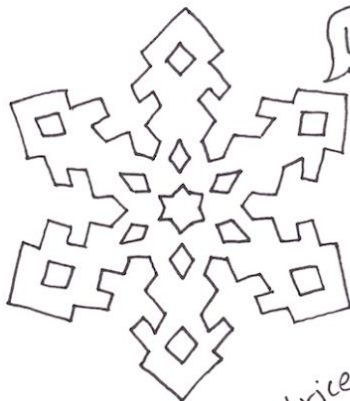


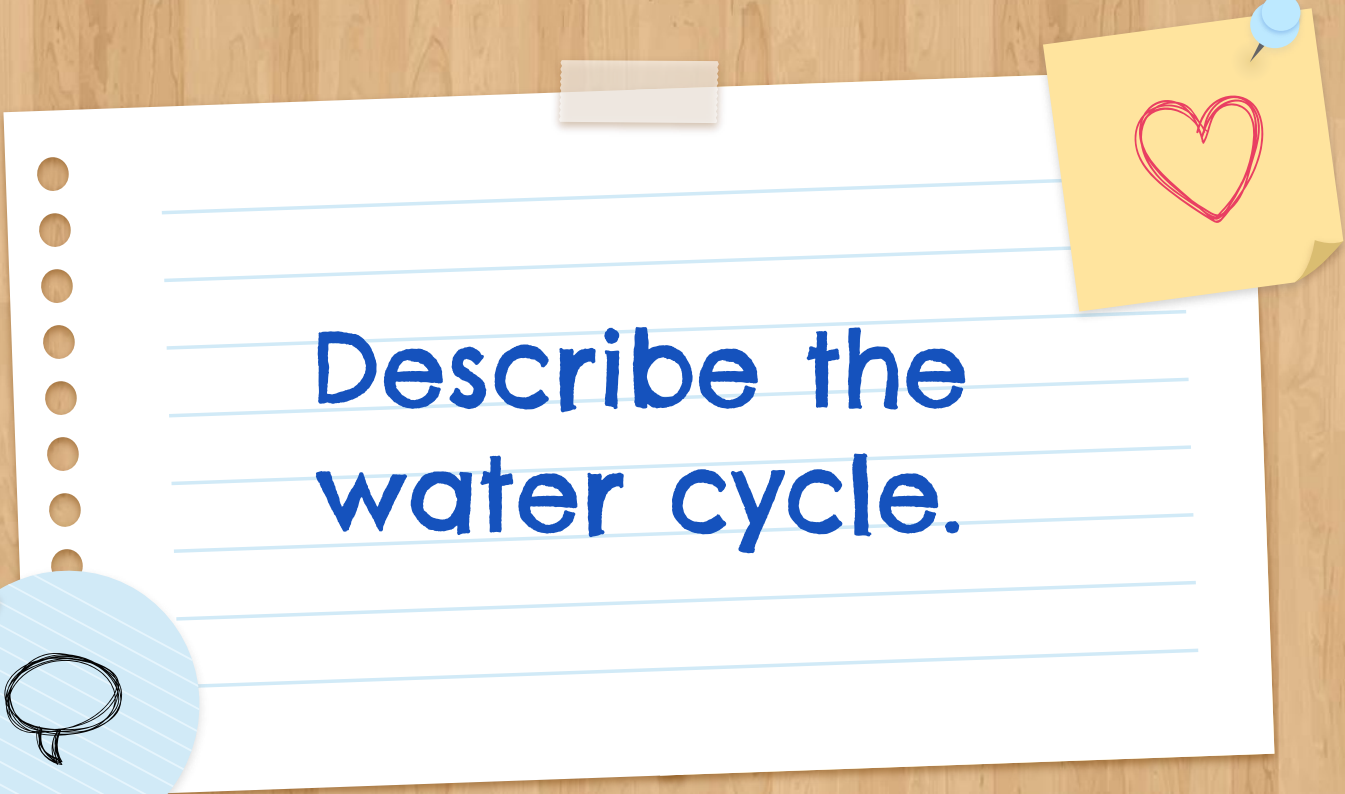


It's time! Everyone assemble just like we practiced!



Woooooo!

Beatrice the Biologist



**Describe the  
water cycle.**





Lies

(Well... Kind of)

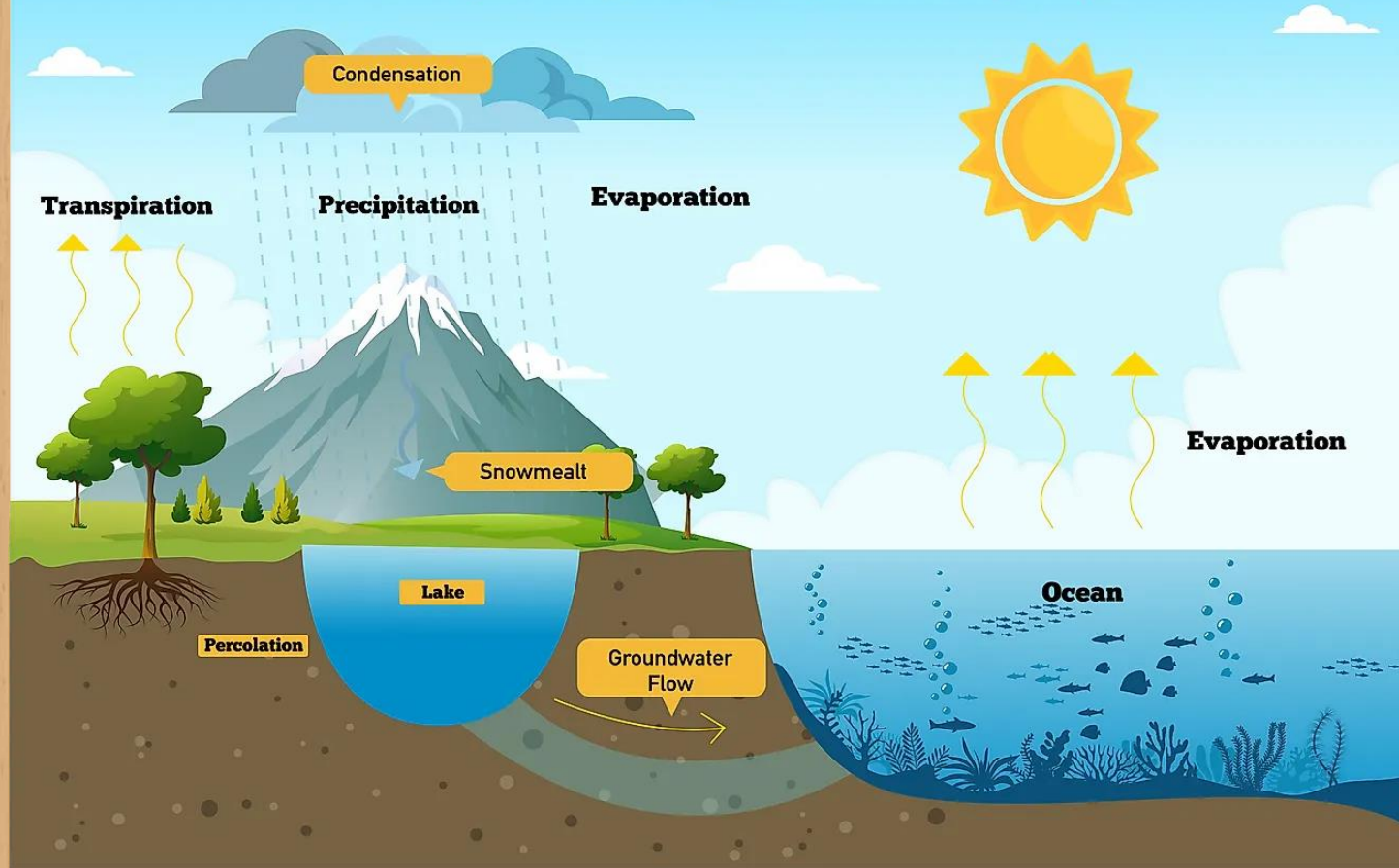
EVAPORATION

ginger

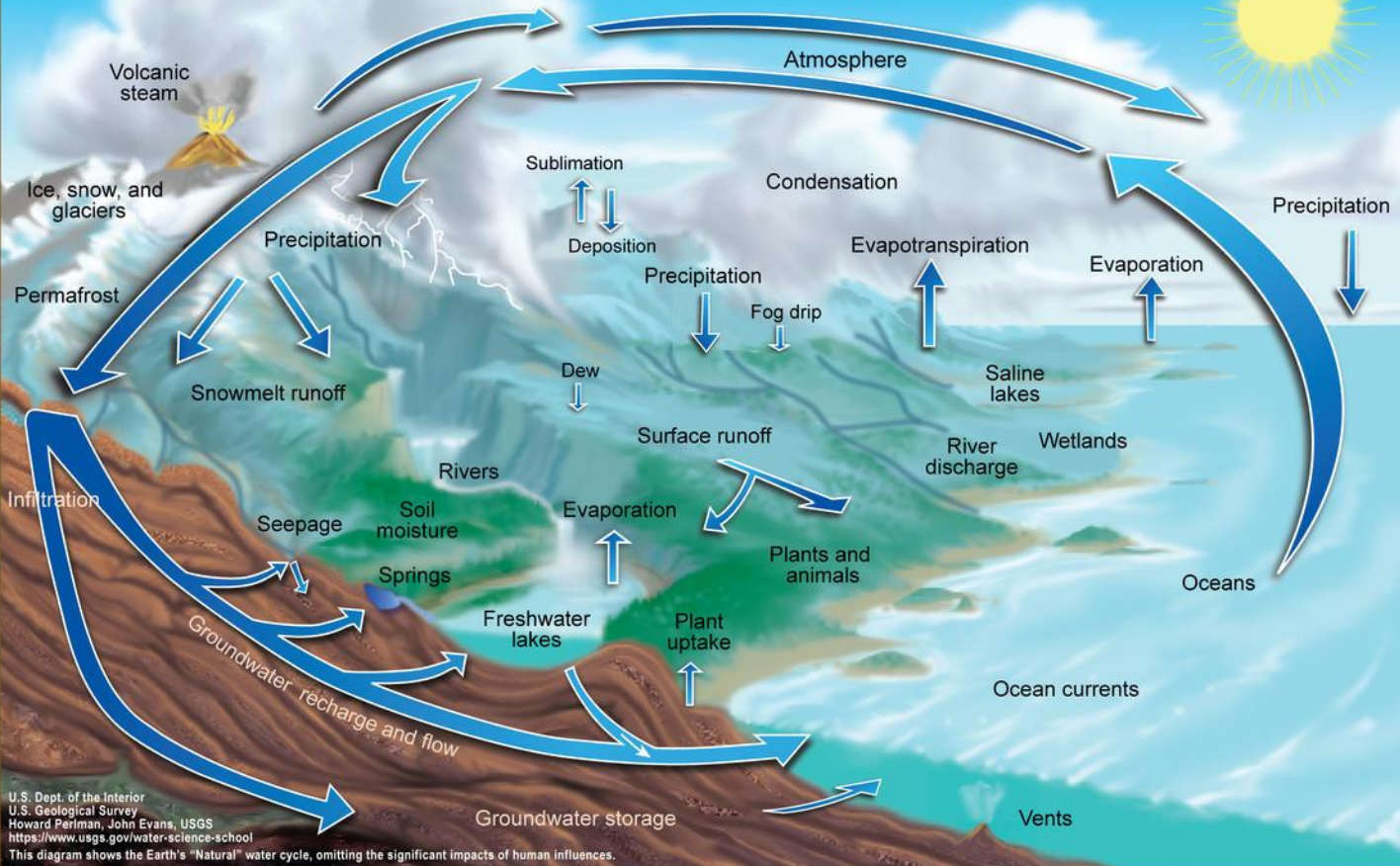




# The Hydrologic Cycle (Water Cycle)



# The Water Cycle

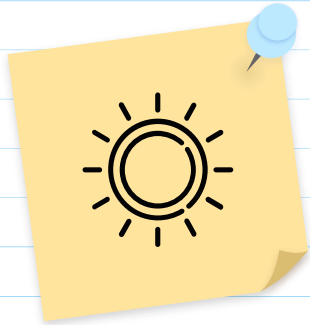


U.S. Dept. of the Interior  
U.S. Geological Survey  
Howard Periman, John Evans, USGS  
<https://www.usgs.gov/water-science-school>

This diagram shows the Earth's "Natural" water cycle, omitting the significant impacts of human influences.

My favorite  
here

# Water Cycle Vocabulary



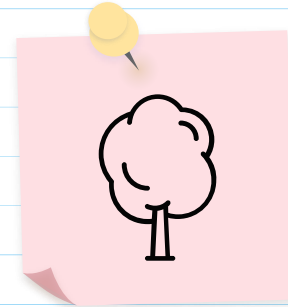
## Evaporation

Water goes from a liquid to a gas



## Condensation

Water goes from a gas to a liquid



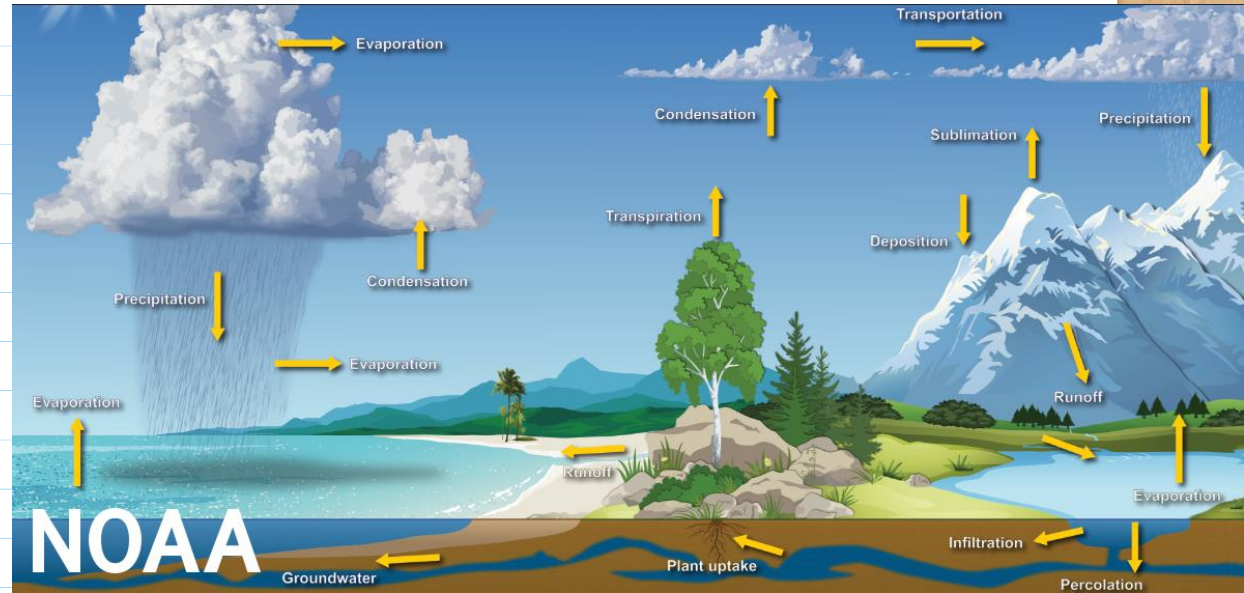
## Transpiration

(Evaporation from plants)  
Water goes from a liquid to a gas



# Other Water Cycle Vocabulary

- Aquifer
- Surface runoff
- Groundwater
- Permafrost
- Seepage
- Recharge
- Infiltration
- Sublimation
- Deposition
- Discharge
- And more!







Let's Play  
a Game!

Dark Blue Station: Ocean	1,2,3: You evaporate and go into the air. (Go to Yellow Station.) 4,5,6: You remain a part of the ocean.
Yellow Station: The air	1,2,3: You condense (turn into liquid) and become part of a cloud. (Go to White Station.) 4,5,6: You remain water vapor in the air.
White Station: Cloud	1,2: You remain in the cloud. 3,4: You fall as rain onto the ground. (Go to Green Station.) 5: You fall as rain into a lake. (Go to Light Blue Station.) 6: You fall as rain into the ocean. (Go to Dark Blue Station.)
Light Blue Station: Lake	1,2: You evaporate and become part of the air. (Go to Yellow Station.) 3,4: An animal drinks you. (Go to Orange Station.) 5,6: Humans process you into drinking water. (Go to Black Station.)
Orange Station: Animal	1,2: The animal exhales you into the air as vapor. (Go to Yellow Station.) 3,4: You remain in the animal's body. 5,6: You are excreted by the animal. (Go to Green Station.)
Green Station: Ground	1: You soak into the ground and become groundwater. (Go to Brown Station.) 2: You run off into a nearby lake. (Go to Light Blue Station.) 3,4: You soak into the ground and are pulled into a plant by its roots. (Go to Violet Station.) 5,6: You evaporate back into the air. (Go to Yellow Station.)
Brown Station: Groundwater	1,2,3: You remain underground. 4,5,6: Humans pump you up. (Go to Black Station.)
Black Station: Human use	1,2,3: You are drunk by humans. (Go to Red Station.) 4,5,6: You are used in a factory to cool machinery. (Go to Gray Station.)
Gray Station: Factory	1,2,3: You continue to cycle around the pipes in a factory. 4,5,6: You are released into the air as water vapor (gas) and steam (liquid). (Go to Yellow Station.)
Red Station: Human body	1,2: You are exhaled into the air. (Go to Yellow Station.) 3,4: You remain in a human's body. 5: You are excreted. You go into a lake. (Go to Light Blue Station.) 6: You are excreted. You go into groundwater. (Go to Brown Station.)
Violet Station: Plant	1,2: You remain a part of the plant. 3: An animal eats part of the plant. (Go to Orange Station.) 4: A human eats part of the plant. (Go to Red Station.) 5,6: You are evaporated through the plant's leaves. (Go to Yellow Station.)

Digital version [here](#)

## Discussion Questions

1. If you did this yourself, would all the stops be the same for you as it was for us?
2. Did we get stuck at one of the stations?  
What does that mean in real life?
3. How could humans alter the water cycle?



# Fun Things to Explore!

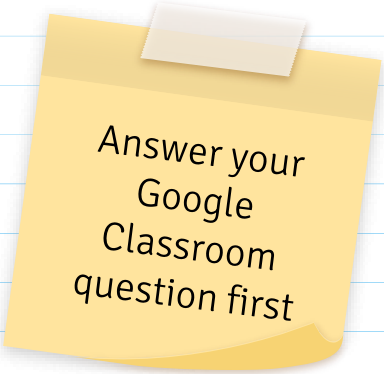
Data on the water cycle [here](#)

Info on the water table [here](#)

How Arizona uses water [here](#)

How water gets to Phoenix [here](#)


Uses of water game [here](#)



Answer your  
Google  
Classroom  
question first



# Models



How could we model the more complete water cycle?

# the Water Cycle

