



## Catholic Schools [THE EQUATION FOR A SUPERIOR EDUCATION]

### What is STREAM

STREAM Education allows academic concepts to be coupled with increased real life application in all the disciplines.

Students become involved in hands-on projects where problem solving, collaboration, and the results of their efforts make lessons more relevant than a textbook alone. Increased technology to enhance learning is emphasized, and career connections as well as exposure to working professionals further relates students to their own learning and their futures! It helps answer the "Why are we learning this?" question.



# What does STREAM look like at NBVM?

Teachers can incorporate STREAM activities into their classrooms how they want. There are supplies located in the school for classes to use.

We also host STREAM academies two times a school year (Fall and Spring) where students can choose a specific concept to focus on. In the past, academies were run once a week for a few weeks. This fall we did a longer, in-depth session for one-half day of school.

There are opportunities through the Diocese to compete and display projects and skills. Stay tuned for information regarding these from your child's teacher or our STREAM coordinator Miss O'Brien.

## How can you help?

If you work at or own a business you think would pair well with our STREAM program or you would like to volunteer to help out during STREAM academies reach out to Miss O'Brien!

### What's new to NBVM STREAM?

In the fall our 8th grade boys got the opportunity to try out our 3-D printer as a new academy program. Check out more about this on the next page.

Each year NBVM applies for a grant to help support our STREAM program to grow. This year our grant will be used to purchase coding equipment for our school. Our students have a strong interest in coding, and with the growing technology world, we are glad to be able to integrate new devices.

We will have Bee Bot and supporting activities for our KR-3rd graders and BBC: microbits for our 4th-8th graders. This will allow our students to build their knowledge of coding as well as challenge their skills as they grow.





Click the pictures to learn more about this technology

# 3-D PRINTING



#### **Grade 8**



Our middle school students are getting the experience to design, create, and print items with our 3-D printer. This is a new academy we hope to continue expanding! Mr. Frentzel was kind enough to come in to help us learn about this new technology.

# Current STREAM

## ACADEMIES



- Fab Fashion
- · Blast with Bubbles
- Primary Engineering Adventures Program (PEAP)
- CSI Experience
- Lights, Camera, Action
- Kitchen Chem
- Lego University
- 3-D Printing



# FAB ASHON

### Grades 3-8

Explore design, engineering, and visual art through fashion design! Use innovative patterns, color, and the design process to solve fashion objectives in the weekly challenges. Students work individually and collaboratively to meet challenge objectives.





## BLAST WITH BUBBLES

Grades 1-3



Children will explore the science of bubbles and engage in a variety of activities that connect to Art, Math, ELA, Writing, Religion, and Engineering! A range of activities will allow investigation, design, and creativity for our youngest learners. We hope that it will have them leaving the course thinking: "I

didn't know Bubbles and learning could be so much fun!" Come join us as this course will surely be a blast ending with a Bubble

Bash!



## PEAP XXX

# Primary Engineering Adventure Program

Grades 1-4





Familiar and timeless story characters and Biblical stories take center stage for PEAP! Our youngest learners will adapt the Engineering Design Process to meet the needs of their favorite literature friends! Students will generate ideas, build, and test solutions collaboratively to help their favorite characters solve a problem.

# CSI EXPERIENCE



#### Grades 6-8



Solve mysteries using the science of forensics in this year's Science Scrimmage. Students will observe trace evidence, investigate fingerprinting, extract DNA, create transfer patterns, and examine fiber and handwriting evidence to master problem solving like a true crime scene investigator.



## MITCHEN CHEM



#### **Grades 4-8**



Extend the joy of science in the kitchen with an array of Kitchen Chem. lessons. The chemistry, biology and simple life science exploration will be emphasized throughout this course. Join all the fun of hands-on kitchen science as mini "Chopped" competitions engage students in the creative aspect of food preparation as well! Kitchen Chem. is always a hit at X-STREAM games.





## LEGO UNIVERSITY





#### **Grades 1-4**

Bring abstract concepts to life with a fun, hands on approach that really engages students. LEGO bricks turn numbers, words, and ideas into real models that can be touched, described, and innovated across all subject areas. Each week, the students will undertake a design challenge connected to topics taught at the primary level in ELA, Science, S.S., Religion, or Math utilizing LEGO® bricks. They will also have opportunities to present and share, strengthening their presentation skills!





