

What's Happening in our Makerspace?

Pre-K3 students worked together in groups and used their imaginations to create original designs using Legos and playdoh. Apples and robots were created, just to name a few.



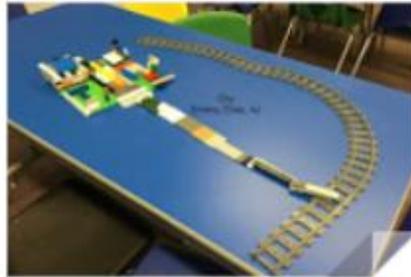
PreK-4 students used straws and playdoh to construct geometric shapes such as squares, triangles, trapezoids, pentagons and hexagons. Additionally they worked together in small groups with the Ozobot Bit robots. Ozobot is a tiny robot that teaches kids programming. Ozobot can identify lines, colors, and codes on both digital surfaces, such as an iPad, and physical surfaces, such as paper. The students used different colored markers to print capital letters on paper and then watched Ozobot follow the letter they printed.



Kindergarten students worked together in small groups programming Dash robots to follow different types of commands. They used the iPad App **Go** to experiment then took turns selecting commands to make Dash move, make sounds and light up. Then they programmed Dash to the correct answer to addition problems given by their teacher!



First Grade Students visited the makerspace as part of social studies class. Student groups used Legos and worked together to build their assigned community: city, farm, or town. The detail in their designs was amazing!



Second grade students worked in groups and were challenged to build a bridge using cardboard, Popsicle sticks, yarn, and tape. The bridge had to be at least 12 inches long and able to support at least 10 pennies. Groups worked busily and used the engineering design process where they:

ASKED: What is the problem?

IMAGINED: Brainstormed ideas and chose the best one.

PLANNED: Drew a diagram.

CREATED: Followed a plan to create the bridge and then tested it out.

IMPROVED: Tested their bridge to determine what worked and what didn't and made improvements if needed.

The students were very proud of their accomplishments!



3rd Grade Students visited the Makerspace as part of their Religion Class and worked to create a star to symbolize the Star of Bethlehem. Prior to the project, they learned how the 3 Kings (The Magi) followed the bright star to Bethlehem where they found the infant Jesus. The Magi brought Jesus gifts of gold (symbol meaning Jesus is a king), frankincense (symbol meaning Jesus is God), and myrrh (symbol meaning a sign of the future). Each group worked together, taking turns using paper material, glitter, crayons, stickers, glue, a coin cell battery and LED to create beautifully decorated stars. Once the stars were decorated, the students learned about electricity; how batteries and LEDs both have positive (+) and negative (-) charges, how to recognize the charges and how to properly connect them together to produce light. The coin cell battery and LED were attached to the center of each star to create light to symbolize the bright star that the Magi followed to find Jesus, The Newborn King.



6A Students visited the Makerspace with Mrs. Romain to review part of speech of words in sentences. Students to work in groups where members took turns reading sentences and identifying the part of speech of a specific word in the sentence. Students then used robotics DASH and Ozobot and programmed them to move to the correct part of speech card.



6th Grade Students in Mrs. Flager's Language Arts classes each wrote five paragraph expository essays about three extinct animals. Each one researched, took notes, organized writing, and wrote introductions and conclusions. Mrs. Flager chose animals that several students had in common, and broke them into groups accordingly. Student groups visited the Makerspace where they worked together to construct their extinct animal using Playdoh. The students then wrote creative and fun scripts which described the animal, informed where and when the animal lived, and explained how it went extinct. Each group recorded videos in front of a green screen. Then using the **Dolnk** App on the iPad, they searched and chose a background image related to their extinct animal, to place behind the video. The students had fun creating these educational videos! You can view them at the bottom of this page!



Grade 8 Students visited the Makerspace with Mrs. Brienza to create plant or animal cellular structures. 8A groups used a variety of playdoh colors to create their structures and 8B groups used Legos to give their cells a 3D look. They used Chromebooks to help them research the needed information. The cell parts were to include: nucleus, cytoplasm, cell wall (plant only), cell membrane, chloroplasts (plant only), ribosomes, endoplasmic reticulum, Golgi bodies and mitochondria. An educational and fun time was had by all!



8A Social Studies students visited the Makerspace with Mrs. Letizia for a hands-on activity to enhance their learning on the Andersonville Civil War Prison. Students worked in groups to construct a prison wall like the one in Andersonville. First they were given a budget for supplies: straws, pencils, tape, yarn. Each group calculated how much of each supply they needed, and once they were given the supplies, they worked together to construct the wall.

Grade 8 Students visited the Makerspace on Halloween as part of their computer class. They created light up Halloween cards using a design template, copper tape, LEDs and coin cell batteries. In doing so they reviewed circuitry skills. They applied copper tape, connected the positive and negative terminals of the LED to the tape and attached the battery. Students helped each other with design problems as needed.

