

**1.  
Ocean**

FACT: 97.54% of the world's water is salt water.

**2a.  
Water Vapor Evaporating  
from the Ocean**

FACT: The water in the air above the earth is called **atmospheric water**. It is 0.001% of the world's water supply. Water is evaporated into the air by the sun.

**2b.  
Water Vapor Evaporating  
from the Ocean**

FACT: When water is a gas, it's called vapor. Water vapor is water in its most pure form.

**2c.  
Water Vapor Evaporating  
from the Ocean**

FACT: Pure water has no smell, taste, or color.

**2e.**  
**Water Vapor Evaporating  
from the Ocean**

FACT: Water is a chemical combination of two atoms of hydrogen (H) and one atom of oxygen (O). This chemical combination is written as the formula  $H_2O$ .

**4a.**  
**Rain**

FACT: Tiny water droplets join together with other tiny water droplets. When the water droplets join, they form bigger rain-drops that are too heavy to stay in a cloud. They fall out as rain.

**3.**  
**Cloud of Condensed Water Vapor**

FACT: The water vapor evaporating from the ocean cools as it gets higher in the air. When the vapor cools, it condenses into a group of tiny water droplets that we see as a cloud.

**4b.  
Rain**

FACT: There are approximately 2 quarts of water in the air above every square foot of land on an average day.

**5.  
Runoff**

FACT: As rainwater runs off a parking lot, it carries oil spilled by leaky cars. Where is the oil going?

**6.  
Stream**

FACT: Only about 0.0001% of the world's water supply is found in streams or rivers.

**7.  
Sun**

FACT: The energy needed to move water “up” in the water cycle is provided by the sun. The sun’s energy is needed to power **evaporation** and **transpiration**. **Gravity** causes rain to fall and water to flow downhill. Together the sun and gravity are the natural forces that power the water cycle.

**8a.**

### **Infiltration of Soil**

FACT: The water in soil accounts for about 0.005% of the world's water supply.

**8b.**

### **Infiltration of Soil**

FACT: When water soaks into and through soil, this is **infiltration**. Water infiltrates soil slowly. When rain or garden sprinklers put water on the soil too fast, it does not soak into the soil. Water that does not infiltrate the soil becomes runoff water.

**9.**

### **Plant**

FACT: Minerals that plants need to grow and pollutants that are bad for plants enter the plants through the water they absorb with their roots. When water leaves the plant, the minerals and the pollutants stay in the plant's stems and leaves.

**10.**

### **Transpiration**

FACT: During the process of photosynthesis, a plant is making food and releasing both oxygen and water vapor. Water vapor is evaporated from the surface of leaves in a process called transpiration. What powers the transpiration process?

## 11. Snowflake

FACT: Water must be at or below 32° Fahrenheit (F) [0° Celsius (C)] to be in a solid form. The freezing point is the temperature at which liquid water changes to the solid form called **ice**. A snowflake is a crystal of ice.

## 12. Snow Pack

FACT: When water freezes, it expands, but the weight remains the same. This is why ice cubes float in a glass of water. Snow falling in the Cascade Mountains may become part of the **snow pack**. The snow pack may melt each spring, or it may become part of a **glacier**. A glacier is formed when individual snowflakes freeze together to make a large block of ice. Just like ice cubes, glaciers can float on water.

## 13a. Slushy Melting Snow

FACT: Polar ice caps and mountain glaciers contain 1.81% of the world's water. This water is stored for long periods of time and is released only by melting.

## 13b. Slushy Melting Snow

FACT: The North Santiam River flows west toward Salem from the Cascade Mountains. The City of Salem takes a large percentage of its public water supply from this river. The river is supplied by the snow pack in 650 square miles of forest land within the North Santiam Watershed.

**14.**

### **Percolation Through Soil**

FACT: As water moves through the soil toward the water table, it picks up contaminants from the soil. Spilling a single quart of motor oil onto soil is enough to pollute 250,000 gallons of water.

**15.**

### **Water Table**

FACT: The water table is the upper surface of groundwater. If you were to dig a hole straight into the earth, you eventually would reach water. This water would be the water table. Where the water table is exposed by the slope of a hill, a spring might be found.

**16.**

### **Spring Flow**

FACT: An average person drinks 1,500 pounds of water every year. This is equal to nearly eight 8-ounce glasses each day. Some people use natural springs for their drinking water supply.

**17.**

### **Wetland**

FACT: Inland freshwater wetlands occur along the shores of lakes, ponds, rivers, and streams. There are few trees, but there is a great variety of other plants and animals.

**18.**

**Estuary**

FACT: The type of wetland richest in plants and wildlife is the coastal salt marsh. This is the place where the fresh water of rivers meets the salt water of the oceans.

**19.**

**Groundwater**

FACT: Water stored in pockets in the earth is called groundwater. Groundwater makes up 0.62% of the world's water supply. People who use wells to provide water to their homes are using groundwater.

**20.**

**Lake**

FACT: Freshwater lakes and inland seas and salt lakes make up 0.017% of the world's water.

**21.**

**Rosa Raindrop**