

# WHERE IS THE WATER?



# HOW DOES IT MOVE?



Plants draw up, use, and retain water as part of photosynthesis.

Water vapor in the atmosphere cools and condenses into liquid water droplets that can fall as precipitation.

Water can soak into the ground and stay close to the surface or it can sink deeper into aquifers. Some aquifers take centuries to replenish.

Water needed for a city is collected, treated, and can be stored in water towers. City water may be withdrawn from local surface water, groundwater from aquifers, or piped in from distant lakes, rivers, or reservoirs.

All living things contain water within their cells, which allows them to grow and function.

All of the food we eat contains water, and water is also used to grow, wash, and prepare food before it reaches your local grocery store.

Water is used to grow, manufacture, and transport goods and food before they are delivered to store shelves.

Growing plants for fabric and making finished clothes requires large amounts of water.

Water is used to make building materials and is used in air conditioners and other mechanical systems.

The “smoke” above a factory is often steam generated by heating water to create power or process food and other products.

Households use water every day, whether in the kitchen, bathroom, or outside.

The fire hydrants on your street are connected to the municipal drinking water system.

**WATER MOVEMENT**

**PHASE CHANGE**

**1** Plants need water to support photosynthesis.

**2** Water is pulled up to the leaves from the roots by the process of transpiration, which is the evaporation of water from pores in the leaves.

**3** Energy from the sun causes water to evaporate from the surface of lakes and ponds even though the water is not hot enough to boil.

**4** Water vapor moves with the wind across large distances in the atmosphere.

**5** Water vapor in the atmosphere condenses around tiny particles and falls back to earth as precipitation.

**6** When we eat food, we consume the water it contains.

**7** We transport food and goods produced with water across the landscape.

**8** Cities collect, treat, and store water before piping it to residents.

**9** Cities move both treated and wastewater to where it needs to go through a complex network of pipes.

**10** Stormwater and water from sprinklers can soak into the soil or be transported downstream in gutters and pipes.