor

When salt water turns to vapor, the salt gets left behind in the ocean.

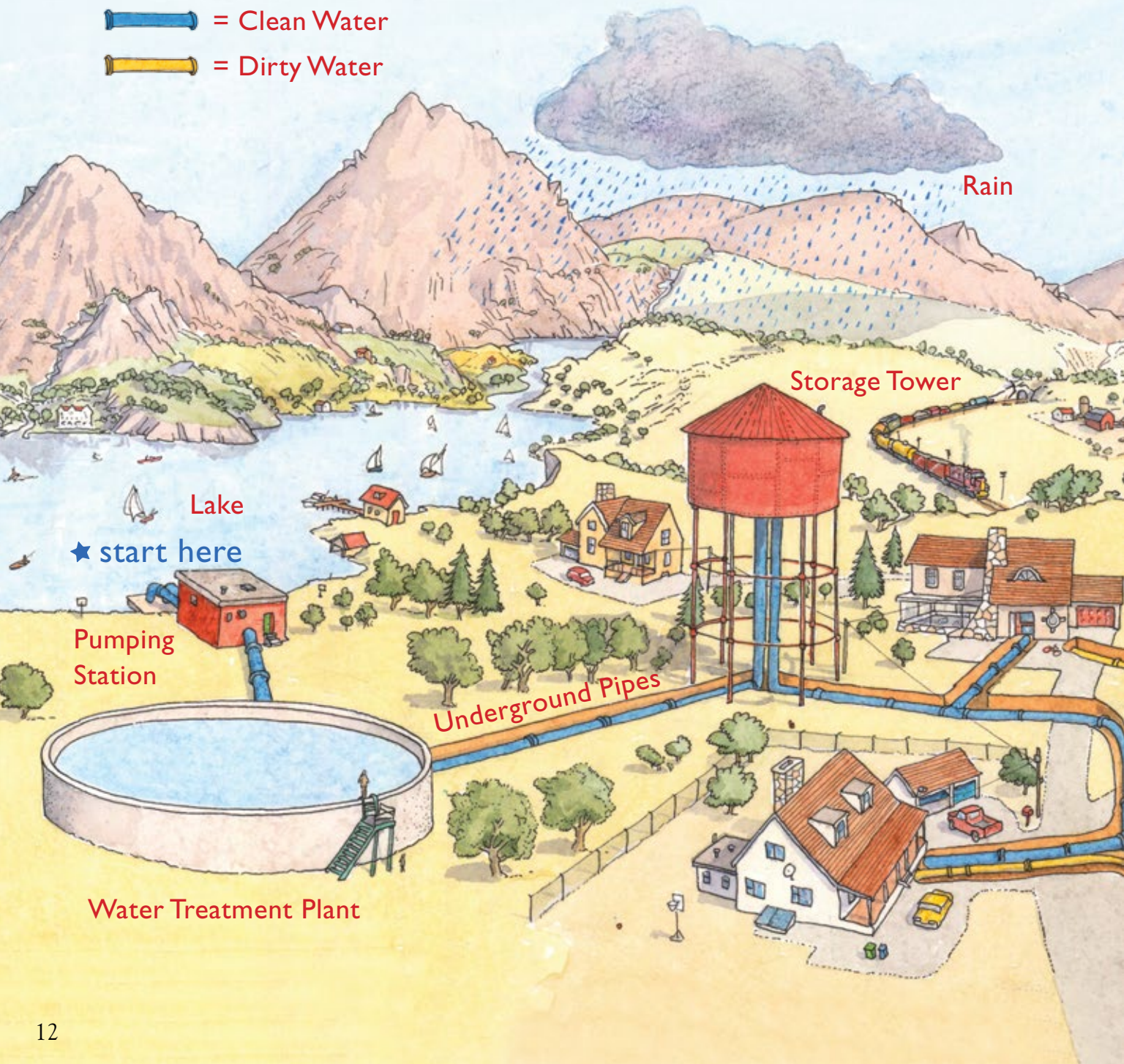
Saltwater Ocean



How does water get to your faucet? Follow the blue pipes. First, water is pumped from lakes, rivers, or from deep in the ground into a water treatment plant. There, germs and dirt are removed from the water so it is safe to drink. Then the water is pumped through pipes into a storage tank or tower. From there, water gets sent through pipes to your home and goes into the kitchen and bathroom.

 = Clean Water

 = Dirty Water



Where does the water go once you have used it? Follow the yellow pipes. When water goes down the drain or toilet, it goes into sewer (say it: SOO-er) pipes that are underground. The dirty water flows to a sewage (say it: SOO-ij) treatment plant. There, the water is cleaned. Then the water goes through more pipes into a river. And it finally flows back into lakes or oceans where the cycle starts all over again.★

