

ALL NEW! *Smithsonian Science for the Classroom*™ Engineering Modules



Bring the power of the Smithsonian into your summer program through engaging, problem-based modules that will not only improve your students' literacy and math skills, but also make summer school science FUN!

Moving Water, from the Grade 5 module How Can We Provide Fresh Water to Those in Need?

Top 5 reasons to use *Smithsonian Science for the Classroom*™ for summer school:

- You don't need to be an engineer to teach engineering**—Step-by-step instruction, background information, and literacy and math integration mean any teacher can feel comfortable teaching engineering.
 - You're not just teaching science and engineering, but literacy and math, too**—Research shows that using an inquiry-based science program improves scores in science as well as literacy and math. Learn more at www.ssec.si.edu/our-results.
 - Your kids will WANT to come to summer school**—Engaging, engineering-focused instruction. They learn and HAVE FUN!
 - This program is flexible enough to fit into all summer school schedules**—10–15 lessons include opportunities to further incorporate literacy, math, and science notebooking through Science and Engineering investigations.
 - Everything you need to teach comes in one package**—No last-minute rummaging around for materials.
 - Step-by-step teacher instruction
 - Hands-on lab materials
 - Smithsonian Science Stories and Student Activity Guides
 - Digital resources
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- A photograph showing a variety of educational supplies arranged on a white surface. In the center is a purple plastic storage bin filled with items. To its left are several books, including 'Lab Nerd' and 'Lem and Hook'. In front of the bin are stacks of wooden sticks, a container of Morton salt, a stack of clear plastic cups, and a small blue clock. To the right of the bin are packages of Marcal Wax Paper and Big Bands. In the foreground, there's a colorful map or activity guide with illustrations of animals and plants, along with some loose string and other small components. The background is a light blue and green gradient.



Grade 1

How Can We Send a Message Using Sound?



Smithsonian

SCIENCE
for the classroom

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Smithsonian Science for the Classroom

Engineering Design modules:

- Integrate engineering with life, earth, and physical science
- Build students' skills in science and engineering practices, problem solving, and collaboration
- Teach science, literacy, and math all in one program.

Engineering Design	Final Design Challenge
Grade 1	
How Can We Send a Message Using Sound? K-2-ETS1-1 • K-2-ETS1-2 • K-2-ETS1-3 • 1-PS4-1 • 1-PS4-4 Supporting: Physical Science	Help Hopper Cross the River! Design and build a simple instrument to send messages to help Hopper the Frog safely cross the river.
Grade 2	
How Can We Stop Soil From Washing Away? K-2-ETS1-1 • K-2-ETS1-2 • K-2-ETS1-3 • 2-ESS2-1 • 2-ESS1-1 Supporting: Earth and Space Science	Save the Sand Towers! Design and build a plan to prevent erosion and the washing away of sand towers.
Grade 3	
How Can We Protect Animals When Their Habitat Changes? 3-5-ETS1-1 • 3-5-ETS1-2 • ETS1-3 • 3-LS4-1 • 3-LS2-1 • 3-LS4-3 • 3-LS4-4 Supporting: Life Science	Salamander Tunnel Save the salamanders! Design and test a solution to help salamanders safely cross a busy road.
Grade 4	
How Can We Provide Energy to People's Homes? 3-5-ETS1-1 • 3-5-ETS1-2 • 3-5-ETS1-3 • 4-PS3-4 • 4-PS3-2 • 4-ESS3-1 Supporting: Physical Science and Earth and Space Science	Model House Doorbell I'm here! Let me in! Build a doorbell device in a model house according to student-designed circuit diagrams and floor plans, and make adjustments to ensure that the devices are within the constraints of the problem.
Grade 5	
How Can We Provide Freshwater to Those in Need? 3-5-ETS1-1 • 3-5-ETS1-2 • 3-5-ETS1-3 • 5-ESS2-1 • 5-ESS2-2 • 5-ESS3-1 Supporting: Earth and Space Science	Get it, Treat it, Share it We need freshwater! Design a freshwater delivery system that provides enough water to sustain agriculture, industry, the environment, and housing within a town.

Engage. Inspire. Connect.

Introduce students to real-world problems. Teach them to design real-world solutions.

For more information, contact curriculum@carolina.com



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