# EDUCATION IN CONTRACTOR IN CON

KC Water offers water quality education to students of all ages. All lessons can be modified for various grade-levels to meet science standards and are free of charge to schools, residents, and businesses in Kansas City. Schedule a lesson at water.education@kcmo.org.



## ALL AGES BINGO BOARD

The KC Water Bingo Board is comprised of a series of at-home learning activities in partnership with Remake Learning Days. The object of the bingo board is for everyone to complete a series of activities to learn about stormwater runoff.

# PRE-K WHAT IS WATER?

Students learn about water and the importance of keeping it clean. They will start by learning about the ways we use water and why it is so important. The lesson includes a hands-on activity where students will create and compare a "sad" polluted landscape with a "happy" clean planet landscape.

#### KINDERGARTEN | FREDDY THE FISH

Students participate in the story of Freddy the Fish and his journey from Kansas City to the ocean. At the end of the story, students discuss how water must be cleaned before humans can drink it, and what they can do to keep pollution out of creeks, streams, and rivers.

# 1ST GRADE WAYS OF WATER

Students will learn about water cycles, watersheds, and how water carries matter through a water system. They will create and manipulate a watershed model and direct parts of the water cycle to learn about the journey of water.

# 2ND GRADE CLEAN WATER MESSAGES

Students learn about common types of pollutants and their impact on waterways. The lesson includes students creating and comparing clean water and polluted water to understand how BMPs help filter and support clean water practices.

# 3RD GRADE TRASH TALLY

Students become familiar with the most common types of trash found on the ground in Kansas City and how stormwater can carry that trash to the nearest waterway. A quick tour of the school grounds to point out storm drains and slope followed by students using data sheets to tally the types of trash they observe.

#### 4TH GRADE HITCHHIKING WITH H2O

Students are introduced to characteristics of water and categories of water pollution. They learn how weathering, erosion, and deposition impact water quality and how various substances interact with our waterways. They also learn how point and non-point source pollution affect water quality.

# 5TH GRADE KC TO THE SEA

Students learn about how precipitation moves through a watershed. The lesson focuses on stormwater runoff and contaminants carried to our waterways. Students will calculate the amount of water found in a square yard and compare this to water falling around common impervious surfaces.

### 6TH-8TH GRADE EARTH SCIENCE FORCE OF WATER

Students will learn about watersheds and how water carries matter through a watershed. The lesson focuses on stormwater runoff and contaminants carried to our waterways. Students will model a watershed and learn about solutions to flooding as well as possible methods of pollution control.

#### 6TH-12TH GRADE LIFE SCIENCE MACRO MONITORING

Students are introduced to benthic macroinvertebrates and how they are used to determine water quality. They learn about the characteristics of macros, their role in the food chain, and descriptions of a healthy macro habitat. This includes an activity for students to study and identify macros found in local waterways.

### 6TH-12TH GRADE PHYSICAL SCIENCE WATER TESTING

Students are introduced to various components and substances found in our water ways and how they are used to determine water quality. They will learn about general research methods through water testing, assessment tools and data collection, and descriptions of a healthy water source.

## 9TH-12TH GRADE JOURNEY OF STORMWATER

High school groups can schedule an overview of the Journey of Stormwater to cover discussion topics over the issues of pollution and solutions. Discussion covers some solution-driven practices along with topics over local Green Infrastructure sites and the federal Consent Decree. The lesson can involve a group-led Project-Based Learning event in partnership with KC Water.

