PCS edventures!™

Experts in Hands-On STEM Education

DISCOVER

The *Discover Series* combines cutting-edge curriculum with new and highly relevant topics in **programming**, **robotics**, **engineering**, **physics**, **drones**, **video production** and a number of other exciting areas. By keying in on application-based learning, these turn-key kits help students gain integral 21st-century skills in areas like creative **problem-solving** and **logic-based critical thinking**.

With each student-driven curriculum highlighting different concepts clearly aligned for specified age ranges, *The Discover Series* is the perfect way to turn any environment into a STEM makerspace, allowing educators to tap into the natural curiosities of their learners!

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2020

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(800) 429-3110

What is The Discover Series?

The Discover Series allows students to get their hands on today's **relevant technologies,** approaching contemporary topics through **hands-on, self-guided** exploration. Promoting an atmosphere of creativity and innovation through thrilling lessons in robotics, engineering, drones and video production, learners explore the topics they are actively interested in, all the while developing essential skills like **communication, critical thinking** and **persistence.**

The Discover Series curriculum is self-paced and student-driven for independent exploration. Activities begin with guided instructions, then graduate to more challenging tasks before moving into a final open-ended design challenge. This progression is based on Bloom's Taxonomy, a model of learning that involves mastery and growth in six stages. Whether constructing a brick crocodile, filming a musical production or coding their first robot, every lesson, students master new skills and discover new passions.

Highlights:

- **TODAY'S TECHNOLOGIES:** In a world of constantly evolving technology, how can students keep up? *The Discover Series* brings modern technologies to learners, providing access to the knowledge needed to succeed in emerging STEM industries.
- **ACCESS TO FUTURE CAREERS:** Careers in programming, video production and virtual reality are fast-growing and high-paying. *The Discover Series* opens student minds to the job possibilities of their future and helps them thrive in an increasingly technical age.
- **STUDENT-DRIVEN EXPLORATION:** Studies show that students enjoy learning more when they get a choice in the matter. Designed with flexibility and adaptability in mind, put learners in charge as they choose their own curriculum adventures.
- **FACILITATOR FLEXIBILITY:** The educator in *The Discover Series* curriculum model acts as a "guide-on-the-side," not a "sage-on-a-stage." With learners leading their discovery through student-focused curriculum, instructors are there to help guide, not lead, as students challenge their abilities and conquer new obstacles.
- **SMALL GROUP COLLABORATION:** *The Discover Series* kits are created for individuals or small groups. This bolsters group participation, ensuring there are no idle hands, nurturing motivation and focus, leading to higher individual achievement.

DISCOVER SERIES

SUBJECT TARGETS

		GRADES	Physical Science	Life Science	Earth Science	Technology	Engineering Design	Robotics & Coding	Art/STEAM	Math Connections	English Language Arts Connections	Social Studies/ History Connections
Discover	Discover Digital Video LAB	1-5 & 6-12	✔	✔	✔	✔			✔	✔	✔	✔
	Discover Cubelets	3-4				✔	✔	✔				
	Discover STEM LAB 3-4	3-4		✔		✔	✔	✔	✔	✔	✔	
	Discover Engineering	4-8				✔	✔					
	Discover Robotics & Physics	4-8	✔			✔		✔				
	Discover Robotics & Programming I	4-8				✔		✔				
	Discover Blocksmith: 3D Coding & Design	4-12				✔		✔				
	Discover STEM LAB 5-6	5-6	✔		✔	✔	✔	✔		✔		
	Discover Robotics & Programming II	6-8				✔		✔				

PLUS

OR

Discover Digital Video LAB

This fresh-take on film focuses the camera on learners as they star in their own multimedia productions. Flip the switch with **application-based**, **collaborative** curriculum and survey digital documentaries, historical recreations and original films as **intrinsic motivation** guides **creative thinking**. With a simple startup, step-by-step **scaffolded** activities and built-in **reflections**, this series easily introduces challenging video production skills into any learning environment. With two curriculum sets available for grades 1-5 and 6-12, *Discover Digital Video LAB* puts the power in the hands of your students as they embark on a personal film journey. The full kit includes Android tablets that can be used for both filming and editing, but the curriculum is also written for easy compatibility with other filming and editing technologies available to your students.

SUBJECT TARGETS: *Physical Science, Life Science, Earth Science, Technology, Art/STEAM, Math Connections, English Language Arts Connections, Social Studies & History Connections*

GRADES: 1-5 or 6-12 • STUDENTS: 30 per LAB • CONTACT HOURS: 60+

Complete Program 1-5 or 6-12 . . . . . $2,500.00

Curriculum Printed Copy $500.00

Curriculum Digital Download $295.00

Discover Digital Video LAB Duo

The *Discover Digital Video LAB Duo* kit contains both *Digital Video LAB* 1-5 and 6-12 programs. Perfect for environments with a mixture of grade levels or for bulk learning initiatives, this complete package contains all the resources, supplies and curriculum needed to bring video production to learners of all ages — all at a discounted price!

SUBJECT TARGETS: *Physical Science, Life Science, Earth Science, Technology, Art/STEAM, Math Connections, English Language Arts Connections, Social Studies & History Connections*

GRADES: 1-5 & 6-12 • STUDENTS: 30 per LAB
CONTACT HOURS: 120+

Discover Digital Video LAB Duo $4,699.00

Discover STEM LAB 3-4

Discover STEM LAB 3-4 aims to inspire upcoming generations to pursue careers in **STEM** through reflective, experiential activities in every facet of STEM. Whether it's the **engineering design process** or math concepts, these collaborative mini-**makerspaces** reach students using modern technology to instill real-life skills and bring learning to life through approachable, **scaffolded and reusable** activities!

SUBJECT TARGETS: *Life Science, Technology, Engineering Design, Robotics & Coding, Art/ STEAM, Math Connections, English Language Arts Connections*

GRADES: 3-4 • STUDENTS: up to 24 • CONTACT HOURS: 100+

CONTAINS: *BrickLAB Zoology, Digital Video LAB, Discover Cubelets and Discover Digits & Design*

Complete Grades 3-4 Program $1,899.00

Discover STEM LAB: Science - *BrickLAB Zoology*

In *BrickLAB Zoology*, 12 **student-driven** lessons combine manipulative-based learning for a **life-science** deep dive. Utilizing PCS Edventures building bricks, *BrickLAB Zoology* is full of hands-on lessons in animal adaptation, **biological innovations** and everything you need to send students down the science rabbit hole. Challenging learners to examine innovations in the animal kingdom, *BrickLAB Zoology* creates a **collaborative** connection between the human and animal world, allowing learners to uncover precisely how our very different species are intertwined.

Discover STEM LAB: Technology - *Digital Video LAB*

Start a film-intensive with **application-based**, **collaborative** curriculum and survey digital documentaries, historical recreations and original films as **intrinsic motivation** guides **creative thinking**. With a simple startup, step-by-step scaffolded activities and built-in **reflections**, this series easily introduces challenging and **reusable** video production skills into any learning environment.

Discover STEM LAB: Engineering - *Discover Cubelets*

Discover Cubelets powers **creative thinking** through engineering and foundational robotic programming. Cubelets are a brick-compatible system of robot blocks that sense, think and act. Bundled with PCS Edventures **reusable**, **scaffolded** curriculum, these bricks are endless sources of programming and **engineering design** fun. With boundless bundles of creativity, get ready to sprout robotic and computational thinking skills with *Discover Cubelets*.

Discover STEM LAB: Math - *Discover Digits & Design*

The *Discover Digits & Design* curriculum includes 12 student activities, divided into four groups based on fun and engaging math manipulatives. With student curriculum pages designed for independent exploration in a learner-driven environment, each **problem-solving** activity emphasizes specific math principles and grade-level appropriate math standards, and is **scaffolded** so learners move upward through Bloom's Taxonomy as they gain experience and understanding of the math concepts and **extensions** involved.

Discover STEM LAB Dynamic Duo

This **reusable** kit is bursting with enlightening, **scaffolded** projects, housing **creative thinking** manipulatives from Cubelets, fischertechnik and more. Every lesson, learners perform science projects, engage in the **engineering design process** and **reflect** on the day's activities. As turn-key, mini-**makerspaces**, *Discover STEM LAB-Dynamic Duo* is the perfect STEM solution for classrooms, after-school programs or summer camps.

GRADES: 3-4, 5-6 • STUDENTS: up to 48 • CONTACT HOURS: 170+

Dynamic Duo - Complete 3-4 & 5-6 Program $3,599.00

Discover STEM LAB 5-6

Discover STEM Lab 5-6 easily integrates into any learning environment looking for **reusable**, **scaffolded** STEM invigoration. Whether it's the **engineering design process** or a survey of sustainability, this curriculum contains over 70 hours of enrichment, where student exploration and **creative thinking** are fostered through a mini-**makerspace** mentality.

SUBJECT TARGETS: *Physical Science, Earth Science, Engineering Design, Robotics & Coding, Math Connections*

GRADES: 5-6 • STUDENTS: up to 24 • CONTACT HOURS: 70+

CONTAINS: *Discover Dynamics, Discover Robotics & Programming, Discover Engineering and Discover Renewable Energy*

Complete Grades 5-6 Program $1,999.00

Discover STEM LAB: Science - *Discover Dynamics*

Explore physical phenomena like acceleration, inertia, the principles of linear motion, equilibrium of forces and the laws of motion with *Discover Dynamics*. Combining **hands-on** experiments with easy-to-follow curriculum, this kit allows students to discover the secrets of centrifugal force, gravity, acceleration and the conservation of energy all while engaging in a welcoming, **student-driven** environment. From building their own **STEM** identities to engaging with **foundational** concepts, *Discover Dynamics* encourages independent student exploration to get students excited about learning!

Discover STEM LAB: Technology - *Discover Robotics & Programming*

Discover Robotics & Programming combines an **application-based** curriculum with high-quality mechanical building pieces for a scaffolded experience, teaching basic programming logic in the context of mechanical and **engineering design process** challenges. With curriculum developed around a **growth mindset** and creative **problem-solving** skills, *Discover Robotics and Programming* is flexible, empowering educators to integrate hands-on STEM into virtually any educational environment.

Discover STEM LAB: Engineering - *Discover Engineering*

Discover Engineering is a fast-moving, **reusable** kit that prepares students to adapt to today's rapidly evolving technologies. Jumping from wheels and pulleys to different types of gears, this **scaffolded** curriculum has students **problem-solve** and utilize the **engineering design process** as they build upon each day's **iterative** concepts to combine what they've learned into more complex systems.

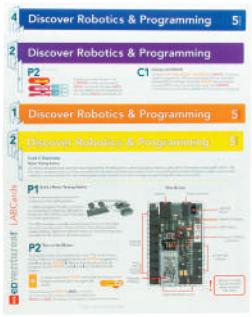
Discover STEM LAB: Math - *Discover Renewable Energy*

Renewable energy is an important source of power today and will become even more critical in the future. The *Discover Renewable Energy: Solar Beginner* set is perfectly designed to help students understand the possibilities of **solar energy**. Building solar-powered boats and cars which run by generating electricity from the sun using a solar module, this kit combines **ethics** and STEM for modern learning and discovery of the possibilities of **sustainability** through renewable energy.

Discover STEM LAB 3-4

Discover STEM LAB 5-6

PLUS



OR

Discover Robotics & Programming I

Discover Robotics & Programming combines an **application-based** curriculum with high-quality mechanical building pieces for a **scaffolded** experience, teaching basic programming logic in the context of mechanical and engineering challenges. With curriculum developed around creative **problem-solving** skills, *Discover Robotics and Programming* is flexible, empowering educators to integrate hands-on STEM into virtually any educational environment.

SUBJECT TARGETS: *Technology, Robotics & Coding*

GRADES: 4-8 • STUDENTS: 1-3 per kit • CONTACT HOURS: 20+

Single Kit:

STUDENTS: 1-3
The Single Kit is perfect for 1-3 students looking to explore the mysteries of robotics and programming.

Complete Program (1 kit) **$469**00

Club Pack:

STUDENTS: up to 15
The Club Pack comes with five (5) individual kits and is perfect for up to 15 students in small classrooms, after-school programs, home school groups and more.

Complete Program (5 kits) **$2,295**00

Classroom Set:

STUDENTS: up to 48
The Classroom Pack comes with sixteen (16) individual kits and special Robotics Challenge Guide for additional ideas and guidance when attempting local or national robotics competitions.

Complete Program (16 kits + hardwood storage unit) **$7,995**00

Discover Robotics & Programming II

Using the same **application-based** building manipulatives from *Discover Robotics and Programming I*, Level II's curriculum-only dives further into the programming process, introducing procedural programming, the integration of sensors and variable driven behaviors all through a **scaffolded**, **problem-solving** approach to learning.

SUBJECT TARGETS: *Technology, Robotics & Coding*

GRADES: 6-8 • STUDENTS: 1-3 per kit • CONTACT HOURS: 40+

LABCards Pack (first set) **$195**00

Each Additional Set **$50**00

Curriculum Digital Download **$295**00

Discover Robotics & Physics

This **application-based** learning series has been expertly **scaffolded** to support essential **problem-solving** and **collaborative** skills to formulate and develop a deep understanding of robotics and foundational physics concepts. With high-quality, **reusable** fishertechnik® building manipulatives and hands-on curriculum developed by PCS Edventures, *Discover Robotics and Physics* is an all-in-one start to your next STEMventure.

SUBJECT TARGETS: *Physical Science, Technology, Robotics & Coding*

GRADES: 4-8 • STUDENTS: 1-3 per kit • CONTACT HOURS: 25+

Single Kit:

STUDENTS: 1-3
The Single Kit is primed for 1-3 eager learners looking to expand their STEM skills into robotics and physics.

Complete Program (1 kit) **$599**00

Club Pack:

STUDENTS: up to 15
The Club Pack comes with five (5) individual kits, each of which is suitable for 1-3 students. This bundle is perfect for small classrooms with up to 15 students, after-school programs, homeschool groups and more.

Complete Program (5 kits) **$2,949**00

Classroom Set:

STUDENTS: up to 48
The Classroom Set includes sixteen (16) individual kits, which are stored in a high-quality hardwood furniture unit with rolling casters. These furniture units are made specially to house these kits and are both beautiful and strong, designed for many years of use.

Complete Program (16 kits + hardwood storage unit) **$9,999**00

Classroom Set

Discover Robotics Duo - Programming & Physics

More Robotics than ever! *Discover Robotics Duo* contains 8 *Discover Robotics & Programming* & 8 *Discover Robotics & Physics* kits which are stored in a high-quality hardwood furniture unit with rolling casters.

GRADES: 4-8 • STUDENTS: 1-3 per kit • CONTACT HOURS: 45+

½ Physics and ½ Programming + Curriculum Digital Download **$8,495**00

Discover Engineering

The engineering field is dynamic, innovative and constantly seeking the brightest minds. In *Discover Engineering*, get ready to cultivate the young engineers of tomorrow. Geared to bolster student literacy with rapidly evolving technology, this kit combines the latest research-based methods to get learners excited about **STEM**. While introducing the **engineering design process**, the reusable activities in *Discover Engineering* foster student confidence, **problem-solving** talents and other important 21st-century skills through an **iterative**, **scaffolded** approach to STEM enrichment. With diverse projects designed to be fun and engaging as students construct trebuchets, cart launchers, transmission models and more, each *Discover Engineering* kit, suitable for 1-6 students, is easy to implement, designed to meet the specific intellectual needs of learners in grades 4-8 and is primed for use in any educational environment.

SUBJECT TARGETS: *Technology, Engineering Design*

GRADES: 4-8 • STUDENTS: 1-6 per kit • CONTACT HOURS: 25+

Single Kit:

STUDENTS: 1-6 per kit
The Single Kit is perfect for small groups of students looking to embark on an engineering STEMventure for the first time.

Complete Program (1 kit) **$479**00

Club Pack

Club Pack:

STUDENTS: up to 30
The Club Pack comes with five (5) individual kits, each of which is suitable for 1-4 students. This bundle is perfect for small classrooms with up to 20 students, after-school programs, homeschool groups and more.

Complete Program (5 kits) **$2,295**00

Classroom Set:

STUDENTS: up to 48
The Classroom Pack includes eight (8) individual kits, which are stored in a high-quality hardwood furniture unit with rolling casters. These furniture units are made specially to house these kits and are both beautiful and strong, designed for many years of use.

Complete Program (8 kits + hardwood storage unit) **$4,195**00

Classroom Set

Discover Cubelets

Discover Cubelets powers lessons in **programming** through a **creative thinking** approach to foundational engineering and robotic concepts. Cubelets are a brick- compatible system of robot blocks that sense, think and act. Bundled with PCS Edventures **reusable**, **scaffolded** curriculum, these bricks are endless sources of programming and **engineering design** fun. Housing student-driven curriculum designed for open learning spaces, *Discover Cubelets* work to build application-based problem-solving skills through hands-on, experiential activities. Whether learners are discovering input variables with a Cubelet dance recital or building script-chain understanding with inverse and reactionary robots, every one-hour unit is teeming with essential programming knowledge. As boundless bundles of creativity, get ready to sprout robotic and computational thinking skills with Discover *Cubelets*!

SUBJECT TARGETS: *Technology, Engineering Design, Robotics & Coding*

GRADES: 3-4 • STUDENTS: 1-6 • CONTACT HOURS: 12+

Complete Program **$499**00

Cubelets Mini Makers Pack

54 Cubelets selected with Pre-K and K students in mind.

. . . . . **$1,440**00

Cubelets Creative Constructors Pack

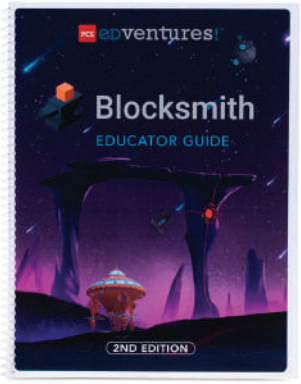
56 Cubelets to support 4 working groups.

. . . . . **$1,490**00

Cubelets Inspired Inventors Mega Pack

For educators who realize kids can't get enough of Cubelets!

. . . . . **$3,999**00



Discover Blocksmith: 3D Coding & Design

Enter virtual reality in style! Offering a unique opportunity to learn and explore **3D coding for virtual reality**, *Discover Blocksmith* comes with 12, one-hour, **application-based** lessons in programming and video game design. Using the Blocksmith Builder software and **creative thinking**, learners create 3D games and scenarios through step-by-step **scaffolded** lessons, bringing their creations to life through Virtual- or Augmented Reality viewing devices. With **differentiated instruction** and the **reusable** Blocksmith Education license, instructors have full domain control to create a secure and distraction-free environment. A fun and exciting journey for students and educators alike, Blocksmith allows learning environments of all sizes to create, share and experience virtual reality through **intrinsic** and **iterative** creativity. 🔁 100% reusable

TECH REQUIREMENTS: *one device per student (Digital Curriculum Only is compatible with Internet-connected Macs, PCs, iPads, Android tablets and Chromebooks.) While VR devices are not required, files created in Blocksmith can be viewed on common headsets, such as Cardboard, Daydream, Windows MR, HTC Vive and Oculus Rift.*

SUBJECT TARGETS: *Technology, Robotics & Coding*

GRADES: 4-12 • STUDENTS: Unlimited Student Accounts
CONTACT HOURS: 12+

Camp License (12 credits, 1 instructor)	$399.00
Classroom License (36 credits, 3 instructors)	$849.00
Site License (60 credits, unlimited instructors)	$1,498.00
Complete VR Lab Program (Classroom License + 3 Oculus Go Headsets)	$2,995.00

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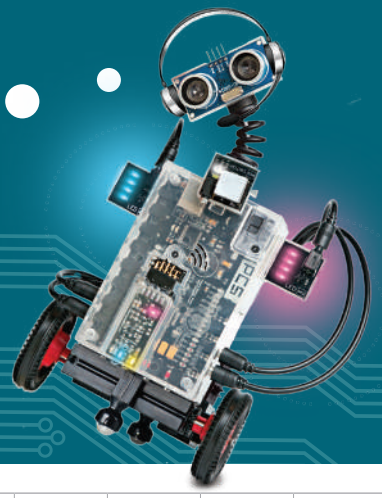

SUBJECT TARGETS

		GRADES	Physical Science	Life Science	Earth Science	Technology	Engineering Design	Robotics & Coding	Art/STEAM	Math Connections	English Language Arts Connections	Social Studies/ History Connections
BrickLAB	BrickLAB Tech	K, 1, 2, 3, 4				✔	✔					
	BrickLAB Magic Beans	1-3					✔		✔		✔	
	BrickLAB STEM Foundations	4-6	✔			✔	✔			✔	✔	
	BrickLAB Genetics	6-8		✔								
Enrichment	Cubelets BOT Builder	1-3				✔	✔	✔			✔	
	Oceanic Exploration	4-6	✔	✔	✔		✔			✔		
	Claymation	4-8				✔			✔			
	Summer Camp Classics	6-8	✔				✔		✔			
Drones	Ready, Set, Drone! Second Edition	4-8	✔			✔	✔				✔	
	Ready, Set, Code! Programming with Drones	4-8				✔		✔		✔		
	Discover Advanced Coding with Drones	7-12				✔		✔		✔		
	Discover Drones	7-12	✔			✔						

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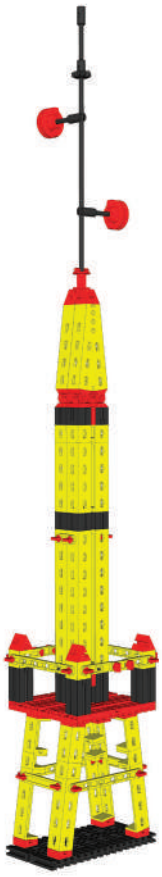

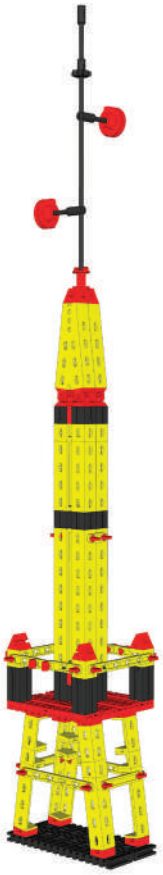

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ENRICHMENT PROGRAMS

DISCOVER SERIES

DRONES