Session Time- 8:30-9:30am K and 1<sup>st</sup> Grade: Coding and STEAM 2nd Grade: Story Books and STEAM 3rd Grade: Bridge and Tower Design Challenges 4th Grade: Engineering Designs of Cars 5th Grade: STEAM Activities and Coding

## **CODING and STEAM**

Would you like to go bowling with a mini BOT? Have you ever seen crystals under a microscope? How many shapes can you create using toothpicks and gumdrops? Join us for ten weeks of ALL NEW STEAM activities!! Explore, create, design and code!!

### STORY BOOKS AND STEAM

Read, Plan and Design structures after listening to a storybook. Students will build all 3 houses for the 3 Little Pigs, design Furniture for Little Red Riding Hood, engineer an escape for Rapunzel, make a new bed for Goldilocks and more! The characters give children a framework to explore how things work and the world beyond their home.

## **BRIDGE AND TOWER DESIGN CHALLENGES**

Work as engineers to design and build a popsicle stick bridge that can withstand 25 pounds. Then, work cooperatively to create the tallest and strongest tower. This hands-on class will include activities that incorporate aspects of science, technology, engineering, art and math (STEAM). Students will engage in challenges like building bridges and towers while testing their strength and more. Let the challenge begin!

# **ENGINEERING DESIGNS OF CARS**

VROOM!!! Design, build and race a variety of cars. We will make a rubber band powered dragster, pinewood derby car and a balloon propelled car. In this class you will learn some physics concepts and use materials to create toy cars. Invite a friend, build two cars and race them against each other. Whose car will go the fastest?

# STEAM ACTIVITIES AND CODING

Let's make it! Kids will design and create as they engage in engineering challenges. Students will use a variety of materials to develop creative projects such as marble run mazes, catapults, launchers and towers! Then, this class will use iPads to learn valuable coding skills. Kids can create their own programs and write their own code to control characters. Students will write code to solve daily challenges and debug their programs when a mistake occurs!