



Colorado River Kits

Brought to you by the Colorado River Foundation

Colorado River Kits are a free curriculum resource provided by the Colorado River Foundation. Colorado River Kits help you teach students about the Colorado River and important water concepts through engaging hands-on activities. All Kits contain multiple lessons, allowing for you to customize your programming and each lesson is TEKS-aligned. All Colorado River Kits includes the following:

- Teacher's Guide
- Lesson Plans
- List of TEKS correlations
- All necessary supplies

Colorado River Kits can be used in conjunction with a field trip to Redbud Center (as a pre- or post-trip activity) or can be done independent of the field trip when the activities best fit into your units of study. To check out a Kit, simply complete the Kit registration form and fax or mail it to the Colorado River Foundation. Registration forms can also be downloaded from the Colorado River Foundation website at www.coloradoriver.org/programs.

On the following pages, you will find descriptions of the Kits we currently offer. Check back as we will be adding others soon!



Kits TEKS-aligned for 5th Grade:

Wetland Exploration

The Wetland Exploration Kit is a great way for fourth or fifth graders to discover the importance of wetlands and their role as water filtering systems. This hands-on activity allows students to be creative while using the scientific method to explore wetlands.

- Lesson 1: Brainstorming Wetlands – Students use their prior knowledge and experiences to gain background information and clear misconceptions about wetlands. They also get to see examples of flora and fauna found in Texas wetlands, a diagram of how wetlands work, and read about their importance in an EPA booklet “What’s Up with Our Nations Water?”
- Lesson 2: Building a Wetland – Students use roasting pans to build a wetland and discover 3 important functions by adding “pollutants” to water that flows through wetlands as runoff.
- Lesson 3: Wetland Extensions – To help learn the types of wetlands and important features, students can complete a match game and word search created by CRF

Water Cycle in Action! (TEKS-aligned for 5th grade)

This Kit allows the teacher to demonstrate the water cycle right in your own classroom. Students observe the different components of the water cycle, learn about pollution can affect areas far from where it started, and about the distribution and recycling of water on the earth.

- Lesson 1: Brainstorming the Water Cycle – Using tools provided in the kit such as a large water cycle poster, transparency, and fun book, students gain essential background knowledge about the water cycle and how a drop of water travels around the earth.
- Lesson 2: Water Cycle Demonstration – The teacher uses a large beaker, ice, and a hot plate to simulate how water on earth warms, rises as vapor, cools and condenses. “Pollutants” such as pepper and food dye can be added to show how the water cycle cleans itself when water evaporates, but how higher concentrations of pollutants left behind are dangerous to people and wildlife.
- Lesson 3: Water Distribution – Students experiment with liquids of different densities to observe just how little freshwater we have, and why it’s important to conserve our water supply.
- Enrichment – Included in the kit is a fun water cycle board game to help students remember the steps of the water cycle.

Kits TEKS-aligned for 7th Grade:

Drop by Drop

The Drop by Drop Kit is designed around water and its fundamental properties. Students will explore water properties listed below in fun and exciting ways and connect them with real life situations involving water pollution.

- Lesson 1: A Penny for Your Thoughts (Surface Tension) - Students follow the scientific method while exploring surface tension and water on a penny. Students take their knowledge about this property to hypothesize and test the affect “pollutants” (dish soap) will have on surface tension. This lesson culminates with a class discussion on what effects pollutants have on our river and on insects, such as the water strider, that depend on high surface tension in their environment for survival.
- Lesson 2: Opposites Attract (Phase Changes) – Students play a fun game in which they become hydrogen and oxygen atoms, forming water molecules and exploring what happens to water molecules during phase changes.
- Lesson 3: Successful Straws (Adhesion and Cohesion) - Students follow the scientific method and find how adhesion and cohesion and surface tension are vital to life as we know it. Students work with five different liquids and straws with various diameters to compare these properties in other liquids.

Watershed Wonders (TEKS-aligned for 7th grade)

The Watershed Wonders Kit explores watersheds and their role in creating creeks, lakes, and rivers. The lessons are adapted for students in seventh grade where they will use models to simulate a watershed and an online web activity to discover their own watershed and its properties.

- Lesson 1: Watershed Wonders – Using plastic model watersheds, students explore how gravity and geography direct the movement of water downhill to create bodies of water, and how water pollution in one area of the watershed can affect another.
- Lesson 2: Watershed Web Exploration – Students use the City of Austin website to complete an online activity to learn about watersheds and aquifers. They will compare the environmental quality of their own watershed to other sheds in the Austin area.



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Thank you for your interest in Colorado River Kits!

To request a **Colorado River Kit** please **email** a copy of this form to sarah@coloradoriver.org or **fax** to 512-473-3253.

Group Information:

Name: _____

School/Organization: _____

Address: _____ Zip code: _____

Email: _____ Phone Number: _____

Grade Level/Age Group: _____ Expected # of Students: _____

Scheduling Information:

Kit pickup and drop off times *must* be arranged in advance (available Monday through Friday 9am-5pm). All kits must be picked up and dropped off at the Colorado River Foundation offices at 3601 Lake Austin Blvd.

Date and time of Kit Pickup: _____

Date and time of Kit Return: _____

Kit Request:

Please check the kit requested:

TEKS-aligned for 5 th Grade:		TEKS-aligned for 7 th Grade:	
Water Cycle Demonstration	<input type="checkbox"/>	Drop by Drop	<input type="checkbox"/>
Wetland Exploration	<input type="checkbox"/>	Watershed Wonders	<input type="checkbox"/>