

STEM in Action®

Modular STEM lessons to supplement your curriculum



Modular lessons to seamlessly integrate STEM into your curriculum

STEM in Action® engages students in authentic, problem-based STEM lessons with real-world applications. This program puts the engineering design process at the heart of exploration—teaching the value of rethinking and supporting multiple solutions.



- Lessons are grouped into flexible blocks of time to easily integrate into teaching schedules
- Spanish versions of student and parent materials are available

STEM in Action® modules align with major science genres **Physical** Life **Earth** Ron's Ramp Adventure Pam and Ava's Mapping Adventure Pam's Camping Adventure PreK-K Ron's Habitat Adventure Sunny Sandbox Exploration Little Footprint Exploration Sidewalk Safety Exploration Wild Feet Exploration Shadow Box Theater Exploration Shrinking Shore Exploration Seed Rescue Exploration Sound Bite Exploration 1-2 Project Park Design Coding Mouse Exploration* Muddy Mats Exploration Farmer Grady's Challenge Squeaky Clean Magnets Challenge Helping Hand Design Rainwater Runoff Challenge Digital Relay Challenge 3-5 Wildlife Corridors Challenge Coding & Mineral Collection Solar House Design Challenge Food Deserts Challenge Challenge The Great Toy Design Challenge

*For grades K-2.





Supports SEL hand2mind.com/sel

Developed in partnership with:





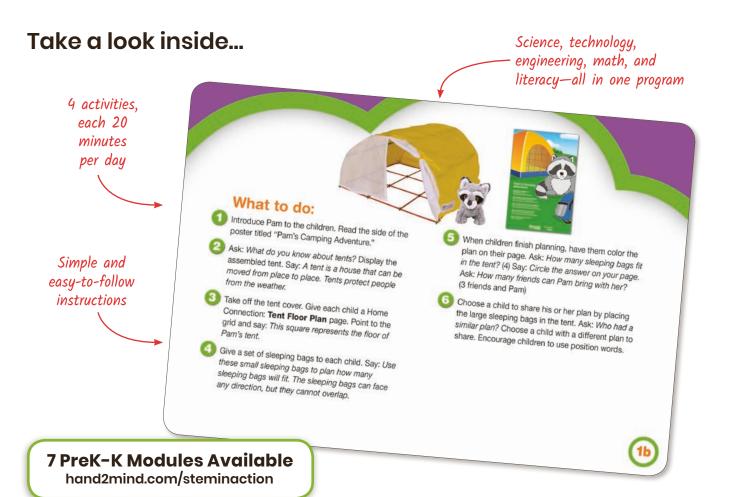
Learn More hand2mind.com/steminaction

PreK-K modules include:

- 4 teacher-directed Activity Cards and a Quick Start Card with helpful hints
- Story Poster
- 5 copies each of 4 different blackline masters
- All the materials needed for 24 students
- Spanish Add-On Bundle includes parent- and student-facing materials in Spanish







Primary Grades 1–2 modules include:

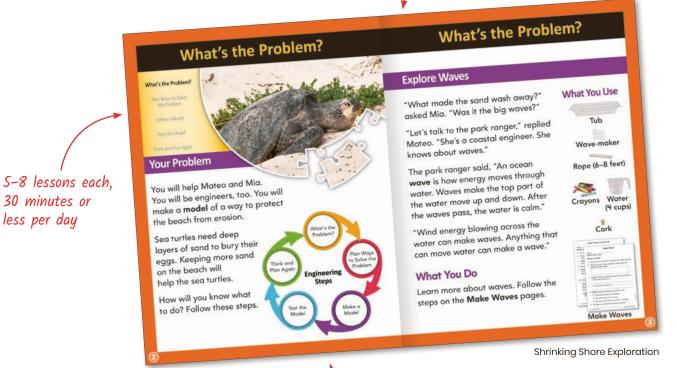
- 6 Student Activity Books
- Teacher Guide
- · All the materials needed for up to 30 students working in 6 groups
- Spanish Add-On Bundle includes parent- and student-facing materials in Spanish





Take a look inside...

Age-appropriate text with supportive visuals



8 Primary Modules Available hand2mind.com/steminaction

Students use science, technology, engineering skills, math, and literacy to solve problems

30 minutes or

less per day

Intermediate Grades 3–5 modules include:

- 6 Student Activity Books
- Teacher Guide
- All the materials needed for up to 30 students working in 6 groups
- Spanish Add-On Bundle includes parent- and student-facing materials in Spanish





Take a look inside...



Get curricular economy with science, technology, engineering & math, plus a literacy connection

5–8 lessons each, 60 minutes or less per day

Food Deserts Challenge

10 Intermediate Modules Available hand2mind.com/steminaction

Activities designed to accentuate the 3 dimensions of NGSS

7 PreK-K modules cover:

Forces Acting on Objects

• Ron's Ramp Adventure

Building Structure & Stability

• Pam's Camping Adventure

Earth Characteristics & Mapping

 Pam & Ava's Mapping Adventure

Living Things, Habitats & Survival

• Ron's Habitat Adventure

Sunlight Heating & Cooling

Sunny Sandbox Exploration

Pushes & Pulls

• Sidewalk Safety Exploration

Pollution & Human Impact

• Little Footprint Exploration





8 Primary modules cover:

Sun & Earth

Project Park Design

Basic Needs of Animals

Coding Mouse Exploration

Animal Adaptations & Characteristics

• Wild Feet Exploration

Sound Waves & Vibrations

• Sound Bite Exploration

Light, Shadow & Illumination

• Shadow Box Theater Exploration

Material Properties

Muddy Mats Exploration

Water & Erosion

• Shrinking Shore Exploration

Lifecycle, Seeds & Pollination

• Seed Rescue Exploration



10 Intermediate modules cover:

Minerals & Erosion

• Coding & Mineral Collection Challenge

Animal Adaptations & Biomimicry

• Helping Hand Design

Severe Weather & Hazards

• Farmer Grady's Challenge

Magnetic Force

• Squeaky Clean Magnets Challenge

Survival & Habitats

• Wildlife Corridors Challenge

Solar Energy

• Solar House Design Challenge

Waves, Codes & Circuits

• Digital Relay Challenge

Changes in Matter, Solids & Fluids

• The Great Toy Design Challenge

Plants & Cycling of Energy

• Food Deserts Challenge

Water on Earth & Pollution

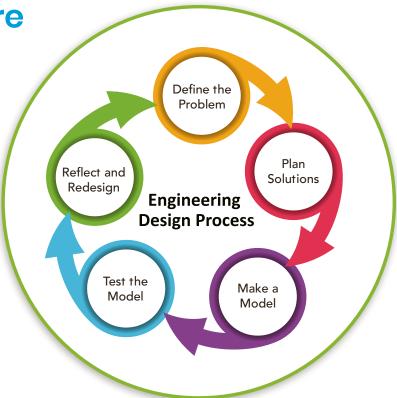
• Rainwater Runoff Design Challenge

Sample Lessons
hand2mind.com/steminaction

800.445.5985 — 7

Engineer the future together with STEM in Action

- Put the engineering design process at the heart of exploration.
- Seamlessly integrate science, technology, engineering, math, and literacy in real-world problems.



A customer favorite...

"When I first saw the STEM in Action kits, I was very interested in the concept of providing a problem-based engineering design activity that used a simple engineering process. It also gave the teachers a way to 'ease in' to the idea of teaching engineering at the elementary level. It was very accessible for teachers and students and had intentional standards alignment.

"This product helps close a gap in elementary school. Teachers have provided anecdotal evidence of increased student interest, high student engagement, and student learning of science and engineering concepts, but also of improving their math and ELA skills through the problem-solving skills they are learning."

Shannon Heckelsmiller K-12 Coordinator for Science Tahoma School District, Washington







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