



Culver TEAMS Report

**Building a Better Education by Connecting
Technology, Engineering, Arts, Math, and Science**



Supplies Needed for TEAMS Projects

Several projects teachers are planning are in need of supplies. If you have any of the following or would like to donate funds to help purchase, please see the school secretaries.

- Pegboard and pegs
- Plywood
- Plywood scraps at least 1 square foot
- 2x6 scrap wood
- Pressboard (20" x14")
- Green/white paint
- Clothespins
- Wood glue
- Hammers
- Wood stain
- Nails
- Shovels
- Pulaskis
- Matches
- Metal pans (lids)
- Refrigerator
- Dishwasher

What to Do On a Snowy Day?

Foosball, Plinko, Paper Football. Many students have played those fun, exciting games, but many other students have not. The third graders at the elementary school have decided they need more options for their indoor recess time and these games are part of the plan.

Teachers Carolyn Herringshaw and Daryl Ivie are excited about the opportunity for their students to create new games for indoor recess. The teachers were brainstorming about how to find a project to connect to our STEM city. Mr. Ivie recognized the need for games for students for indoor recess times. This idea was enthusiastically received by all students. The games will be kept in the Stem Room because that is where indoor recess games happen. Mr. Ivie said, "I think it will be fun!" They are excited that the students will have a chance to create something useful for the school.

Students will use the engineering design process, math measurement and geometry, collaboration with peers, teamwork, and art in order to make the games pleasing to the eye. They have done digital research for plans and materials; also for the official rules of the game. Students will use construction tools to assemble the games. Students will use keyboarding and writing skills to create accurate and professional sets of rules.

The class hopes to be finished by May. Many students are especially excited about the foosball game because they like soccer!

Printing in 3D

Ms. Bezdek, Mr. Burbank, and Ms. Chapman collaborated on a proposal for the Lowes Toolbox Grant and received \$4,400 to purchase a 3D printer and supplies. The Art, Ag 1, and Digital Media Design classes will learn how to use the printer and create original creations in Tinkercad. The Digital Media Design class is the first to use the printer and will take the lead in teaching the other classes how to use it. Cole Brown, 9th grader, said, "I think it's a great opportunity for kids to use 3D models for projects. I think our class can be a great leader in teaching other students to use it because we've had firsthand experience using it."



Below: Habliston's class used the engineering design process to design and build a full size modular eagle nest for Eagle Watch that was enjoyed by all.



Middle School Lives Like an Eagle

Mr. Habliston's 8th Grade STEM class worked on a project as part of Eagle Watch that truly showed the various aspects of STEM. The project built on the same project from last year, making modifications and improvements to make this year's nest a true success.

Starting with last year's weakness of a modular full size eagle nest, which collapsed in transport, the students used the engineering process to redesign the nest so that it could be modular. The students designed a substructure made out of PVC pipe. They then weaved branches to create the nest that was large enough to fit half of the class inside it.

The class used multiple subjects to complete this project. They needed math to calculate the amount of resources needed by finding circumference and area of the circle. They also used language arts and science to investigate the eagle; including lifecycle, range, eating, etc. The students took their knowledge and wrote papers and used computer design to create digital posters that expressed the information.

Ranger Erin Bennett, from Cove Palisades State Park, loved the nest and has even requested designs for other parks to recreate the nest because some have attempted at other parks as well, but they encountered similar problems.

Eagle Watch Art Contest

In February, several students in all schools participated in the Eagle Watch Art contest sponsored by the Cove Palisades State Park. This contest was an opportunity for students to demonstrate their knowledge of local birds of prey in an artistic way. Also, new this year was the opportunity for students to create multimedia presentations about a bird of prey. This contest provided students the opportunity to integrate the arts with science and technology.

There were two Culver winners in the multimedia division. Jeyshon Cruz, 5th grader, won 1st place in the elementary division for his Golden Eagle PowerPoint. The judges noted he had a great conservation idea for artificial nesting included in his PowerPoint. Dusty Thornton, sophomore, won 1st place in the high school division for his Barred Owl PowerPoint. The judges appreciated his consistent format and factual information.

The middle school had three winners in the art contest. Tegan Macy, 8th grade, received 1st place for her leather carving. Lauren Berky, 7th grade, received 1st place for her oil painting, and Uriel Mejia, 7th grade, won 1st place for his colored drawing.

Congratulations to all the winners!

