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FRR 7th Grade Math
BEF Idea Lab Grant, Fall 2023

Upload Project Description

This joint STEM project represents an opportunity for students to engage in hands-on learning by working in teams to build their own underwater ROV (remotely operated vehicles) as part of a challenge from NOAA (National Oceanic & Atmospheric Association) and MATE (the Marine Advanced Technology Education) Program. During 7th grade advisories, students will learn about the United Nations' Sustainable Development Goals (SDGs) as well as the UN's call for a "Decade of Ocean Science for Sustainable Development." During 7th grade science, students learn about ecology and ecosystems. And, in 7th grade math, students learn about data collection and analysis. This project will tie together students' learning in all three areas. Students will work in small groups to design an ROV prototype, engage in the engineering and design process to refine their prototype, and then build and test their design. We plan to work with a consultant from NOAA's Teacher at Sea program who will provide expertise to FRR (at no cost!), and we also plan to collaborate with other local experts (as volunteers). Not only will students have the opportunity to learn how to build a real-life underwater ROV, but equally importantly students will build their ROV with purpose as they seek to respond to the 4 ocean/climate change challenges as outlined by MATE.