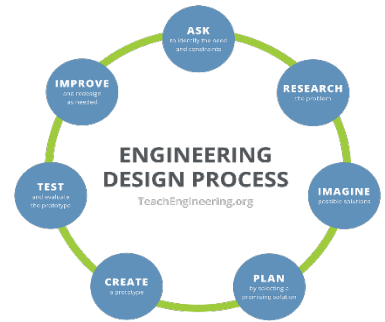




Engineering/STEM (K-8 Career Literacy)



Engineering Design Process teachengineering.org/
(Grades K-8) Start here! This process emphasizes open-ended problem-solving and encourages learning from failure.

Engineering for Kids engineeringforkids.com/
(Grades K-8) Accredited, interactive engineering programs.

EVERFI Endeavor endeavor-stem-career-activities-middle-school/
(Grades 6-8) Career exploration projects in game design, prototype design, and data-related challenges.

My American Farm games/subjects/engineering
(Grades K-5) Fun, educational games created by The American Farm Bureau Foundation.

PBS Learning-Engineering Systems engineering--technology/systems
(Grades 6-8) Free robotics lessons based on science standards.

Possible Futures Career Exploration–Engineering and Design
arizonafuture.org/programs/workforce-programs/
(Grades 6-10) Free engineering lessons aligned to Arizona Career Literacy Standards.

Project Lead the Way Automation and Robotics pltw.org/curriculum/pltw-gateway
(Grades 6-8) Students combine mechanisms with automation and explore aspects of automation and robotics, and experience how solving real-life problems involves the teamwork of mechanical engineers, software developers, and electrical engineers.

Rube Goldberg Machine–Teach Engineering simp_machines_lesson05_activity1
(Grades 5-12) Open-ended, hands-on, fun challenge employs the engineering design process. Develops student creativity and problem-solving skills.

Solve It Challenges schoolsup.org/solveit
(Grades 6-12) Free real-world challenges for students to solve using the Engineering Design Process.

Start-Up STEM startupstemllc.net/
(Grades K-5) Hands-on teacher PD for elementary educators to learn how to write STEM lessons and build a STEM community.

STEM Activities–Science Buddies stem-activities/
(Grades 5-8) Free real-world challenges using the Engineering Design Process.

Teach STEM Explorers-AZ Educational Foundation azedfoundation.org/teachstem
(Grades 5-8) Free lessons on engineering design processes and inventions.

ZSpace Franklin's Lab and Newton's Park zspace.com/solutions/stem
(Grades K-8) Virtual platform for elementary students to learn how to build electrical circuits. Middle school students explore force and motion to design, build, run, and analyze experiments.