



Grades K–5 Enrichment Curriculum

Bring Engineering to Life Anytime, Anywhere

Youth Engineering Solutions (YES) educates the next generation of problem solvers and engineers—because engineers shape the world!

YES Enrichment's standards-aligned K–5 units to tackle real-world problems using the Engineering Design Process. These units are specifically designed to support STEM specials, electives, makerspaces, clubs, camps, spring break, and summer programs. Through hands-on investigation and testing, students learn to embrace challenges, persist through failure, iterate on their designs, and unleash their creativity!



Sample Unit: Engineering Rescue Shuttles

Youth design shuttles to land a rope near a person who needs to be rescued.

Program Highlights

- **Fits any budget:** free and low-cost resources for grades K–5.
- **Research based:** backed by three decades of study and development. Classroom tested, educator approved, and proven effective.
- **Hands-on learning:** students use the Engineering Design Process to innovate their design solutions.
- **Designed for all learners:** relatable contexts, multimodal activities, language development supports, Spanish translations.
- **Career explorations:** embedded career activities relate to the design challenge.
- **Versatile implementation:** designed for use in any educational setting before, during, or afterschool.



Museum of Science.



yes.mos.org

Learn more: yes@mos.org, 617-589-0230

YES Enrichment Curriculum

Each unit contains five core 45-minute activities plus four optional activities to extend learning.

Lower Elementary (K-2)



Engineering Bandages

Youth design a bandage that covers and protects a cut.



Engineering Sails

Youth design a sail that uses wind energy.



Engineering Bubble Wands *Coming Soon*

Youth engineer wands to make a variety of bubbles.

Upper Elementary (3-5)



Engineering Rescue Shuttles

Youth design a shuttle that lands a rope near a person for a water rescue.



Engineering Sock Assistive Devices

Youth design an aid that helps people with limited mobility put on their socks.



Engineering Upcycled Toy Vehicles *Coming Soon*

Youth engineer a toy vehicle using upcycled materials.



Teach with Ease

Access Free Downloadable Resources

- Digital Educator Guide
- Dynamic Poster or Comic
- Slides, Vocabulary Cards, Engineering Notebook, Family Resources, Video Playlist, Posters, Spanish Translations, and more!

For Purchase

- Materials Kit for 24 to 30 youth
- Full-color Educator Guide plus printed classroom resources

Educator Empowerment

Professional Learning Workshops Available!

“The YES program impacted my teaching by giving me the confidence and desire to implement more engineering opportunities both in the afterschool program as well as in my normal classroom. **The collaboration, discussion, and productive struggle opportunities are important** for students to have.”

– Elementary Educator

STEM is for Everyone!



Free downloads



Purchase materials



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