# LEGO® Education

## K-12 Summer and Vacation Program Guide

Keep learning and building all year long

# Let's Get Started!

LEGO® Education has adaptable summer and vacation programming that is designed to build STEAM knowledge and skills through project-based learning sessions. The lessons are interdisciplinary, fostering a better understanding of everything from **math and science**, to **language arts**, **emotional health** and **self-awareness**.

With LEGO Education hands-on solutions as the foundation of your program, students will be engaged and excited about their summer or vacation learning.

Supported by robust LEGO Education professional learning options and easy to implement curriculum, teachers will feel confident in their ability to implement a joyful and engaging summer or vacation program for their students.

Non-consumable LEGO Education solutions are a sustainable solution to summer learning and can be used year after year.

**Questions along the way?**
Visit https://education.lego.com/en-us/ for even more information.

Let's build something awesome together!

# Cross Curricular Connections

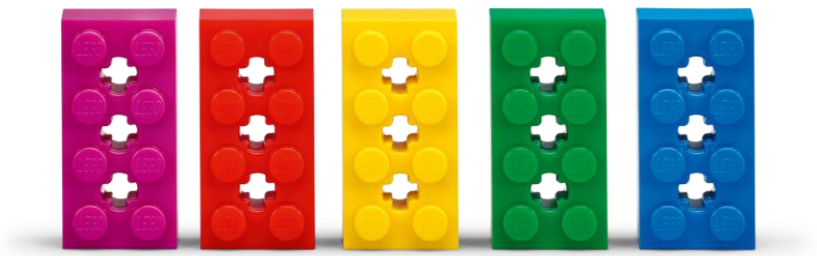
**Building STEAM Knowledge and Skills**
Students build skills and develop confidence in engineering design, coding, problem-solving, and computational thinking. By collaborating with one another to develop solutions to problem-based lessons, they learn to communicate and think creatively.

**Engaging with the Arts and Literacy**
Students need authentic ways to experience informational texts and practice speaking and writing about STEAM concepts. Through the engaging LEGO Education lessons, students will develop the ability to not only make arguments but support those arguments. They will also work on comparing and contrasting, making inferences and presenting claims through writing and speaking.

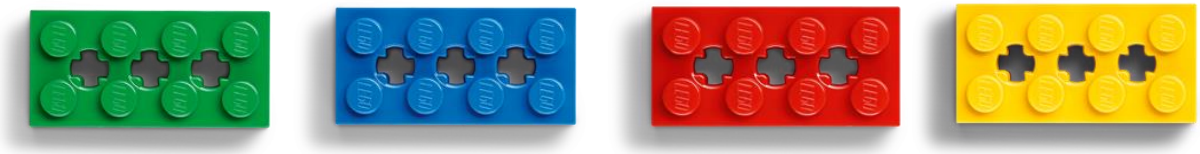
**Practicing Authentic Math**
LEGO Education brings math concepts to life with a hands-on approach that makes learning math concepts fun. Students practice using and analyzing data, solving equations, taking measurements, and using ratios.

**Foster Experiences in Science and Engineering**
Students develop and use models to conduct investigations and design solutions to problems using science and engineering practices. They investigate cause-and-effect relationships, model phenomena and processes, and analyze and interpret data to solve problems.

**Developing 21st Century Skills**
By collaborating with one another to develop solutions to problem-based lessons, students learn to communicate and think creatively. They also build skills in critical thinking, information literacy, and problem-solving.



# LEGO® Education Summer/ Vacation Curriculum



**LEGO® STEAM Park Summer Program** (30 hours – unplugged)
Grades PreK – 1
Week 1 | Week 2

**LEGO® Education SPIKE™ Essential Summer Program** (55 hours – technology enhanced)
Grades 1 – 5
Week 1 | Week 2

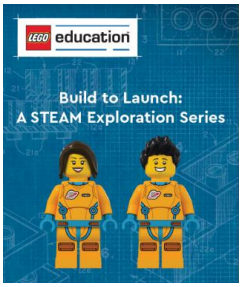
**LEGO® Education BricQ Motion Essential Summer Program** (48 hours – unplugged)
Grades 2 – 5
Week 1 | Week 2

**LEGO® Education BricQ Motion Prime Summer Program** (48 hours – unplugged)
Grades 6 – 8
Week 1 | Week 2

**LEGO® Education SPIKE™ Prime Summer Program** (55 hours – technology enhanced)
Grades 6 – 8
Week 1 | Week 2

**High School Coding/ Design Engineering Projects**
Grades 6 – 12
Robotics Playground from Tufts Center for Engineering Education and Outreach
Required sets: SPIKE™ Prime and SPIKE™ Prime Expansion Set

# Additional Resources




## Build to Launch

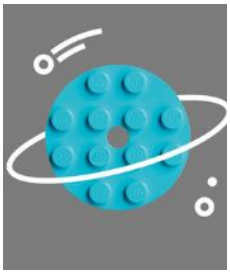
Taking STEAM Learning to new heights! LEGO® Education is teaming up with NASA and the Artemis I team to bring students and teachers an out-of-this-world STEAM learning series. Build to Launch is an exploration of the technology, STEAM concepts and careers behind the Artemis I mission to the Moon.

## Rebuild the World

Use Hannah's STEAM Heroes: A Career Toolkit in your classroom and inspire your students to #RebuildTheWorld. Through engaging videos and hands-on challenges, your students will meet Hannah's STEAM Heroes and learn how this diverse group of professionals uses STEAM skills every day.


## Build the Change

Build the Change is all about giving children a voice and allowing them to express their hopes and ideas for a better future. Children use their creativity to solve real-world challenges with LEGO® bricks and other creative materials – and it is all achieved via Learning through Play.



## Learning Progressions

This link contains lesson progressions for Grades 1-5, with each grade level featuring over 50 elements sequencing LEGO® Education lesson content with SPIKE™ App tutorial content and activity prompts to scaffold students' design thinking, science, and computer science skills.

# Sample Lessons

Flexible and modular curriculum allow for many learning options including full-day session, half-day sessions, or other combinations of learning.

Access all lesson plans here:
LEGO Education Lessons

Below are a few example lessons to start exploring!

| Grade | Lesson | STEAM Focus |
|---|---|---|
| K | Ramps | Predict and measure distances |
| 2 | Underwater Quest | Recall or gather information to answer a question in writing |
| 4 | Trash Monster | Explore automation then refine a prototype and discuss |
| 6 | Hopper Race | Create a prototype to solve a problem |
| 8 | Brain Game | Sort values in array, recognize patterns and create a program |

# Pre-K & Kindergarten Learning Solutions

LEGO® Education offers early STEAM solutions for Pre-K and Kindergarten students that reinforce STEAM concepts, storytelling, and community learning. One set is recommended for 4 students.

## StoryTales $179.95

Promote creativity, imaginative storytelling and language development with this unique and engaging storytelling set. Students will explore the world of make believe as they retell fictional stories and exercise their imaginations by building and telling their own stories.

## STEAM Park $239.95

Easily adaptable to fit any learning environment, STEAM Park builds on every child's natural curiosity and desire to explore and investigate the world of early science, technology, engineering, art and math through creative play.

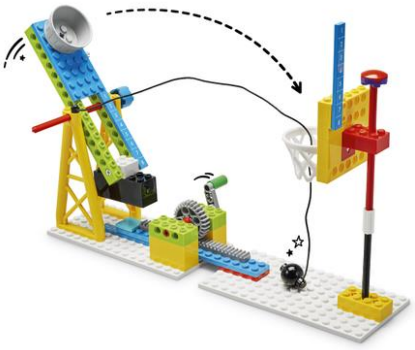
# Elementary Solutions

Elementary STEAM solutions include both plugged and unplugged options. One set is recommended for 2 students.

Find your account manager here or email sales@LEGOeducation.us

## SPIKE™ Essential $329.95

A cross-curricular STEAM solution, LEGO® Education SPIKE™ Essential engages students in hands-on investigation of STEAM and computer science concepts while contributing to literacy, math, and social-emotional development. Standards-aligned learning units use everyday themes, relatable Minifigures with different personalities and familiar LEGO® building elements to solve problems through storytelling.



## BricQ Motion Essential $159.95

LEGO® Education BricQ Motion Essential engages elementary school students in STEAM learning as they experiment with forces, motion, and interactions within a sports context. BricQ Motion Essential helps foster an understanding of physical science by providing easy, hands-on learning experiences without the need for technology. Students will experience cool "aha" moments as they set bricks in motion.

# Secondary Solutions

Secondary STEAM solutions include both plugged and unplugged options. One set is recommended for 2 students.

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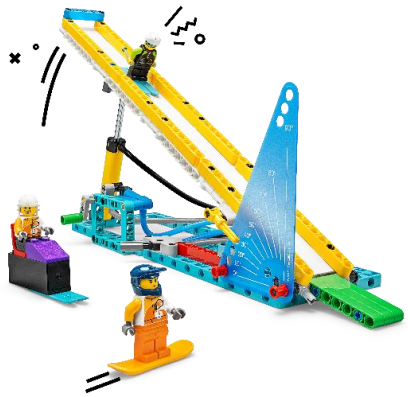
## SPIKE™ Prime $399.95
## SPIKE™ Prime Expansion Set $156.95

LEGO® Education SPIKE™ Prime helps students learn the essential STEAM and 21st-century skills needed to become the innovative minds of tomorrow. With SPIKE Prime, students will think critically and analyze data, prototype solutions to real-world problems, practice icon-based or text-based coding with Python, and hone STEAM and 21st-century skills that will prepare them for a technology-driven future.



## BricQ Motion Prime $159.95

The LEGO® Education BricQ Motion Prime Set engages students in grades 6-8 in the exploration of physical science within a sports context. Part of the LEGO® Learning System, BricQ Motion helps foster an understanding of forces, motion, and interactions by providing easy hands-on learning experiences without the need for technology. BricQ Motion Prime lessons are aligned to NGSS, ISTE and CSTA standards with the extensions aligned to CCSS literacy and CCSS math.

# Professional Learning Options

LEGO® Education believes in supporting teacher professional growth through online and in-person options that inspire teachers to learn and practice how to bring playful, hands-on experience into their classroom to impact student outcomes.

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**LEGO Education Facilitated Professional Learning and Coaching** enables educators to actively engage in experiential professional learning programs designed to produce a strong set of transferable instructional skills and strategies that foster student success.  Sessions available for up to 20 educators.

**LEGO Education Educator Success Program** provides free support for educators to get the most from their LEGO Learning System solutions.  Open for enrollment for all.

# Implementation Support

LEGO® Education has experience in supporting implementation of summer programs for districts and schools of all sizes.

Find your account manager here

Your LEGO Education account manager will help build a program that supports your unique summer learning and professional development needs.

## Helpful links

Sign up for LEGO Education Educator Success

Getting Started: District, Site and Classroom Preparation

Standards Alignments

Lessons and Inspiration