2022 VIRTUAL STEM NIGHT

Please view the list below that includes all demonstration and workshop offerings for our 2022 Virtual STEM night. If you want to participate in a workshop, you must sign up for a materials kit using our SignUp Genius link below. This is first come first serve! (Supplies are limited)

SignUp for workshop supplies here:
https://www.signupgenius.com/go/9040545AEAD2BA2FC1-stem

DEMONSTRATIONS

Materials are not provided for demonstrations. Some demonstrations may give you a materials list to find items from home to complete.

Intro to Drones

In this demonstration, we will talk about the engineering and design of the Parrot drone and we will be doing a demonstration showing the drone flying through an obstacle course. We will end with a drone race. We want people to be inspired to fly their own drones.

F.V.A. Testing

In this station, participants will learn more about Friction, Velocity, and Acceleration. Participants will have the opportunity to set up an experiment at home with their own household items to test friction and velocity and slope and velocity in an interactive way.

Elephant Toothpaste

Our station has to do with a chemical reaction between a few household items. This spectacular reaction makes elephant's toothpaste, a large foam explosion! This demonstration will blow your mind away as you watch us make and demonstrate the chemical reaction that makes the toothpaste.

Aerodynamics with Cars

In this demonstration, we will test a variety of vehicle body shapes and assess the aerodynamic qualities of each. Participants will get to see our experimental design setup and testing process used to evaluate the efficiency of each design. Students will also be given a list of materials if they chose to try out their own testing at home!

Workshops

Students will be provided materials to pick up to complete these workshops.

Color Theory

Participants will use paint to learn about primary and secondary colors. They will use every color of the rainbow to make a custom sun catcher.

Oobleck vs Slime

We will be comparing Oobleck and Slime and how Oobleck reacts when you step in it compared to Slime when you step in it. Our goal is to show the audience why Oobleck and Slime react differently.

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Beauty Face Masks

In the hands on workshop, participants will learn how to make different types of face masks that have different benefits to your skin. Participants can re-create these masks with their own materials and face mask tablet provided.

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Lego Challenge

Participants will be provided a set of Lego blocks that they will be able to build with. Participants will be given an opportunity to participate in an Engineering Design Challenge where they must use their Lego block to create a product given specific criteria.

Egg Drop Experiment

In this workshop, participants will learn about an egg drop experiment. We will use different materials to try to protect our egg from cracking. The participants will learn problem solving skills.

Brain Games

In our STEM station, we will be talking about optical illusions. We will be covering how your brain thinks one thing when it really something else. We will also create your own optical illusions only using straight lines.

Slime

At our station we will be teaching participants how to make slime. We will learn the best, tested recipe to make slime and participants will have fun making their own slime at home!

How to Fingerprint

This is an experience where participants are shown how to roll and create a fingerprint card. Participants will learn information about ridge patterns in fingerprints and how fingerprints are used in the forensics field.

Popsicle Catapult

Our demonstration includes the difference between potential and kinetic energy using a large catapult to test different projectiles. Participants will have the opportunity to make their own small scale catapults and test them.

Bath Bombs

Participants will learn how the bath bombs fizz, why they react this way in water, and what do the components do, by making bath bombs. The goal for this project is to learn the science behind the bath bombs, and learn how to make your very own and unique bath bomb.