

Pre-K - 1st Grade STEM Program

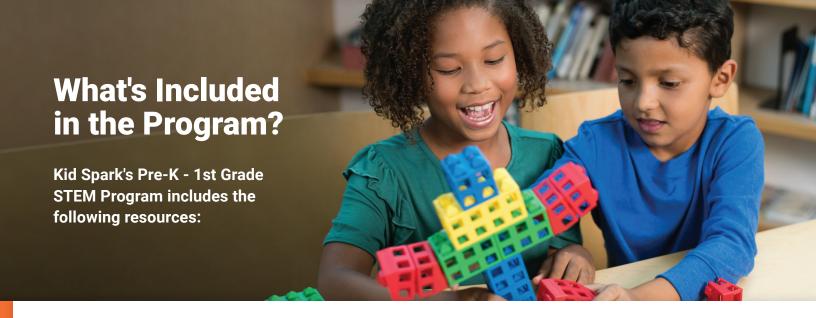
Kid Spark's Pre-K - 1st Grade STEM Program focuses on helping young students develop foundational STEM fluencies that are prerequisite for a lifetime of STEM learning.

These fluencies include spatial reasoning, sequence and correspondence, symbolism, classification and comparison, and creative problem solving.

While many students learn these fluencies at home, this program helps fill in critical gaps that may exist, especially for underserved students.









Pre-K - 1st Grade Curriculum

There are a total of four units of instruction included in Kid Spark's Pre-K - 1st Grade STEM Program. Each unit of instruction includes a unit overview, four lesson plans, and a unit assessment. Most lessons average 30 - 35 minutes and include opportunities for students to apply what they have learned through creative invention challenges.



TOTAL HOURS OF CURRICULUM

10+ HOURS

Below is an example of how Kid Spark's Pre-K - 1st Grade STEM Program might be implemented across grade levels. Ultimately, each school can decide which units of instruction to offer at certain grades. Kid Spark units are progressive which means educators have the ability to meet the needs of any student regardless of age or skill level.

Grade		Kid Spark Unit	Lessons & Assessments	Minimum Time Required
Pre-K		It's All About the Blocks	4 Lessons, 1 Assessment	(5) 30-Minute Sessions
К		I Am an Engineer	4 Lessons, 1 Assessment	(5) 30-Minute Sessions
1	<u> </u>	Making Things Strong	4 Lessons, 1 Assessment	(5) 30-Minute Sessions
		Making Things Move	4 Lessons, 1 Assessment	(5) 30-Minute Sessions



Foundational Fluencies STEM Lab

The Foundational Fluencies STEM Lab is designed to support Kid Spark's Pre-K - 1st Grade STEM Program. The carefully curated materials in the lab are child-friendly and unintimidating; the larger scale allows for collaborative learning. Even the most inexperienced students can quickly and easily build sophisticated prototypes, and increase their confidence in STEM.

Each Lab serves up to two (2) students and includes:

O ENGINEERING MATERIALS

45 large-scale building components. 50 small-scale building components.

INSTRUCTOR'S GUIDE BOOKLET

Teacher preparation materials, unit overviews, lesson plans, and unit assessments.

O BUILDING PLANS BOOKLET

Step-by-step building plans that coordinate with lesson plans.

TRANSPARENT LID

Includes an inventory and organization guide to easily locate and manage materials in the lab.









Professional Learning

To help Pre-K - 1st grade educators prepare to use program materials and resources in their classrooms, Kid Spark offers professional learning courses through our online learning management system.



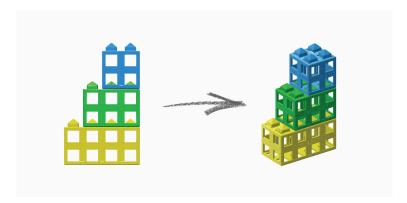
What are Foundational STEM Fluencies?

All children are natural designers, but they need to learn foundational STEM fluencies in order to think like engineers and scientists.

Regardless of their age, all children must acquire these basic fluencies to make sense of more advanced STEM learning opportunities, and to be successful in a technologically-driven world.

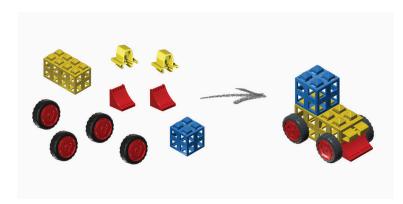
Below are examples of Foundational STEM Fluencies that students acquire from the Pre-K - 1st Grade Program.

SPATIAL REASONING



The ability to envision objects or ideas in three dimensions.

CREATIVE PROBLEM SOLVING



The ability to work through or analyze problems and explore different ways to solve them.

Standards Alignment

Kid Spark's Pre-K - 1st Grade STEM Program is aligned to the following national education standards:



Next Generation Science Standards (NGSS)



Kid Spark Education 1 South Main Street, Suite 102 Webb City, MO (USA) 64870

858.259.4433 contact@kidsparkeducation.org kidsparkeducation.org