

Elementary Makerspace STEM Program



The Elementary Makerspace STEM Program is uniquely crafted to introduce making into the curriculum.

Key Features:

- 1x lesson plan per grade level
- Project-based
- Cross-curricular
- Based on the Indiana Academic Standards



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Grade Level	Lesson	Objective	Indiana Standards Alignment	Time Required	1 st Maker Space Kit
Kindergarten	Number Recognition with KEVA	Students will identify the number of KEVA planks in a set and the correct corresponding numeral.	<i>Mathematics:</i> K.NS.1, K.NS.2, K.NS.4, K.NS.6	55 minutes	KEVA Planks
1 st Grade	Bristlebot Lab	Students will follow directions to create a vibrating bristlebot to explore energy, electricity, motion, and stability.	<i>Science:</i> 1.PS.3, K-2.E.1, K-2.E.2, K-2.E.3, SEPS.1, SEPS.3, SEPS.4, SEPS.7, SEPS.8 <i>English/LA:</i> 1.W.1, 1.W.3.2	55 minutes	Bristlebot Kit
2 nd Grade	Makedo Tower	Students will explore architecture and will build a tower out of cardboard while connecting to themes in <i>Iggypect</i> , <i>Architect</i> .	<i>Science:</i> K-2.E.2, SEPS.6, SEPS.2 <i>English/LA:</i> 1.RL.2.1, 1.SL.2.5	55 minutes x 3 days	Makedo Classroom Pack
3 rd Grade	Toy Design Workshop	Students will create their own unique pull-toy with animated parts that move as they roll. Students will use the engineering design process and utilize simple machines, linkages, kinetic and potential energy, and mechanical advantage in their plans and construction.	<i>Science and Engineering:</i> 3.PS.2, 3-5.E.1, 3-5.E.2, 3-5.E.3, SEPS.1, SEPS.2, SEPS.3, SEPS.4, SEPS.5, SEPS.6, SEPS.7, SEPS.8 <i>Mathematics:</i> 3.G.3, 3.M.2, 3.DA.2 <i>Computer Science:</i> 3-5.PA.1, 3-5.PA.2	55 minutes x 5 days	Toy Design Workshop Kit
4 th Grade	Build-a-Boat Workshop	Students will utilize the engineering design process to create a working electric motorboat using provided parts as well as additional chosen recyclables to explore buoyancy and simple machines.	<i>Science & Engineering:</i> 4.PS.1, 4.PS.2, 4.PS.3, 3-5.E.2, 3-5.E.3, SEPS.1, SEPS.2, SEPS.3, SEPS.4, SEPS.5, SEPS.6, SEPS.8 <i>Mathematics:</i> 4.G.4, 4.M.1, 4.M.2, 4.DA.1	55 minutes x 4 days	Build-a-Boat Kit
5 th Grade	Building a Fairytale with Bloxels	Students will write their own fairytale or story and create a video game based on that story in Bloxels.	<i>Computer Science:</i> 3-5.CD.4, 3-5.NC.1, 3-5.PA.2 <i>English Language Arts:</i> 4.RL.2.2, 4.RL.2.3, 4.RL.4.1, 4.W.4	55 minutes x 5 days	Bloxels Classroom Pack
6 th Grade	Solar Cockroach	Students will create a solar cockroach out of a solar panel that vibrates when exposed to sunlight.	<i>Science:</i> 6.PS.3, 6.PS.4, SEPS.2	1 hour	Solar Cockroach Kit

