# The DuPage Regional Office of Education Presents STEM - IT'S ELEMENTARY!

Enjoy the glimpses of some of our work in DuPage County.







Questions? Contact Mary Biniewicz mbiniewicz@dupageroe.org

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The DuPage Regional Office of Education STEM Squad is excited to offer a new outreach program for K-5 teachers who teach in DuPage County public schools. This program allows teachers to instruct students with assistance from a STEM Squad member during the school day. The Squad member will be available to address questions during or after implementation of the lesson. The lessons are designed to align with standards, complement the work teachers are doing in their classrooms, and to serve as a starting point for the development of additional lessons. This year's offerings include the following.

#### Survivor

Students will learn about structural design as they build a shelter from simple materials that can withstand rain, wind, etc.

## Make It Move

Students will learn about motion by designing a car from common household items and then test and modify their design.

## Make Your Own Music

By constructing and testing a harmonica or kazoo, students will learn about vibration and the properties of sound.

# **Morphing Models**

A variety of designs can be made from the exact same materials. Students will use materials such as BUILDZI, KEVA Planks, and Box Lox to demonstrate this concept.

# **Electrifying Energy**

Students will learn about simple circuits and electrical energy by using Snap Circuits, Circuit Mazes, and Energy Balls and Sticks.

#### **Metric Olympics**

By participating in activities such as the paper plate discus and drinking straw javelin throw, students will learn about and practice measurement and data collection.

#### Numbers Aren't Only For Nerds

Tenzi dice will be used to teach a variety of math skills from the very basic to the more complex depending on the skill level of the students.

# Shape and Symmetry

In this activity students will learn about linear and/or rotational symmetry by experimenting with materials such as ShapeOmetry and BUILDZI.

#### **Mixture Mania**

In this activity the students will learn about the properties of mixtures by making their own lava lamp using ordinary household items.

# Attracted to STEM

Students will learn about the attractive and repulsive forces exerted by magnets through a number of hands on activities.

The offerings above are available throughout the school year and can be scheduled at a time that best matches your classroom work. You are welcome to schedule multiple lessons throughout the year. We will do our best to accommodate your schedule, however, please note that we work on a first come, first served basis. Lessons must be scheduled at least three weeks in advance.

For questions or to schedule a lesson please email Mary Biniewicz at mbiniewicz@dupageroe.org. We look forward to working with you.