

# Engineering Exploration Summer Program

**Who:** Open to any public or private school student presently in grades K-5

**When:** Week of July 14 -18 Monday-Friday 8:30 – 11:30am

**Where:** Manufacturing & Engineering Tech Wing at Neenah High School

**Instructors::** Tony White (*Technology & Engineering Teacher - NHS*) & Maripat Franke (*Hoover teacher Aide*)

**Cost:** \$20, payable to Neenah Joint School District on the first day of class, July 14

**How:** Complete and return the attached registration form by Friday May 16.

**Questions:** Phil Johnson 751-6970 ext.102



## Engineering Design Process

Students will be introduced to the 12 step engineering process and have an opportunity to design and create their own puzzle cube. Using snap blocks and several types of grid paper they will learn about sketching in perspective and multi-view drawings.

- *Practice brainstorming techniques*
- *Develop a design proposal*
- *Make a model*
- *Test and evaluate*
- *Create your solution*

## Scientific Investigation

Students will have the opportunity to mix their own polymer compounds and then evaluate them using several test methods.



## Structure & Function

Students will explore the structure and function of materials while solving design challenges. They will utilize simple drawings & test data to evaluate potential solutions.



## Challenges

Students will participate in several engineering challenges to put their creativity and knowledge to work.

- Egg drop
- Marble roller coaster
- Paddleboat
- Zip-line
- Structures



## Action Packed Week of Learning

Each student utilizes an Engineer's notebook to record their activities for the day. This helps parents see what their child is learning and keeps students organized.



"Amazing week, my child learned so much and is definitely inspired to explore Engineering and Project Lead the way"

## Neenah HS Engineering Academy?

Students interact with high school academy students both during the program instruction and exploration and also during breaks where they can get to know the high school students in an informal setting. Students will also have a tour of the PLTW Manufacturing & Engineering labs. Qualifications for participating in PLTW Academy are also discussed to assist students with goal setting.

### Registration Form – Due Friday, May 18

#### STUDENT INFORMATION

Student Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Current School Enrolled in: \_\_\_\_\_ Present Grade: \_\_\_\_\_

#### PARENT/GUARDIAN INFORMATION

Parent/Guardian Name: \_\_\_\_\_ Home Phone: \_\_\_\_\_

Work Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Parent Email Address: \_\_\_\_\_

#### CHOOSE DESIRED CLASS: (Check One)

K-2nd/3rd grade

3rd/4th – 5th grade

Each class is limited to 25 students. If more than 50 registrations are received, a lottery will be held. Every effort will be made to notify families ahead of time of any cancellations due to low enrollment. It is very important that all students who enroll follow through with their commitment to attend.

Send completed registration to:  
Phil Johnson, Principal  
Roosevelt Elementary and Alliance  
215 E. Forest Avenue  
Neenah, WI 54956

#### When will you receive confirmation?

You will receive a written confirmation in June

***If you register more than one child, please complete a registration form for each student.***