

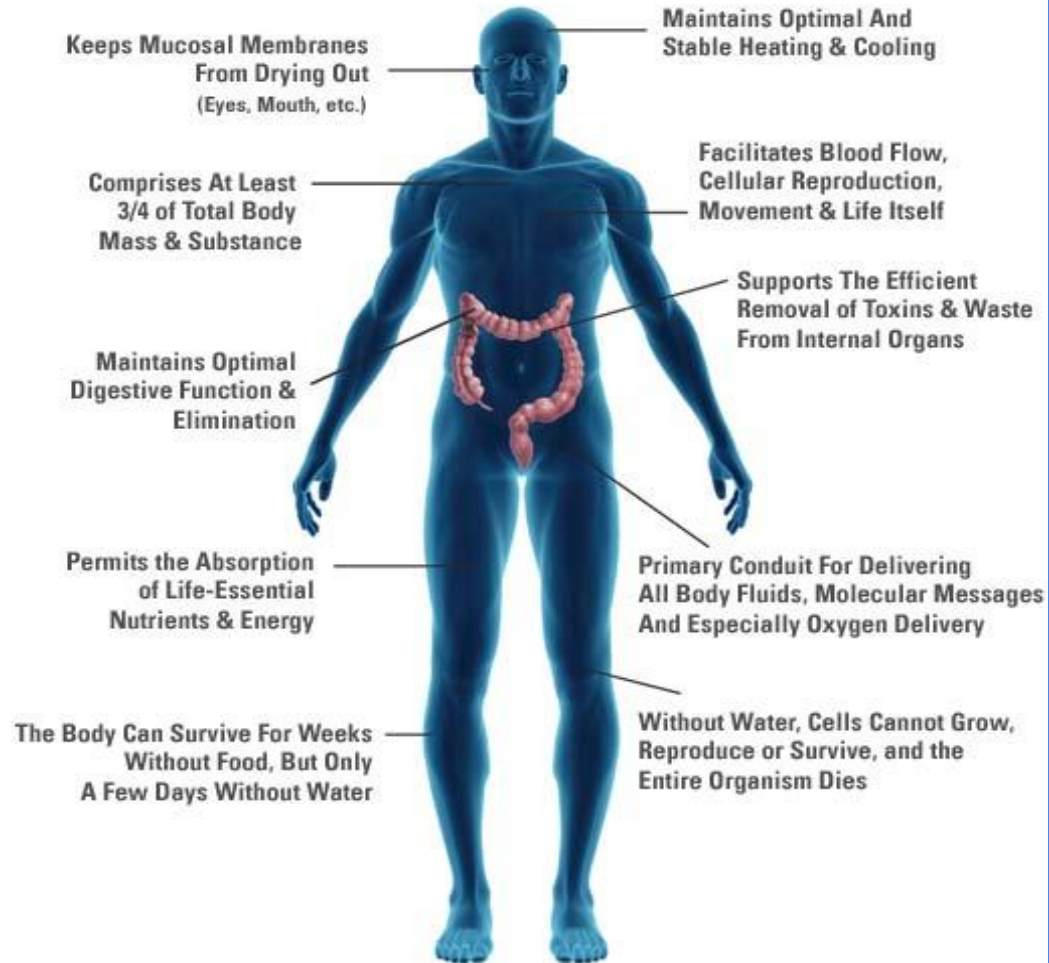
A full-page background image of a tropical beach scene. The foreground is filled with clear, turquoise water showing ripples and reflections. In the distance, a dark, low-lying coastline is visible under a bright blue sky with a layer of white, fluffy clouds.

WATER

**Water is crucial to life
on Earth.**

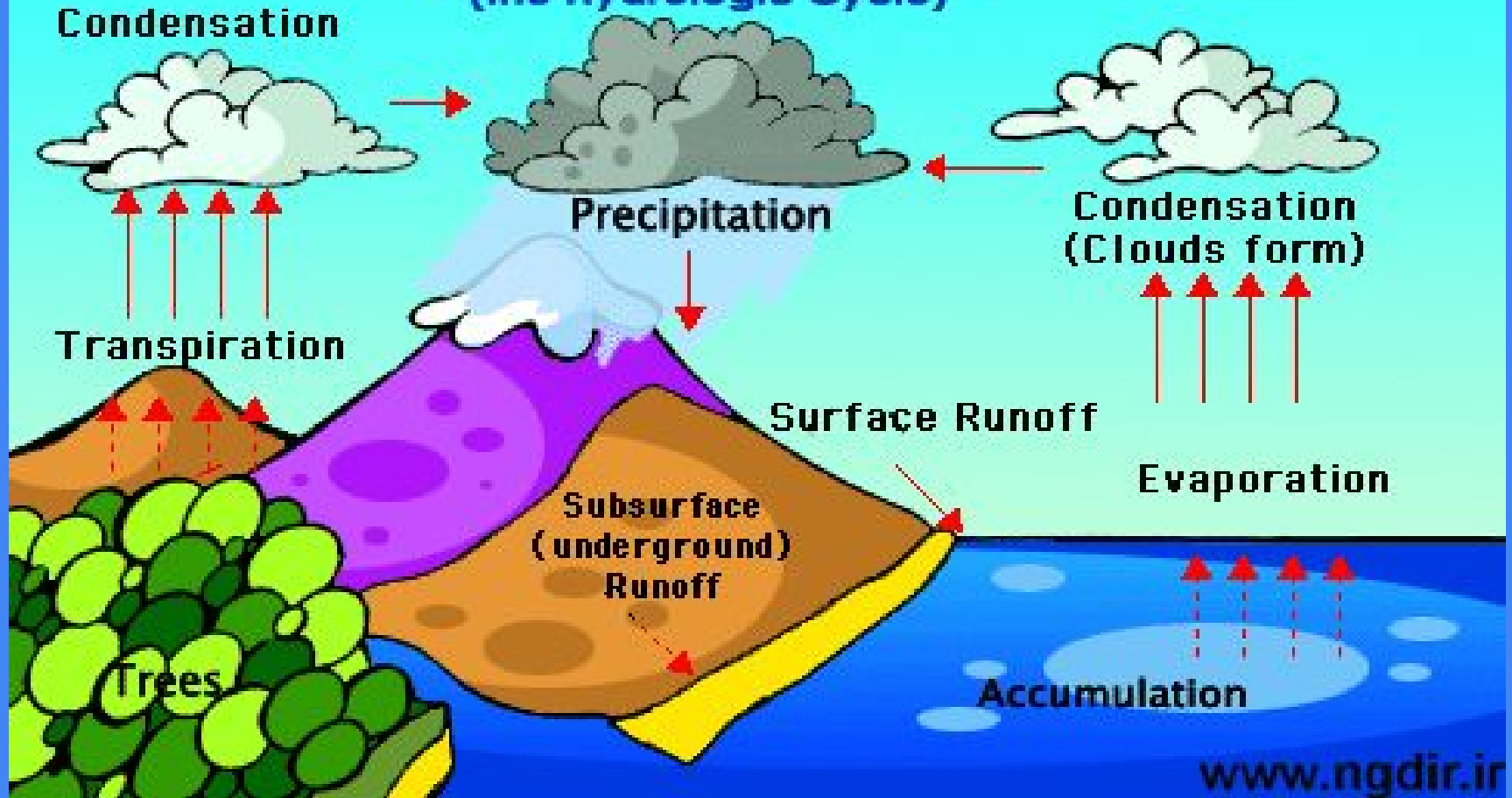




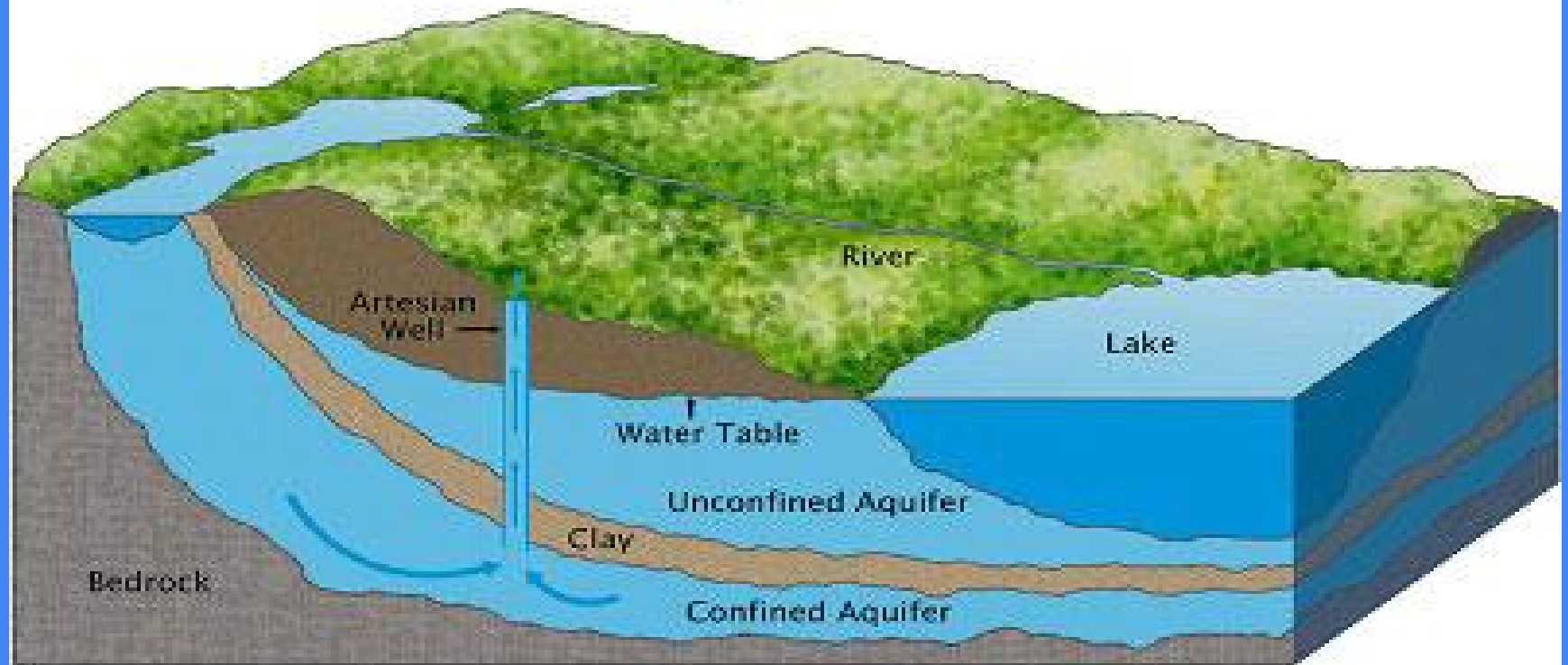


The Water Cycle

(the Hydrologic Cycle)



Aquifer





Increase salinity

Decrease salinity

***Evaporation
of
seawater***

***Precipitation
of rain
or snow***

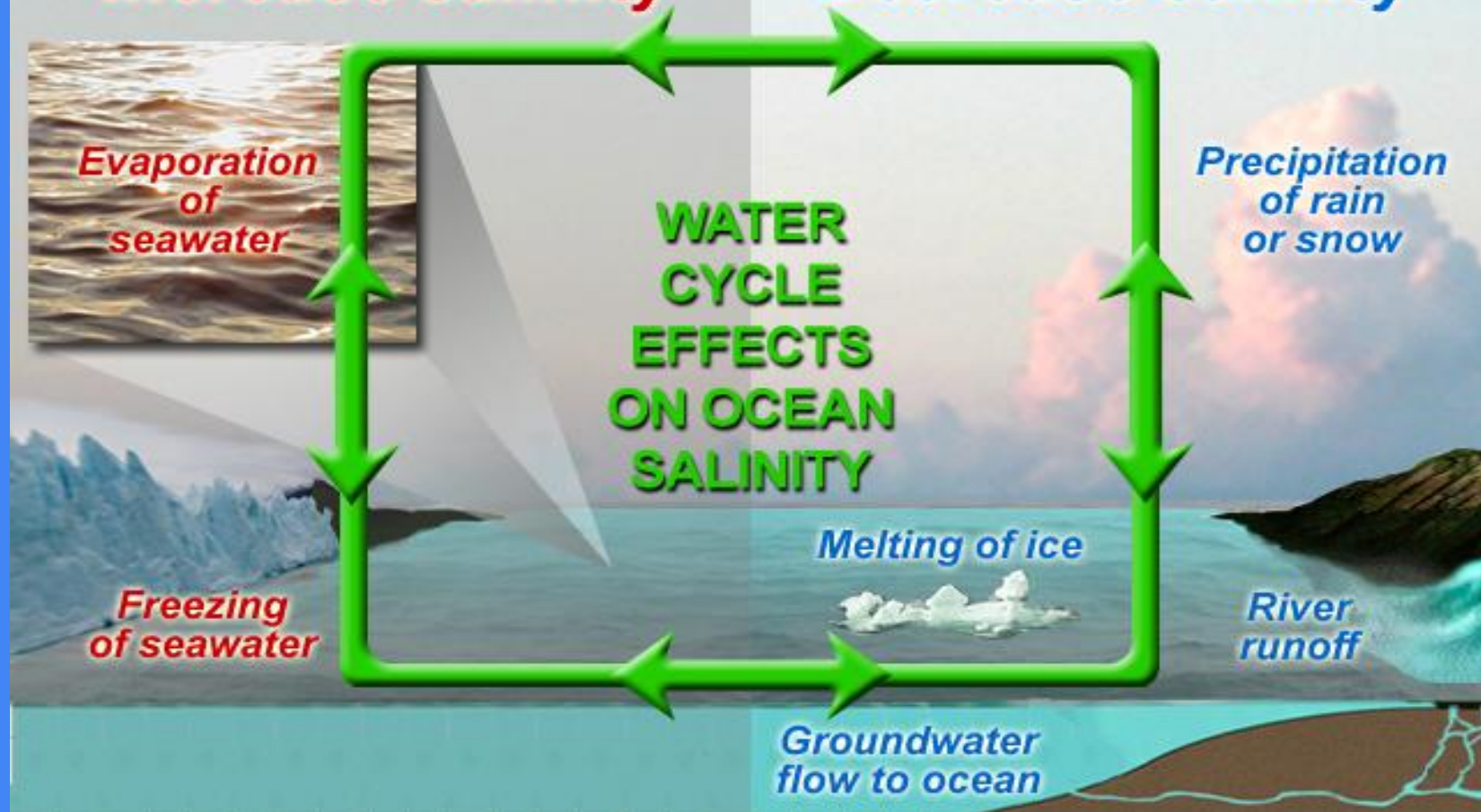
**WATER
CYCLE
EFFECTS
ON OCEAN
SALINITY**

***Freezing
of seawater***

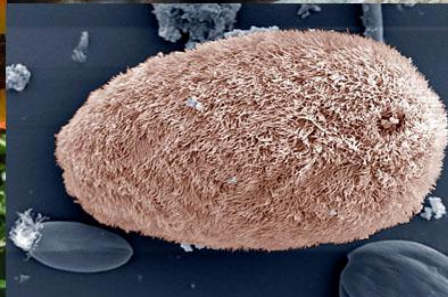
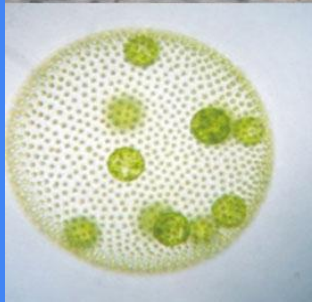
Melting of ice

***River
runoff***

***Groundwater
flow to ocean***



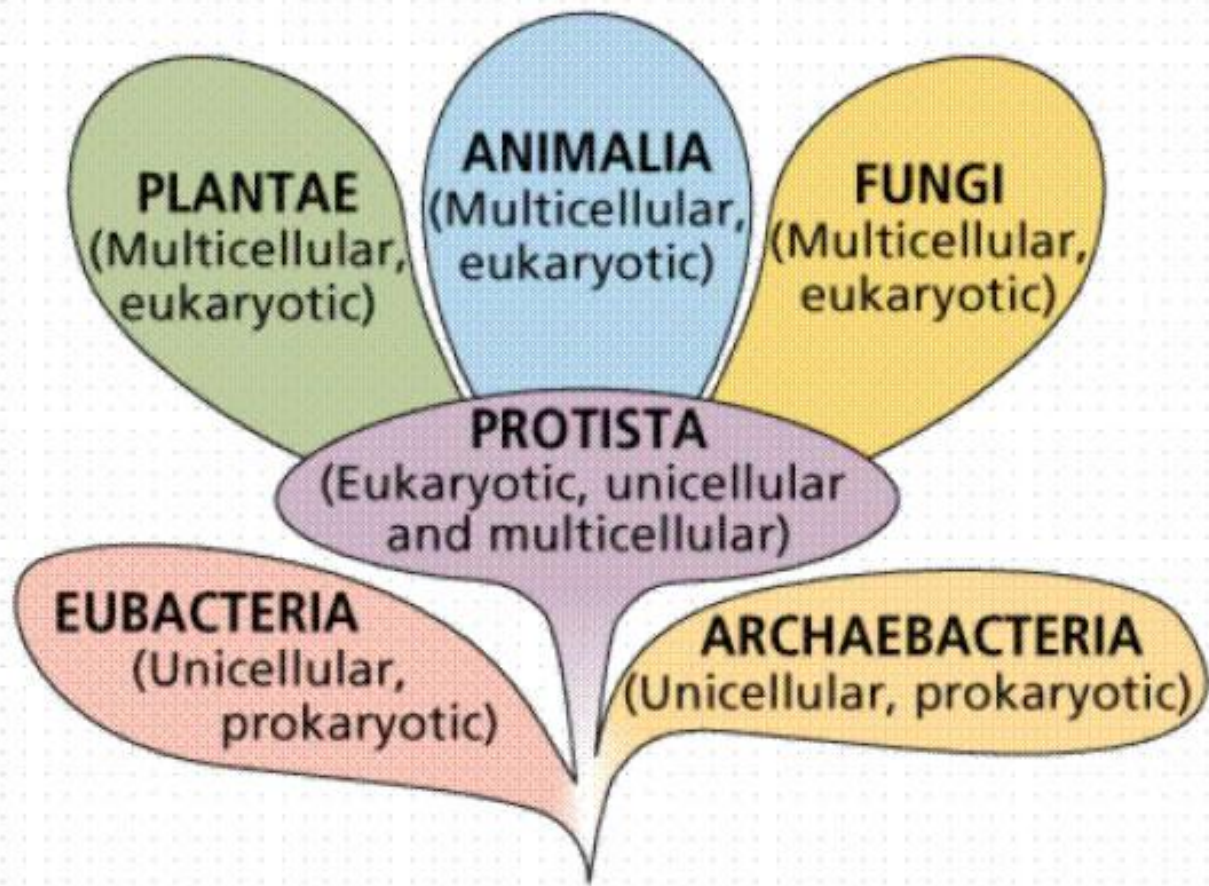












**Water systems
influence climate and
weather patterns.**



What is Climate ?

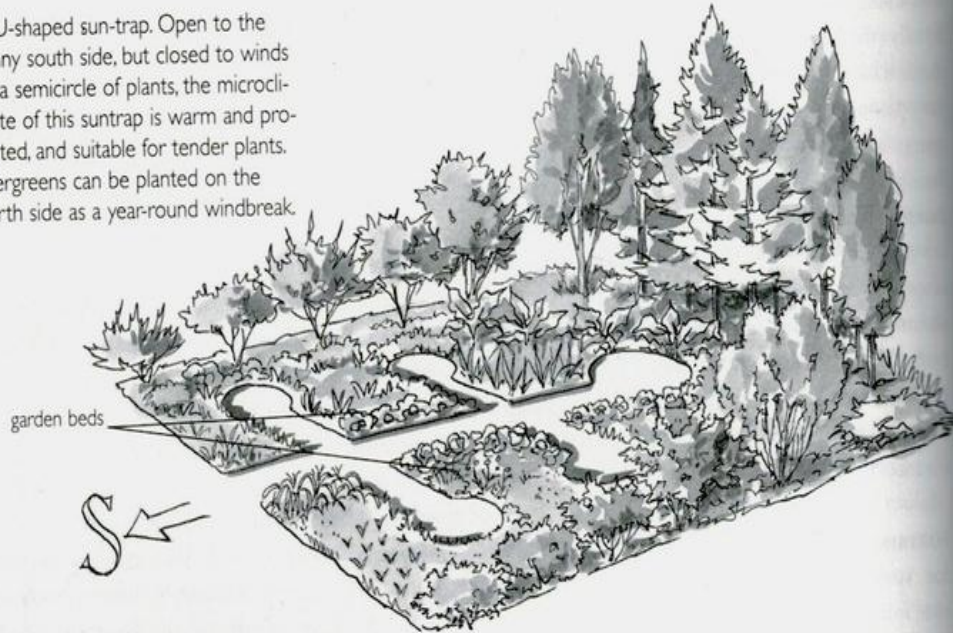
Climate: the average, year-after-year conditions of temperature, precipitation, winds, and clouds in an area

What is Microclimate?

Microclimate: climate conditions within a small area that differ from those in the surrounding area

- This is why it is cooler in a patch of trees than in an open field

A U-shaped sun-trap. Open to the sunny south side, but closed to winds by a semicircle of plants, the microclimate of this suntrap is warm and protected, and suitable for tender plants. Evergreens can be planted on the north side as a year-round windbreak.















Water is an important resource that needs to be managed sustainably.











Water your yard and outdoor plants early or late in the day to reduce evaporation.

Use a shut-off nozzle on your hose.



Use plants that require less water.



Mulch around plants to hold water in the soil.

Get an Energy Star labeled washing machine.



Wash only full loads.

Use a low flow showerhead.



Take shorter showers — five minutes or less is best.

Turn off the water while soaping hands and brushing teeth.



Turn off sink faucet while scrubbing dishes and pots.



Install new toilets that use less than 1.6 gallons per flush.

Put faucet aerators on sink faucets.



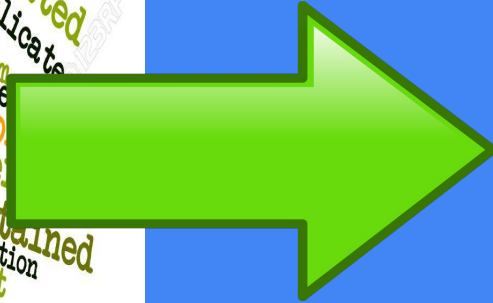
Use a broom, not a hose, to clean driveways and walkways.











- QUESTION
- COLLABORATE
- CONNECT
- PLAN
- PRODUCE
- SHARE

QUESTION

**-develop questions about the topics
addressed in this slide presentation**

COLLABORATE

- with a group of your peers, share your questions and determine which you would like to learn more about**
- develop a focus for an inquiry that incorporates the big ideas of this unit**

CONNECT

- use various research tools that will help you to conduct your inquiry**
- make connections either locally or globally that will help you to understand and explain your topic**

PLAN

- create a plan of action (how will you plan, create, and share your work)

PRODUCE

- make something that demonstrates your learning that others can look at and comment on**
- connect your inquiry to the real world**
- use technology**

SHARE

**-share your work using technology
(with more than just your class)**

REFLECT

-reflect on the process and results of your inquiry

