

AQUIFER

Question: What is an underground body of rock, sand or gravel which can contain or transmit water?

Follow-up: Did you know there are 9 major aquifers and 22 minor aquifers under the state of Texas?

POLLUTION

Question: What is the contamination of air, water, or soil by substances that are harmful to living organisms?

Follow-up: The most common type of pollutant into our lakes, rivers and streams is sediment. Sediment is eroded soil that is carried away by water.



RIVER

Question: What is a large stream?

Follow-up: Can anyone name one of the major rivers in Texas?

DROUGHT

Question: What is an extended period of below-normal rainfall?

Follow-up: This is a picture of a lake that dried up because of a major drought that happened in 2011.



FLOOD

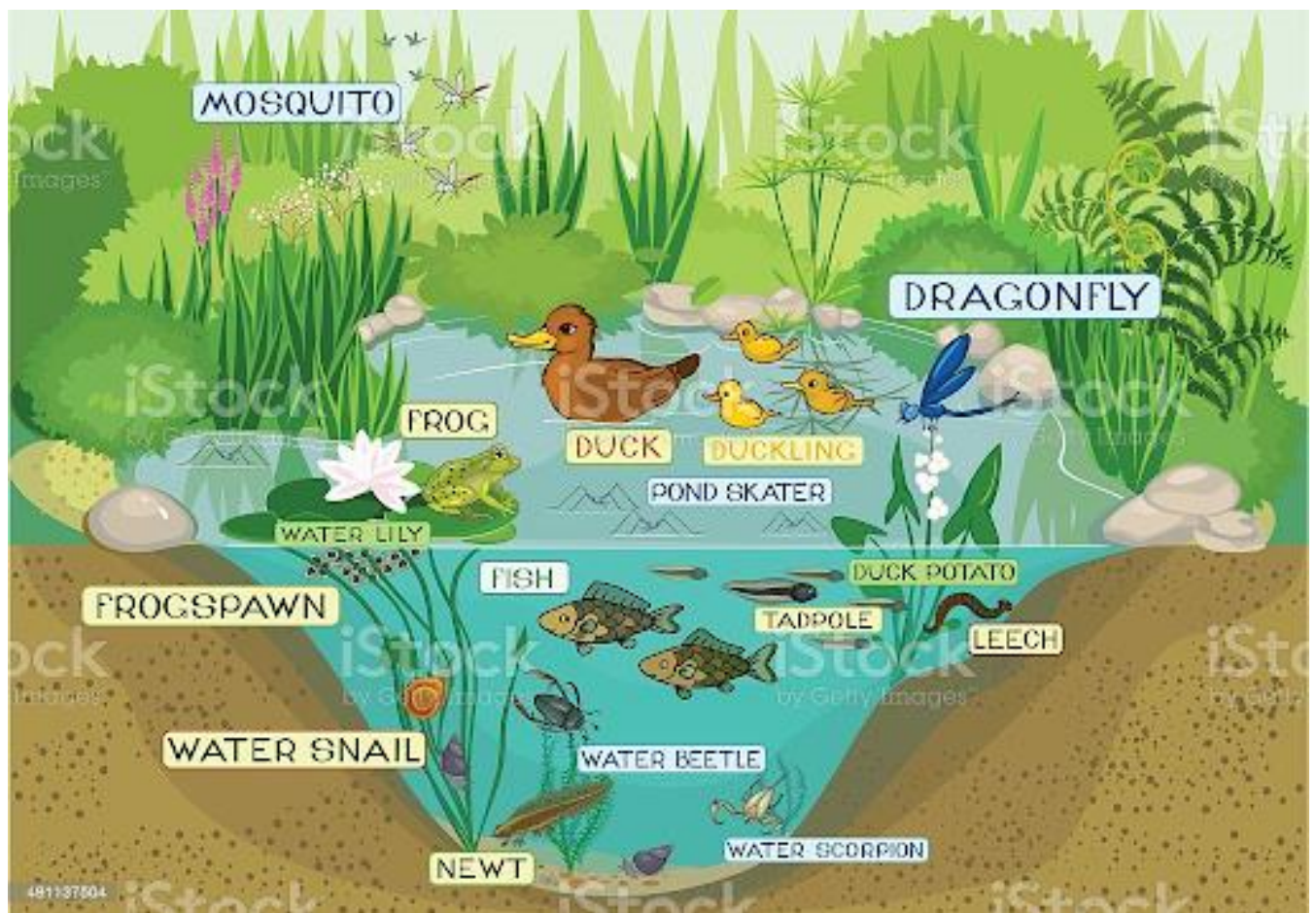
Question: What is an overflow of water onto normally dry land?

Follow-up: What is a flash flood? Answer: A flash flood occurs during a heavy rainstorm when the water does not have time to drain or infiltrate into the soil.

ECOSYSTEM

Question: What is a community of organisms together with their physical environment?

Follow-up: What are signs of a healthy ecosystem? Answer: A healthy ecosystem has a diversity of plant and animal life.



EVAPORATION

Question: What is the process of changing water from a liquid state into vapor?

Follow-up: Is there more evaporation in the summer or winter? Answer: Summer

FRESHWATER

Question: What is water that has very little salt content?

Follow-up: What are major sources of freshwater? Answer: Rain and snow. Lakes, rivers, streams, glaciers, etc.



GROUNDWATER

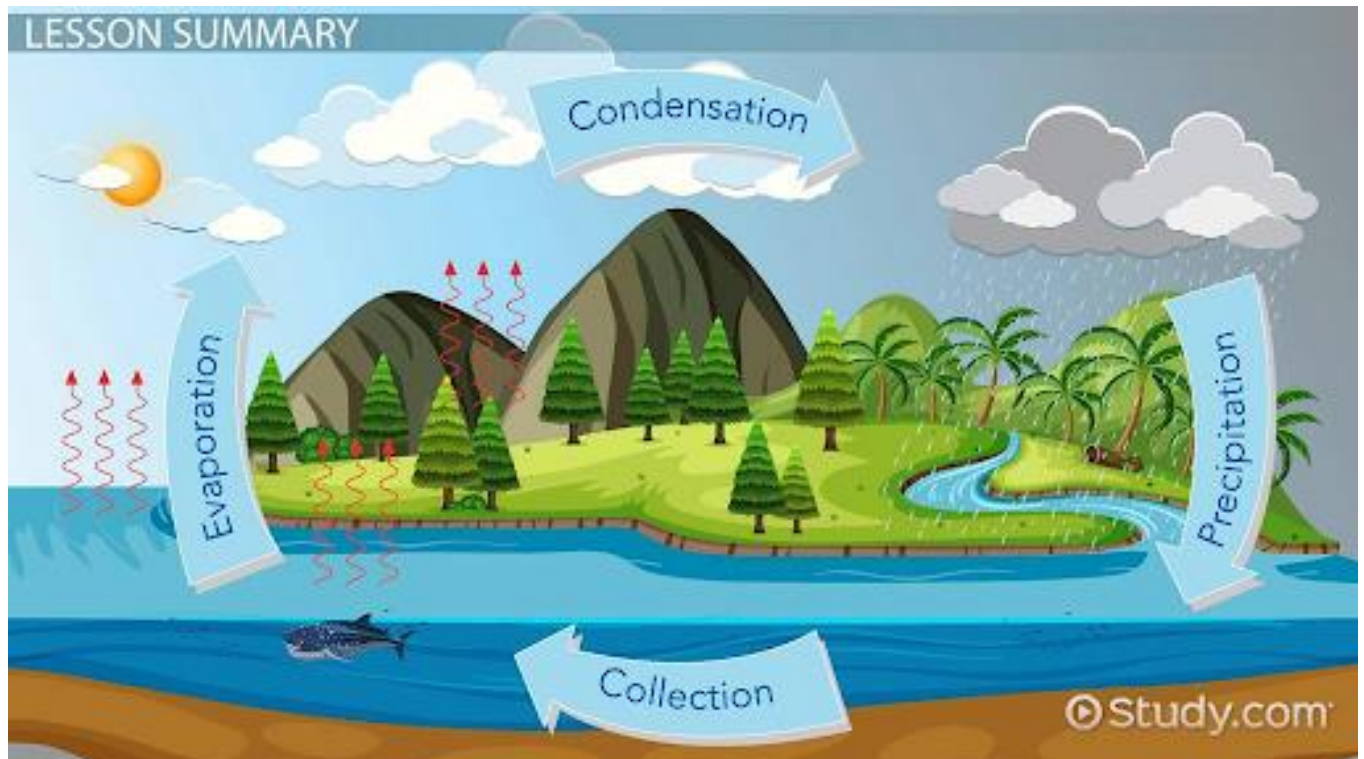
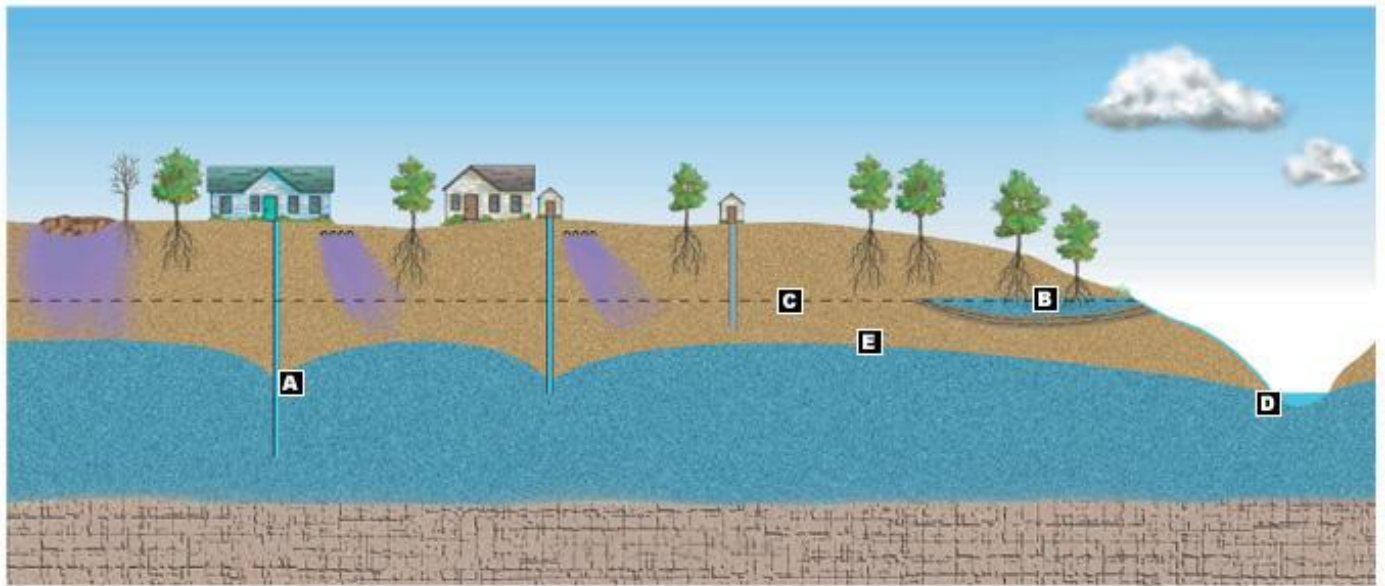
Question: What is water that flows beneath the Earth's surface in saturated soil or aquifers?

Follow-up: Did you know that more than 80 percent of groundwater in Texas is for agriculture?

WATER CYCLE

Question: What is the process by which water circulates between Earth's oceans, atmosphere, and land?

Follow-up: Where does the water cycle begin and end? Trick question – it is a cycle with no beginning or ending. This is like asking which came first, the chicken or the egg.



CONDENSATION

Question: What is the process of changing water from a vapor into a liquid?

Follow-up: In your house, where do you see condensation happen most?

Answer: Bathroom

PRECIPITATION

Question: What is a name for water that condenses in the atmosphere and falls to Earth as rain, snow, or sleet?

Follow-up: Most precipitation in Texas comes in what form? Answer:
Rain



STREAM

Question: What is a body of flowing water?

Follow-up: Streams are just small rivers. Do you have a stream near you?

IRRIGATION

Question: What is the application of water to the soil to help grow agricultural crops and water lawns?

Follow-up: What time of year do we need the most irrigation? Why?

Answer: Summer, often not enough rain to meet plant water needs.



LAKE

Question: What is a large body of standing water?

Follow-up: Lakes form at low points in a watershed or when a dam is installed on a river to restrict water flow.

NATURAL RESOURCE

Question: This term describes something found in nature that is useful to humans?

Follow-up: Water is considered the most important natural resource. What are other natural resources? Answer: Water. Other resources include soil, trees, air, etc.



OCEAN

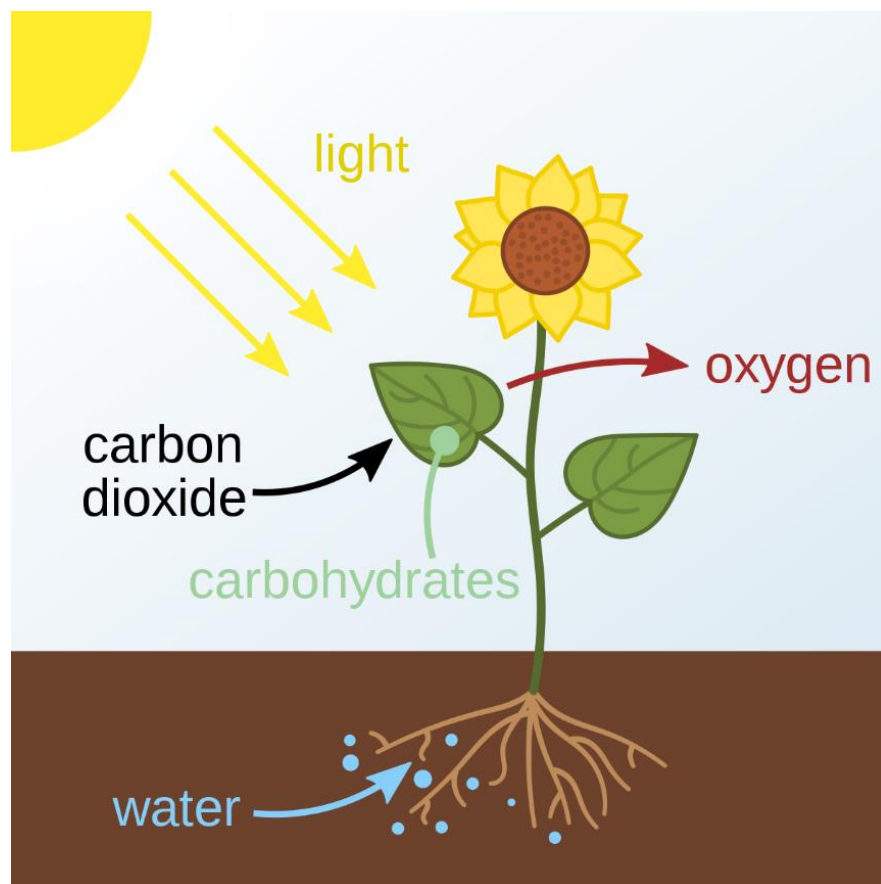
Question: What is a very large expanse of sea?

Follow-up: Did you know that about 97 percent of earth's water is in oceans?

PHOTOSYNTHESIS

Question: What is a process by which plants, algae, and many species of bacteria convert energy captured from the sun into chemical energy that can be used to fuel the organism's activities?

Follow-up: What gas do plants produce? Answer: Oxygen. Why is this important? Answer: Because animals need it to survive.



RAIN

Question: What is a form of precipitation in which moisture condensed from the atmosphere falls visibly in liquid drops?

Follow-up: Rainfall in Texas varies from more than 60 inches per year in east Texas to less than 10 inches per year in far west Texas.

WATER DROP

Question: What is a small volume of water where even though they're tiny, every bit matters?

Follow-up: One drop of water can be teeming with life! For example, a single drop of ocean water can contain millions of bacteria or viruses, fish eggs, baby crabs, plankton or small worms.



RUNOFF

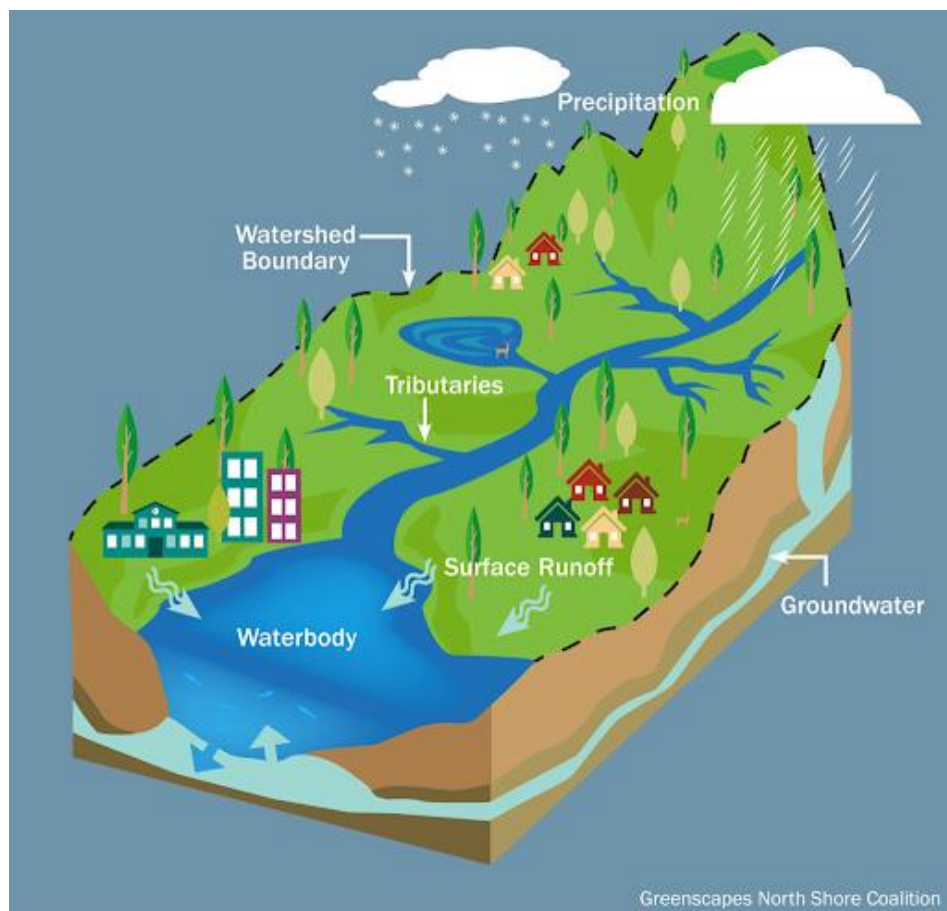
Question: What is precipitation, snow melt, or other water that flows on the surface of land but is not absorbed into the soil?

Follow-up: Why is there so much runoff in cities? Answer: Because there are so much concrete and other surfaces that do not allow water to infiltrate into the soil.

WATERSHED

Question: What is all the land from which water drains into a specific body of water?

Follow-up: Think of a watershed as a bathtub. When water falls into a bathtub it all flows to the drain – the lowest point in the bathtub.



TOILET

Question: What appliance uses 40% of a normal household's water use and can be found in the bathroom?

Follow-up: Let's say your toilet uses 2 gallons of water per flush. If there are 4 people in your household which flush 4 times per day, how much water would be used? Answer: $2 \times 4 \times 4 = 32$ gallons per day.

FAUCET

Question: What is something you should turn off when brushing your teeth or hand-washing dishes?

Follow-up: Have you seen the faucets that only turn on when it senses your hand is near it?



SPRINKLER

Question: What is used to water your plants in your yard? It is mostly used in the summertime.

Follow-up: Did you know that most of the water used in the summer in cities is by sprinkler systems – people watering lawns and sports fields?

DISHWASHER

Question: What is something that you should run in the kitchen only when it's full? This appliance uses less water than hand-washing dishes.

Follow-up: Dishwashers have become very water efficient, using less water than they did in the past.



CORN

Question: This cereal grain was first domesticated by indigenous peoples in southern Mexico about 10,000 years ago. It is a common crop in Texas and usually requires a lot of irrigation during the growing season.

Follow-up: Did you know that each cob of corn usually contains 800 kernels that are arranged in 16 rows?

COTTON

Question: Fiber from this crop is used to make clothing. Its seeds are sometimes used to feed cattle.

Follow-up: You may think of cotton only being white. In fact, early varieties of cotton had tan, red, green, pink and brown fibers.



COW

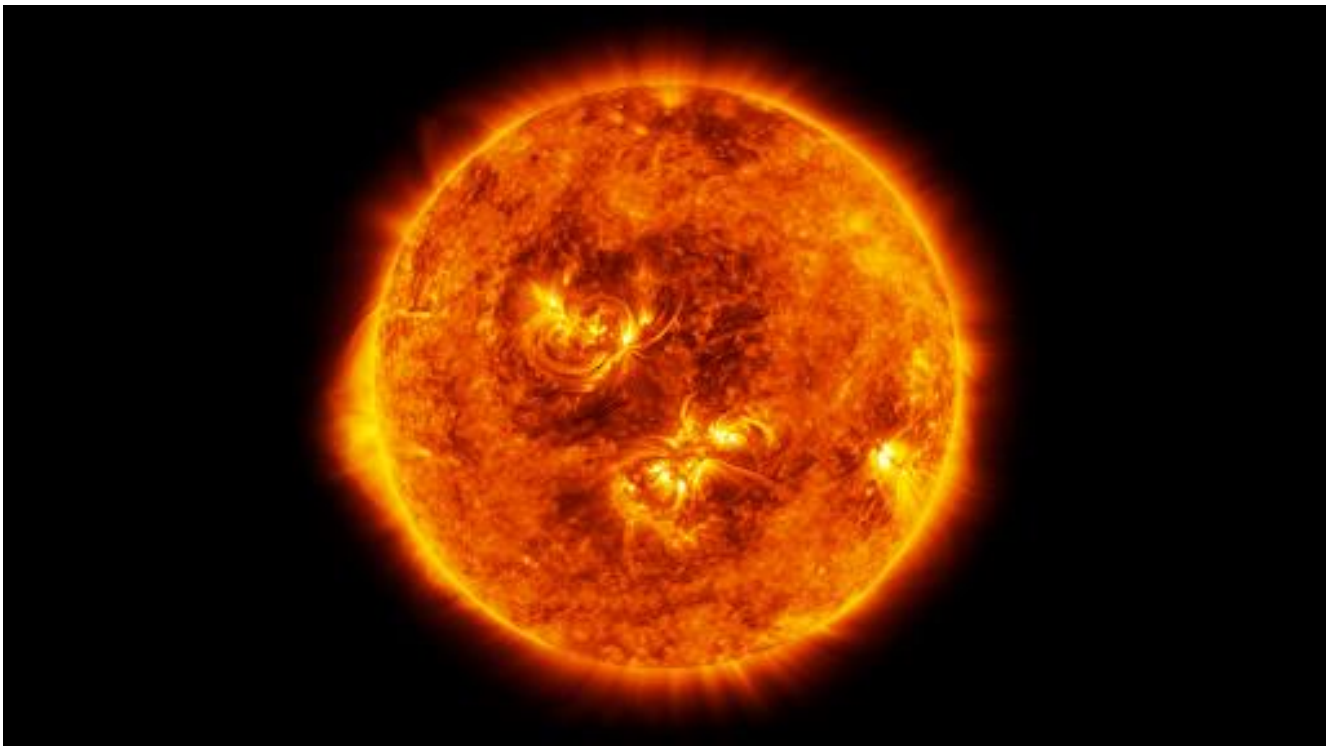
Question: This land mammal can consume between 30 and 50 gallons of water per day.

Follow-up: What breed of cow is shown in the picture? Answer: Holstein

SUN

Question: What is the very bright star that heats up Earth and provides energy to our planet?

Follow-up: Light from the Sun, traveling at 186,000 miles per hour, takes about 8 minutes to get to Earth.



ICE

Question: What is the solid form of water, produced by freezing?

Follow-up: When it freezes, water expands about 9 percent.

FISH

Question: What is a limbless cold-blooded vertebrate animal that has gills and fins and lives in water?

Follow-up: There are approximately 250 species of freshwater fish in Texas. Can you name one? Answers: Bass, crappie, catfish, sunfish, etc.



PRODUCERS

Question: What is an organism that is able to produce its own food from non-living materials, and which serves as a food source for other organisms in a food chain?

Follow-up: Examples of producers include algae, phytoplankton and some kinds of bacteria.

BATHTUB

Question: In the bathroom, this can be hold up to 70 gallons of water?

Follow-up: What is the most popular alternative to bathtubs? Answer:
Showers



LITTER

Question: What is trash, such as paper, cans, and bottles, that is left in an open or public place?

Follow-up: Who is responsible for keeping litter out of our streams, rivers, lakes and oceans? Answer: Everyone

NATIVE PLANTS

Question: What are plants indigenous to a given area that are well-suited for that environment?

Follow-up: What do we call plants that are not native to the area, but move in and take over? Answer: Invasive plants



HABITAT

Question: What is the natural environment in which an organism normally lives, including the surroundings and other physical conditions needed to sustain it?

Follow-up: What kind of things can destroy a habitat? Answer: Construction, plowing for agriculture, pollution, invasive species, etc.

AGRICULTURE

Question: What is the practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products?

Follow-up: Did you know there are nearly 250,000 farms and ranches in Texas?



TURBIDITY

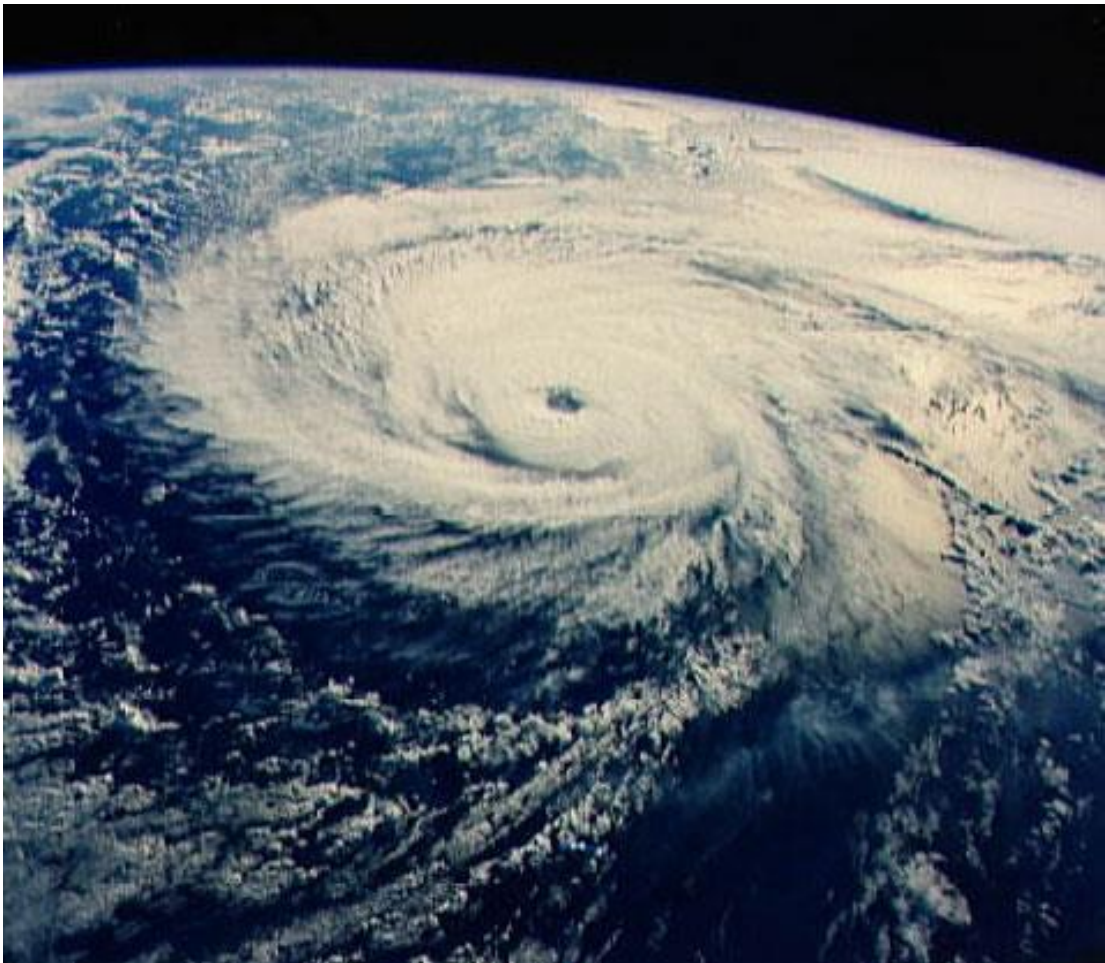
Question: This measurement describes the cloudiness of a body of water?

Follow-up: Just because water is clear does not mean that it is safe to drink.

HURRICANE

What is a rapidly rotating storm system characterized by a low-pressure center, a closed low-level atmospheric circulation, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain or squalls?

Follow-up: Hurricanes are especially dangerous because of the extremely high winds and major flooding.



TORNADO

Question: What is a mobile, destructive vortex of violently rotating winds having the appearance of a funnel-shaped cloud and advancing beneath a large storm system?

Follow-up: On May 11, 1953 the deadliest tornado in Texas history struck shortly after 4 pm on the day after Mother's Day in 1953. It killed 114 people and injured 597.

HAIL

Question: What is a type of precipitation in which pellets of frozen rain fall in showers?

Follow-up: The largest officially recognized hailstone on record to have been 'captured' in the U.S. fell near Vivian, South Dakota on July 23, 2010. It measured 8 inches in diameter and weighed nearly 2 pounds.



SNOW

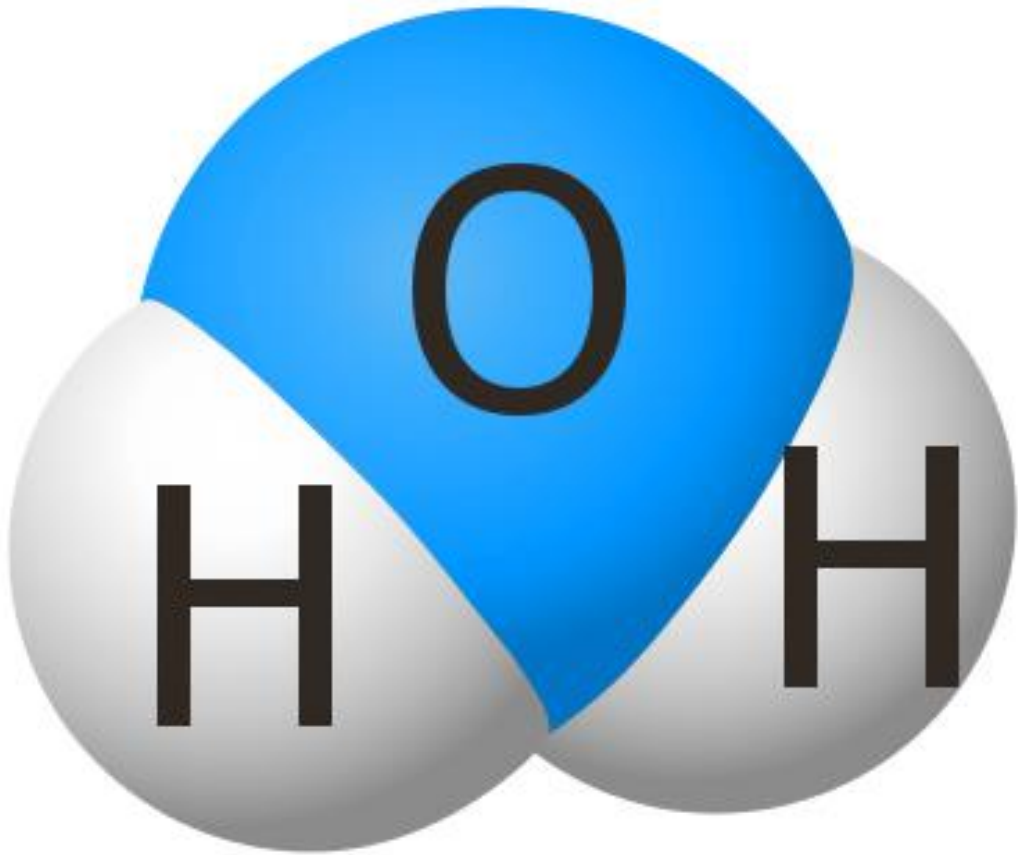
Question: What is a form of precipitation in which atmospheric water vapor freezes into ice crystals and falls in light white flakes?

Follow-up: The greatest amount of snow recorded in a 24-hour period in Texas occurred December 21-22, 1929 in Cleburne where in snowed 26 inches.

H₂O

Question: What is the chemical formula of water?

Follow-up: What does the “H” and “O” stand for? Hydrogen and Oxygen.



WATER QUALITY

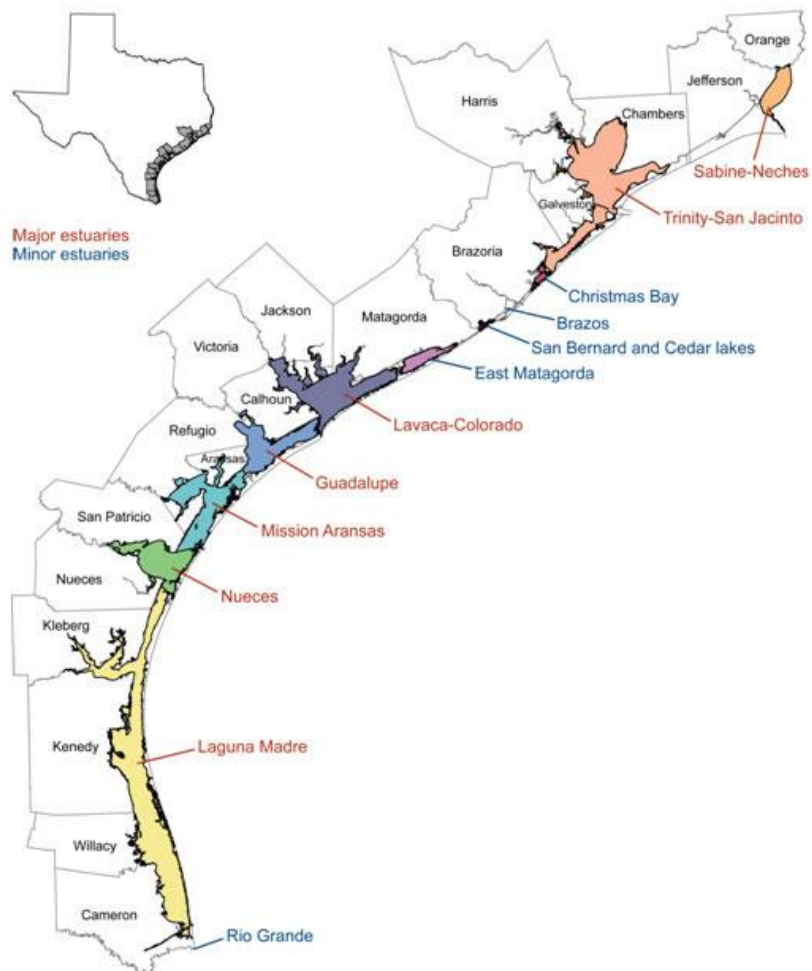
Question: What describes the condition of water, including its chemical, physical, and biological characteristics?

Follow-up: Water is known as the “universal solvent” because so many things can dissolve in it.

BAY

Question: What is a body of water partially enclosed by land that is directly open or connected to the ocean?

Follow-up: Why is it so important to protect the water in bays? Answer: Because many different kinds of sea creatures use bays for reproduction and raising their young.



ESTUARY

Question: What is a partly enclosed body of water along the coast where one or more streams or rivers enter and mix freshwater with saltwater?

Follow-up: Can you name one Texas river that flows into an estuary?

Answers: Brazos, Trinity, Colorado, San Antonio, etc.

WETLAND

Question: What is a low-lying area where the soil is saturated with water at least seasonally and that supports plants adapted to wet soils?

Follow-up: Wetlands are important because they protect from flooding, filter water and provide habitat for wildlife.



HEADWATERS

Question: What is the source of a stream or river often found at the bottom of a mountain or at an underground spring?

Follow-up: Did you know that the headwaters for the Rio Grande River is located in southern Colorado?

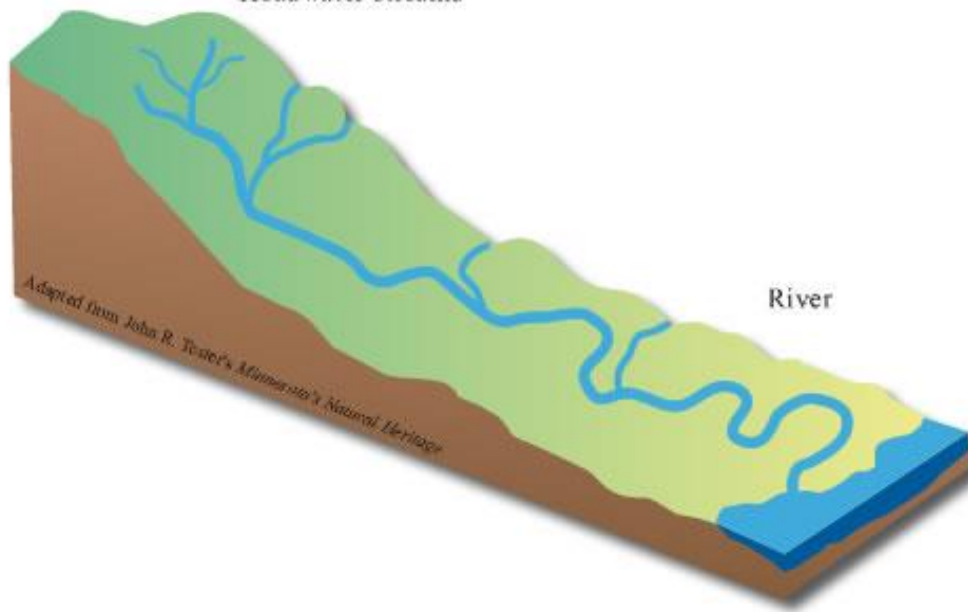
RED DRUM

Question: This fish inhabits inshore and offshore waters along the Atlantic Coast and throughout the Gulf of Mexico. It is a large, reddish fish with at least one black spot at the base of the tail.

Follow-up: Did you know that Red Drum is the state saltwater fish of Texas? The state freshwater fish is the Guadalupe Bass.

Drainage divide

Headwater streams



River

Confluence with
larger river

Adapted from John R. Tester's Minnesota's Natural Heritage

