## THE DUPAGE REGIONAL OFFICE OF EDUCATION

# 2023-24 STEM OUTREACH PROGRAM

# **Program Highlights**

- Sessions are conducted by DuPage ROE STEM Squad members <u>at</u> your junior high or middle school.
- Each after-school session runs about 1.5 hours and times can be adjusted to fit your schedule.
- One or two of the school's teachers must be present to assist and will be paid a modest stipend.
- All supplies provided. Snacks will not be provided due to increasing food restrictions.





Amber Quirk Regional Superintendent DuPage County Schools

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The DuPage ROE STEM Outreach Program engages DuPage middle and junior high school students in informal, after-school STEM learning activities designed to increase STEM-related interest and skills. These opportunities also assist schools as they develop their own after-school STEM Clubs and events. Email <a href="Mary Biniewicz">Mary Biniewicz</a> for more information or to schedule.

#### ArtKEVActure October 3, 5, and 11, 2023

Wood planks are used to create works of art, Rube Goldberg ball-runs, towers, bridges, and more. Simple and complex designs also will teach students about principles of measurement, patterns, and dimensions.



# Code Crackers October 24, 26, and November 1, 2023

Students will decode using different ciphers and explore the field of cryptology to help sharpen their organizational, communication, and observation skills. Your students may just go crackers for cryptology!



### Make It Move November 8, 14, and 16, 2023

How can you make a car move, without an engine? Would Newton's Laws apply to a balloon car? Try building a balloon car to find out. Then race your car to see which ones go the straightest and farthest.



## **Colorful Music**

#### November 29, December 5, and 7, 2023

Use special rings and the Sphero's Specdrums app to create and produce music without any instruments! Note: The required app must be downloaded on the school's devices <u>prior to the scheduled</u> <u>session</u>. **Devices nor the app are provided by the STEM Squad.** 



### STEM Is A Blast!!!

#### January 25, 30, and February 1, 2024

Students will design and construct a functional air-blaster using common, safe items then compete to determine "the best" design. While having fun, students also learn how the volume of a gas is related to the pressure of a gas (Boyle's Law).



# **Mini Olympics**

#### February 7, 8, and 13, 2024

Students will launch, hurl, and fling their way through this session as they participate in unique STEM Olympic-style events and apply their estimation and measurement skills.



## Grow Your Own Pizza March 7, 12, or 13, 2024

Students will learn to prepare and grow many of the ingredients needed to make delicious home-made pizza. Students will get to take home everything to continue the learning and fun at home.



# Catapults

#### April 9, 10, and 11, 2024

Students will build a catapult using a schematic and provided materials, then experiment to find the best angle to hit targets. Once students have mastered the idea, they will build their own catapult with the materials provided. **Requires the use of a large open space or hallway**.

