

## Are we drinking the same water that the dinosaurs drank?

### YES we are!



The water on the earth today is the same water that was here when the earth was formed and when the dinosaurs lived. We keep using the same water over and over again!

So, you may be asking yourself a lot of questions right now about the water all around us and the water you drink. Well let's think about the most important reason why the water on our planet can move around and clean itself...



Also called the **Hydrologic Cycle**, the Water Cycle keeps the water moving around the Earth and naturally cleans the water. Let's check it out!

Let's start on the surface of our planet where water from the Earth's soil, plants, and bodies of water turns into a gas called water vapor through the process of **evaporation**.

This invisible vapor, most of which comes from the world's oceans, travels up into the atmosphere (or sky) and comes together to form clouds. This is called **condensation**. The vapors in the clouds condense more and more until they form water droplets. More and more water vapor combines forming larger droplets of water until this is too heavy to stay in the sky any longer. The water then falls to the earth as rain, snow, or hail. This is called **precipitation**.



(to the tune of "She'll Be Comin 'Round the Mountain")

All our water goes in a cycle, yes it does! All our water goes in a cycle, yes it does! It goes up as **evaporation**,

It forms clouds through **condensation** It comes down as **precipitation**, **YES IT DOES**!



#### Did You Know...

Just like the water in the water cycle, the stuff you use every day is part of a cycle. Everything that you use comes from something on our earth - paper comes from trees, glass bottles and jars come from sand, metal cans come from rocks dug out of the ground and plastics come from oil.

By recycling, you can help turn the old stuff into new paper, glass, cans or bottles - and keep the stuff in the cycle and not in the trash!

#### CONTACT ENVIROKIDS' www.SpokaneEnviroKids.org Spokaneenvirokids@gmail.com

## Try this at home!

Identify and observe the differentprocesses of the water cycle by making asimple model.

#### Materials you need:

- Clear plastic bag (sandwich-size Ziploc bag)
- Tablespoon
- Masking tape

#### How to make it:

- 1. Pour 2 tablespoons of water into the clear plastic bag.
- 2. Blow air inside the bag with your mouth and quickly seal the bag closed.

## Make a water cycle in a bag!

- Place the bag on a sunny window or ledge, or tape it directly to the window.
- Look at your water cycle model throughout the day. What



changes do you see? Maybe you could try putting cold water in one bag and hot water in a second one. Or you could put food coloring in the water.

What do you see now?

Take a picture of your water cycle & send it to the club address on the back or e-mail it to spokaneenvirokids@gmail.com to receive 15 points!

## Community Calendar

And more opportunities to earn points!

#### September

School Starts! Send in a picture of you going to school with your reusable lunch box/bag to earn 10 points!



- **10-19** Spokane Interstate Fair- visit us at the "Go Green" space and **earn 15 points** by learning three new things at our booths!
- **19 & 26** Group Health Bike Rides (see flyer) check in at EnviroKids table - **earn 15 points** for riding.

#### October

- **16** Fall Leaf Festival at the Finch Arboretum from 11-2. Earn points by completing a composting activity!
- 19 Deadline to submit posters for the Spokane Recycles Contest. Winners artwork to appear in 2011 calendar. Go to www.solidwaste.org for details. Send a pic of your poster - earn 15 points.

#### November

 Spokane Regional Solid Waste System will be at Mobius Kids for America Recycles Day from 11-3!



# Keep the Water and Air Clean

You and your family can help keep our land, water and air healthy...go toxic free!

- Shop smart: avoid products labeled dangerous or poisonous and choose safer options
- Use products with care: follow instructions and send less down the drain

Dispose of products safely: leftover products can be taken to the Household Hazardous Waste sites for free drop off. (www.solidwaste.org)

- Never pour oil or other chemicals on the ground or into storm drains.
- **Learn more** about toxic free tips resources for a safer and healthier community at www.ecy.wa.gov/toxicfreetips.

Envirokids' Club members can earn points that can be traded for **COOL** prizes for participation in fun activities. Your mailing label indicates how many points you have. **See a list of fun prizes you can win on www.spokaneenvirokids.org!** 

## What is Stormwater?

When snow melts or rain is falling around us, where do you think that water goes?

Does it soak into the ground? Does it form puddles and evaporate back into the air? If you answered yes for either of these, you are partly right.

Some of the water flows over the lands surface and roadways and heads downhill to the nearest stream, ditch, or storm drain. We call this **stormwater runoff.** 

In cities and towns water can't soak through the roads, driveways, parking lots, and rooftops. This means there is more stormwater runoff in cities than in our forests

### Your Water Bank Account

You can think of a water supply as a bank account, with deposits (water put in) and withdrawals (water taken out). What happens



to the bank account as the population grows?

Year	Yearly rainfall (+/add)	City's water needs that year (-/subtract)	=Water Supply	
Starting Water Supply = 5 coins				
1	3	1 coin	7	
2		2 coins		
3		3 coins		
4		4 coins		
5		5 coins		
6		6 coins		
7		7 coins		

and fields. The water collects in gutters and flows along the roadside into the storm drains – which are the big grates in the road where the water goes down. Then, the water goes into a pipe taking it to local lakes and streams or into a concrete container with holes called a 'dry well.'

Once the water from the stormwater drain reaches a waterway such as a stream, lake, or the ocean many of the **pollutants** it carries can harm the animals and plants in the water. These pollutants are things like oil, grass clippings, pet waste, or any other water on the streets and sidewalks.



Hey! Did you know you can call Spokane Regional Solid Waste System Hotline - **625-6800** - to find out where to take yard waste and household chemicals?

- 1. Place 5 coins in a cup. This is your initial water supply. Keep 20 coins aside.
- 2. Make 5 strips of paper. Number them 1-5.
- 3. Mix up the strips and draw one. The number tells the amount of precipitation you receive that year. For example, if you draw a 3, add 3 coins to your cup.
- 4. Fill in the chart. Then remove the number of coins required to fill your city's water needs that year. (See chart)
- 5. Continue to add and subtract coins from your water supply as you draw numbers. Fill in the chart as you go. What happens?
- Send in your water bank account chart
  - and receive 10 points!

#### Why did Washington State ban phosphorus in our dishwasher soap?

Phosphorus ends up in our rivers and lakes and causes aquatic plants and algae to grow and when these plants die they use the oxygen fish need to survive. All that algae in the lakes sure does look gross!





EnviroKids' Club c/o National Weather Service 2601 N. Rambo Rd. Spokane, WA 99224

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Did you know that groundwater makes up more than 90% of all available fresh water in the world, and is most of the drinking water?

#### EnviroKids'... caring for the Earth

EnviroKids' Club is a way for you to team up with other kids in Spokane County- exploring all aspects of the environment: air, water, weather, garbage & recycling, plants & animals, and even you & your environment. The EnviroKids' Club is for kids grades K-6, who live in Spokane County.

EnviroKids' Club members will receive a newsletter in the mail four times a year. The newsletter will contain activities to complete and ideas for activities at home or in the community to earn more points. Complete desired activities and follow directions to return results to the Club Headquarters (address and form is below). You can do email too: Spokaneenvirokids@gmail.com. As long as you keep submitting activities, you will continue to receive the newsletter and continue to earn points towards a special prize.

Mail Completed Activities By Nov. 30, 2010 to: EnviroKids' Club c/o National Weather Service

2601 N. Rambo Rd. Spokane, WA 99224

Fill in this form and send back to us to earn your points! Do you also have a friend or sibling who would like to join the EnviroKids' Club? Copy this page for them to send in and be added to our mailing list.

Name:	Age:	School:
Home Mailing Address:		
E-mail Address:		Phone:

My child has permission to participate in EnviroKids' Club activities and to have name/picture used in ads/Web site.

Parent Signature & Date

EnviroKids' Club Partners: National Weather Service, Spokane County Water Resources, Spokane Regional Clean Air Agency, Spokane Regional Solid Waste System, Spokane River Forum, WA Department of Ecology and West Valley Outdoor Learning Center.

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