

## New Class for sophomore students, S.T.E.A.M!

STEAM stands for Science, Technology, Engineering, Art and Mathematics. Portage Area sophomore students get to learn about these five topics in an integrated way while producing artworks, testing theories in science and mathematics and hands-on problem solving. Mr. Bearer, Mrs. Gdula and Mrs. Williams are spear heading this course.

Students in Mrs. Gdula's Family & Consumer Sciences (FCS) STEAM class will have the opportunity to incorporate some of Portage Area's newest technology into their projects. Mrs. Gdula is looking forward to showing students how science, technology, engineering, arts, and math are all an integral part of the FCS classroom. "I'm excited to teach students how to operate all the parts of our new embroidery machine technology which not only allows students to really personalize their work, but also opens doors for new creative processes."

Students will incorporate a drawing created in their (Art) STEAM class to a cutting board that they will manufacture in the Wood Shop. Drawings will be scanned in digitally and converted to line art, which will then be lasered onto their individual cutting boards. The schools two MakerBot's will be in use to 3D print individual designs created with Pro Engineering software. Within constraints, students will engineer a magnetic levitation vehicle for operation and testing.

Mrs. Williams Art STEAM class are engineering "Bower" sculptures from their environment. They listened to a podcast from NPR "Where Science Meets Art" about aesthetics in nature and early human communication. The Bowerbird was featured as an example of how certain genes passed on through generations due to their females making aesthetic judgements on the males sculpting abilities. Students were to construct their own bowers in groups of four making sure it was structurally sound, included a strong color choice, visual rhythm, pattern, movement, and symmetry.

Mrs. Williams is excited to incorporate more of the sciences, and mathematics into her curriculum. "I truly believe that being creative in our problem solving will be the future for many of our students in their daily lives and careers. STEAM is a way to bridge creative processes and uses many methods for inquiry and investigation. Teaching relevant, in-demand skills, which will prepare students to become innovators in an ever-evolving world is paramount, not only for the future of these students but also for the future of our workforce.

Please see student "Bower" Art below

