Post Oak Savannah Groundwater Conservation District

Educational Opportunities

"Education is not the filling of a pail, but the lighting of a fire."

William Butler Yeats

Educational Focus

Our educational focus is to bring the Texas Essential Knowledge & Skills (TEKS) alive with hands-on activities that will spark interest in groundwater conservation in conjunction with the functions of the water cycle. Students will be able to dive into each lesson with the assistance of a bird's eye view into the surface and underground water system. Each lesson incorporates insightful information about the importance of conservation, recycling, and natural resources. Students will be able to apply the knowledge & skills learned to their everyday lives as well as difficult scientific topics in relation to the water cycle.

STAAR in Mind

I understand that time is limited especially in preparation for the STAAR test. Post Oak Savannah Groundwater Conservation District strives to ensure that each classroom presentation and resource will be a beneficial asset to your students test prep. Every minute counts!

Free Curriculum Resources Available!

We have FREE TEKS based curriculum available for grade 4-5, 7, and adult.

Each curriculum set has multiple cross-curricular lessons focused on student hands-on engagement and critical thinking.

Post Oak Savannah Groundwater Conservation District

Education Coordinator

Doug Box

I love creative education! Before I became the education coordinator for Post Oak Savannah GCD, I had the privilege of teaching all aspects of photography around the world and to all age groups – children, teens and adults. For twenty years I owned and operated a daycare center licensed for 150 children in Brenham, TX. I have also written six books on photography that teaches hands-on skills.

Aside from teaching students, I love to help teachers by developing creative lessons that will in turn, inspire students to dive dig deep into a concept by providing hands-on experiences. My goal for every lesson is to trigger new thinking that will help students understand the "magical" water world.

I ensure that all activities and lessons are aligned with the Texas Essential Knowledge Standards and promote critical thinking skills through STEM like investigations.

For more information regarding our educational resources:

512-455-9900 office

979-219-3300 cell

dbox@posgcd.org

www.posgcd.org

How do I book a presentation?

First	Second	Last
Contact Doug Box 512-455-9900 o 979-219-3300 c dbox@posgcd.org www.posgcd.org	Check available dates! Make any special requests for presentation adjustments.	Presentation Day!

7th grade

Aquifer Model

I have a variety of water cycle related presentations to help bring the water cycle to life for younger audiences.

Lesson Overview

Main Focus

The main focus for the Aquifer Model lesson is to dive deep into the intricate process and components of the water cycle. The Aquifer Model provides the students with a bird's eye view of what actually takes place from the sky to the ground.

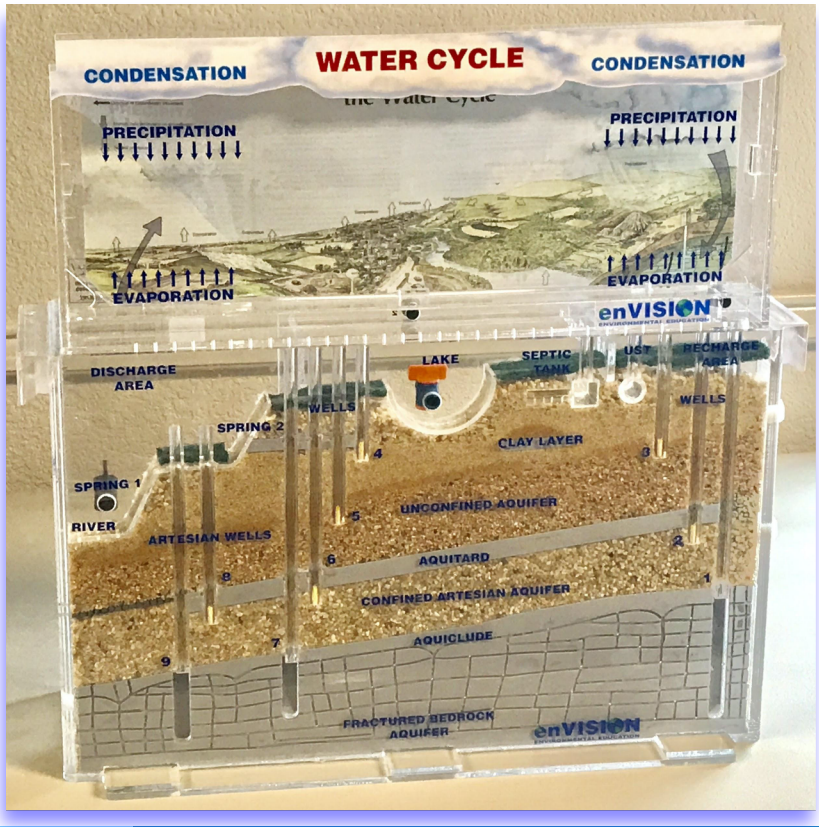
Aquifer Model

The benefit of the Aquifer Model is it shows the water cycle process full circle. The students will witness how water changes states and how the water flows through the system by accumulation, infiltration,, runoff, and aquifer recharge.

Is this STAAR related?

Yes!

All lessons revolve around the assigned TEKS for each grade level and can be tweaked to meet those standards. The connections made during the lesson will aid students in their critical thinking process of STAAR diagrams/questions related to the water cycle and conservation concepts.



Texas Essential Knowledge & Skills

7th Grade

TEKS for presentation

(1) Scientific investigation and reasoning.

(B) practice appropriate use and conservation of resources, including disposal, reuse, or recycling of materials.

(3) Scientific investigation and reasoning. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists. The student is expected to:

(B) use models to represent aspects of the natural world such as human body systems and plant and animal cells;

(8) Earth and space. The student knows that natural events and human activity can impact Earth systems. The student is expected to:

(C) **model the effects of human activity on groundwater and surface water in a watershed.**

Essential Questions

- Where does your water come from?
- How important is the water cycle to our water supply?
- What is the main function of the aquifer?
- In what ways is the aquifer a key component to the water cycle?

Vocabulary Focus

- Groundwater
- Water Cycle
- Condensation
- Percolation
- Accumulation
- Weathering
- Run-off
- Surface Water
- Evaporation
- Precipitation
- Aquifer
- Erosion
- Deposition

- **Additional Vocabulary**
  - Infiltration, Recharge, Particle, Pore Space, Saturated, Conservation, Cone of Depression

Other Available Educational Opportunities

Contact Doug Box for more details!

Major Rivers Curriculum

POSGCD offers FREE TEKS based water curriculum.

Grades 4-5

Raising Your Water IQ

Free TEKS based water curriculum geared for grades 7-8.

Water Day

We offer the opportunity to put on a “Water Day” for your school or surrounding schools in your area. Presenters from different water and ag related entities join together for a fun-filled educational experience for a chosen grade level.