



Dear Parents,

The purpose of this newsletter is to give you an overview of what your child will be learning during our current unit of study in science. Please take a moment to look over the different sections of this newsletter. You will see example questions, important terms to know, and some extension activities you can do at home.

Parent Background:

Water continually circulates between the Earth's surface, the air, and underground, changing form but never increasing or decreasing in overall volume. This circulation of water is driven by the sun's heat energy. As the sun heats bodies of water such as the oceans, lakes, and rivers, the liquid water evaporates as gaseous water vapor into the air. This water vapor then rises, cools, and condenses into clouds. From these clouds the water will fall back to the Earth as liquid or solid precipitation collecting in streams and rivers that eventually empty into the oceans.

Liquid raindrops form in warm clouds as millions of cloud droplets coalesce and join together as they fall to the Earth. In cold clouds, cloud droplets coalesce to form ice crystals as well as water droplets. The type of precipitation that reaches the ground in this case depends on the temperature of the air through which the crystals fall. If the air is chilly all the way down, the crystals will fall as snowflakes, a solid form of precipitation. Sleet, also a solid, is formed when the crystals fall through a layer of warm air and melt, then re-freeze as they enter a layer of colder air. Liquid rain results if the ice crystals fall through a layer of warmer air and melt. Hailstones, another solid form of precipitation, are formed when the ice crystals are carried up and down by strong air currents in thunderclouds. During this turbulent ride in the thunderclouds, moisture accumulates in frozen layers around the ice crystals.

Students will know...

- **that weight of water is the same in solid and liquid forms**
- **water can evaporate**

Students will be able to...

- **observe and record water changes**
- **identify the different types of precipitation**
- **recognize changes when water freezes (ice) or melts (water)**
- **identify precipitation as solid or liquid**

Make your own water cycle model!

YOU WILL NEED:

1. jar
2. plants
3. bottle cap or shell of water
4. soil
5. sand
6. small rocks

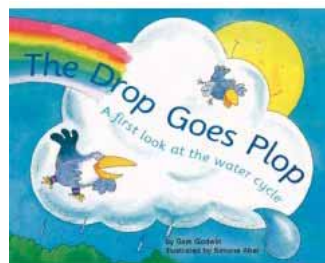
DIRECTIONS:

1. Fill jar as in the picture and put the lid on
2. Put the jar in a sunny place.
3. See how the water cycle works.

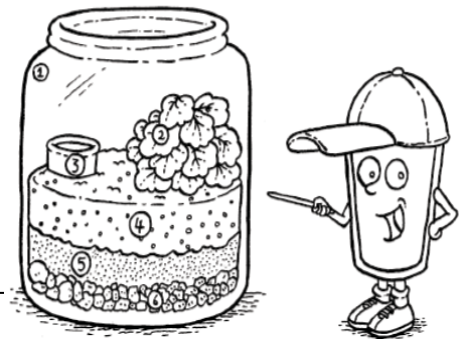


Try these books!





by [Franklyn M. Branley](#)



by [Sam Godwin](#)



Important Words to Know

word	picture	description
precipitation		Precipitation is any form of water, either solid or liquid, that falls from the atmosphere and reaches the ground. There are several types of precipitation, including rain, snow, sleet, and hail.
Evaporation		Evaporation is when the sun heats up water in rivers or lakes or the ocean and turns it into vapor or steam. The water vapor or steam leaves the river or lake or ocean and goes into the air, where it becomes a cloud.
Sleet		Sleet is formed when the water ice crystals fall through a layer of warm air and melt, then re-freeze as they enter a layer of colder air.
Hailstones		Hailstones are formed when ice crystals are carried up and down by strong air currents in thunderclouds. During this turbulent ride in the thunderclouds, moisture accumulates in frozen layers around the ice crystals.

Water Cycle

(sung to "It's Raining, It's Pouring")

It's raining, it's **pouring**,
The oceans are **storing**
Water from the falling rain
While thunderclouds are
roaring.

The rain now is **stopping**,
The rain's no longer dropping.
Sun comes out and soaks up
water
Like a mop that's **mopping**.

The water's still there now,
But hidden in the **air** now.
In the clouds it makes a home
Until there's **rain** to share now.

It's raining, it's pouring...

by Meish Goldish, 101 Science Poems
& Songs for Young Learners

Water Fun

For some interactive games & stories go to
<http://kids.aol.com/homework-help/junior/earth-science/water>

Read Cloudy with a Chance of Meatballs and discuss the solids that fall from the sky in the book versus the solids and liquids that really fall.

Sing the song "Water Cycle" and make up body movements for the bold faced words.

