The makerspace meets engineering design curriculum

DIVE-in Engineering





Deconstruct-Imitate-Vary-Explore: this is what real-world engineers do every day. Unleash your students' creativity with DIVE-in Engineering, a curriculum where makerspace meets engineering design and being an engineer becomes a reality. Students will build hovercrafts, subwoofers, and more, customizing their designs along the way. Learn more at **diveinengineering.com**.

The DIVE Model

In each grade band, students will explore nine different engineering solutions, in three different units: On the Move, Around the House, and Eyes, Ears, and Hands. DIVE, our engineering lesson model, helps students develop critical thinking:

- Deconstruct: Working the way engineers do, students begin by taking apart a working prototype, make recordings, take measurements, and create diagrams.
- Imitate: Now students are ready to reverse engineer the prototype, making their own version of what they deconstructed.
- Vary: Students analyze what they have created and brainstorm ways to enhance it: different materials, faster speeds, higher flying altitudes, increased carrying capacity, etc.
- Explore: Students apply what they have learned through the engineering design process to a real-life situation: how can their innovation make a difference in the real world?



Robot Arm: Students design a hydraulic arm with an articulating neck and pincer grip and then Vary their design to solve real-world problems.

3-5th Grade Bundles			\$2,125.00
On the Move Kit	Balloon Boat	Rubber Band Car	Stomp Rocket
Around the House Kit	Lock Box	Light Switch	Rotary Fan
Eyes, Ears, and Hands Kit	Claw Hand	Stringed Instrument	Telescope
6-8th Grade Bundles \$2,600.00			
On the Move Kit	Motor Boat	Motor Car	Hovercraft
Around the House Kit	3-way Switch	Door Knob	Air Conditioner
Eyes, Ears, and Hands Kit	Robot Arm	Slide Projector	Speaker
Teacher Toolkit (1 per Teacher)			\$245.00