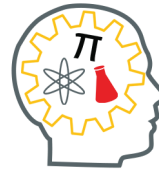
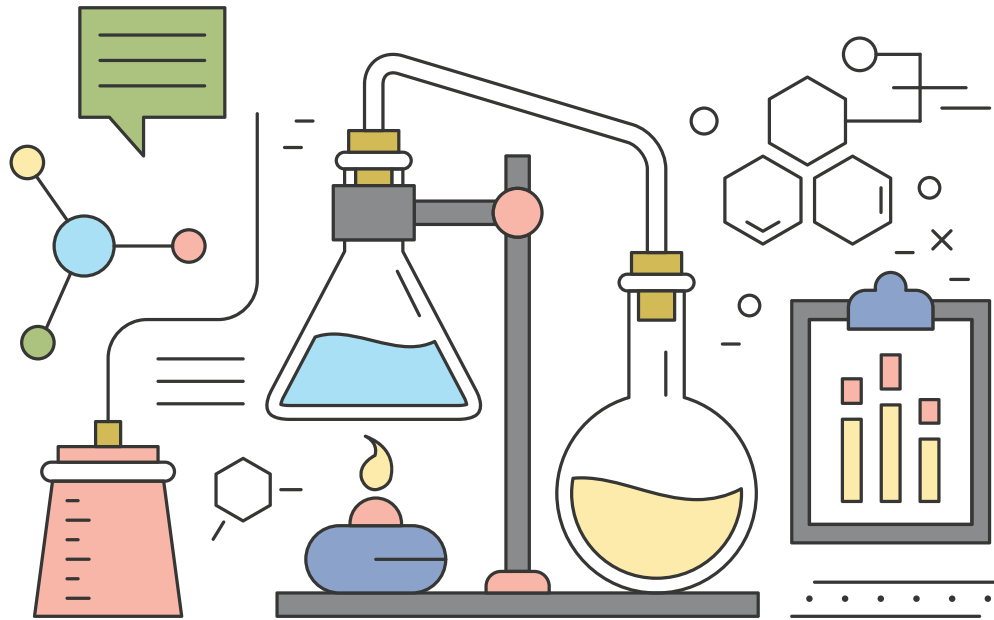


Notre Dame of Maryland University is a proud sponsor and participant in:



MARYLAND
STEM
FESTIVAL



STEM

FAMILY FUN FAIR preK-12

Hosted by the School of Education STEM Leadership Program



Station Name	Topics Covered	Overview	Collect a Stamp
SCIENCE			
Puffer Fish Balloons!	» Chemical Reactions	Set off a chemical reaction, students to create a "puffer fish."	
Walking Water	» Capillary Action, Gravity, and Surface Tension	Make water "walk" between glasses using nothing other than a paper towel	
Marshmallow/Air Dry Clay SnowFlakes	» Building/Structure	Learn about snowflakes and design and build your own snowflake using toothpicks and marshmallows.	
It's not Magic it's Science	» Pressure/Volume	Investigate activities that seem like magic but are really based on scientific principles.	
Magic Milk	» Chemistry, polar vs non-polar	Participants will learn about the bipolar characteristics of soap and will watch these properties in action in a colorful milk bath.	
TECHNOLOGY			
Gumdrop bridge/ Marshmallow Bridge	» Structure/ weight	This activity explores how technology has changed over time leading to different shaped bridges being used due to the strength of a structure and how to distribute load.	
Can you save Fred?	» Engineering, Scientific Method Review	Work together to save Fred the worm from a capsized boat. What tools do you have available to communicate and to save Fred?	
Toy around with trajectory	» Design, Modeling, trajectory, angles, material science, potential and kinetic energy	Design a catapult to achieve a mission.	
ENGINEERING			
Catapult Creation	» Kinetic Energy, Projectile Motion	Students will be able to create their own catapults with popsicle sticks, rubber bands, and a plastic spoon.	
The Bridge Challenge	» Force » Gravity » Geometry » Friction	Students will use one simple classroom material to create a load-bearing bridge following the "Da Vinci" style.	
The Marshmallow Challenge	» Engineering	Create a structure/tower that can hold a marshmallow at the top.	
Constructing Coin Spinners	» Engineering, energy, and torque	Assemble toy spinners then test them to observe how they work and discuss how to make improvements to the design.	

MATHEMATICS

Math McDonalds Different Ways to Make Numbers	» Addition and Subtraction	Students will place the "McDonald Fries" with different math problems written on them in the correct fry container.	
Can You Fit Through an Index Card	» Geometry and spatial reasoning	Participants will be asked if they can fit through an index card and provided with the card and scissors to try it out.	
Geometrical Shapes on Pumpkins	» Geometry - Right angles, shapes, positions and more.	Create geoboards out of pumpkins and even take some geo-shape templates home.	
Which container holds the most water?	» Volume	Make predictions about which container holds the most water and then use water to determine if you are correct.	
Additional Stations			

Collect stamps to redeem for prizes!

1-5 stamps =Level I

6-10 stamps= Level II

11-15 stamps=Level III

16-20 stamps=Level IV

STEM SUMMER CAMP

JULY 14-18

AT NOTRE DAME OF MARYLAND UNIVERSITY

Join us for an exciting exploration of the wilds of the world. Investigate different tropical regions of the world and learn about the plants and animals in these amazing ecosystems. Campers will be engaged in a variety of age-appropriate hands-on activities to help them build their knowledge and skills of the vast wild areas of our world. Students entering grades K-10 are welcome to enroll.

ndm.edu/stemcamp

Wilds of the World

