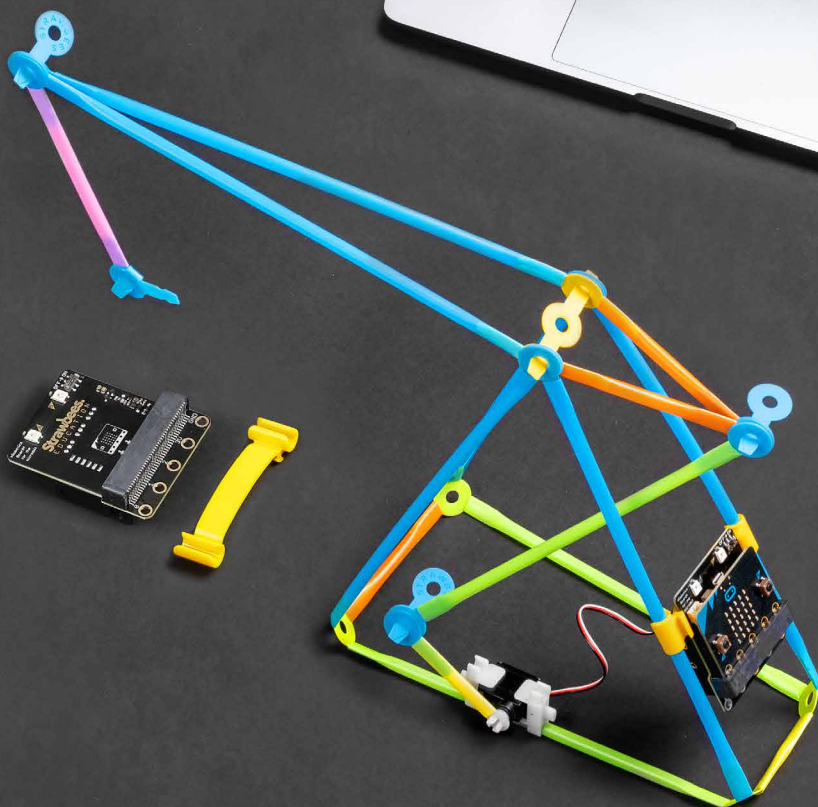
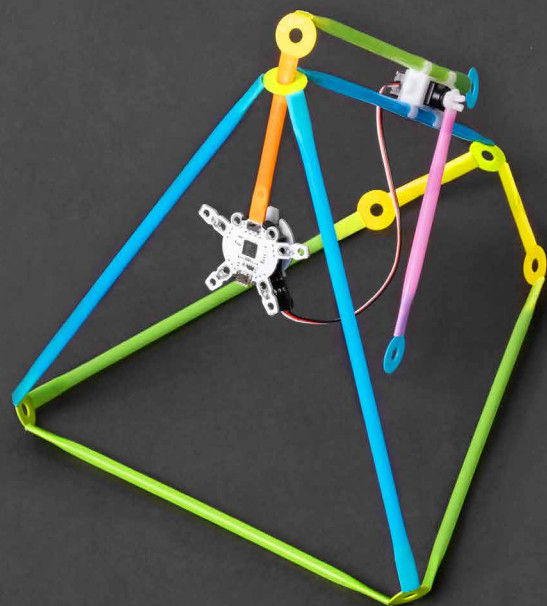




Strawbees.®

CATALOG 2021

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WELCOME TO THE WORLD OF **Strawbees.**[®]

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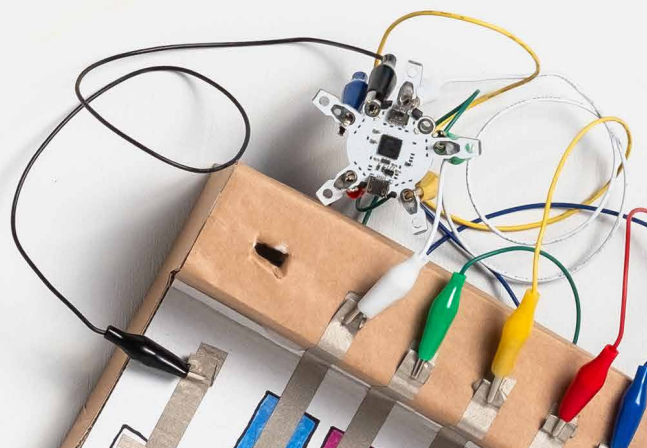
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LETTER FROM OUR FOUNDERS

Let kids create the change we need!

Guess what the World Economic Forum's top three 'C' words are for 2030! Complex problem solving, Critical thinking and Creativity. We firmly believe that creative confidence forms the core of this. A term coined by David M. Kelley from IDEO and D-School at Stanford University, creative confidence means believing in your ability to create change in the world. Imagine if every child had the chance to develop this!

Everything is progressing – phones, cars, TV. So why isn't education? Our mission for 2020 and beyond is to make creative learning first priority for all educators. We want to break down walls between education and creative learning, and help kids build answers to all kinds of problems. Even problems that don't yet exist. We want to inspire the Greta Thunberg generation – tomorrow's generation. With this in mind, we support the neuroscientist and author of 'The Creative Brain' documentary David Eagleman's appeal for creative learning, who says: 'The jobs that will exist 20 years from now, we don't even have names for those yet! To succeed in the future, we need to cultivate creativity to proliferate

our options to get off the path of least resistance. To take risks and, in this way, take advantage of what it is to be a human, to drink in the world and produce something, anything that has never existed before.'

Strawbees is not just another building set. We represent a mindset that isn't afraid of the 'f' word – 'fail'. We think the writer Samuel Beckett was onto something when he said, "Ever tried. Ever failed. No matter. Try again. Fail again. Fail better". We believe that 'mistakes' contain the seeds of future success, so we say imagination not instruction! Learning by doing isn't good enough. Learning by trying is the future.

You want problem solvers? Let kids create!

From the founders



Erik Thorstensson

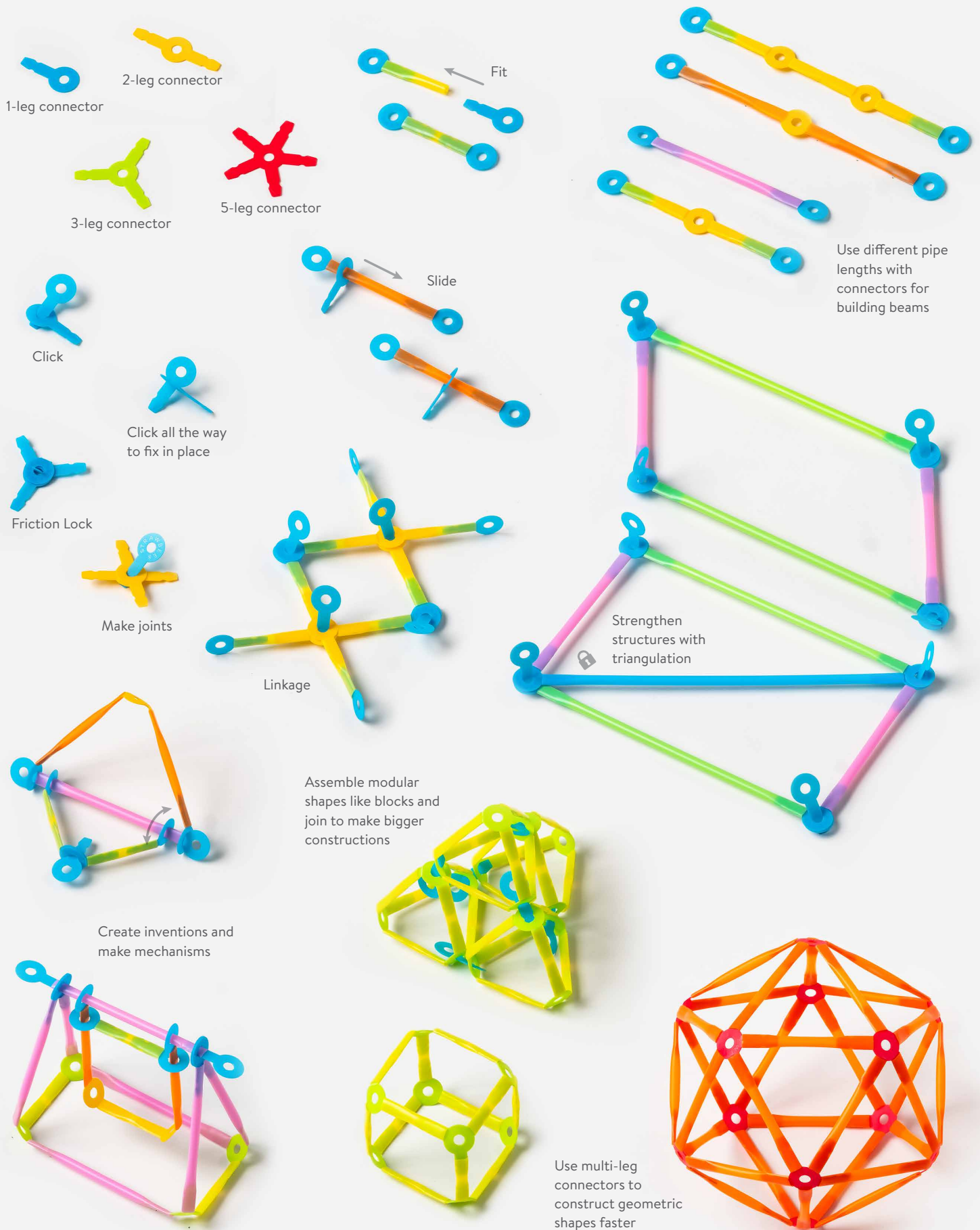


Erik Bergelin



STRAWBEES CONSTRUCTION SYSTEM

Ideal for hands-on exploration and learning, our construction set includes versatile connectors and construction pipes for building projects.



CODING & ROBOTICS

Our coding and robotics sets connects to our physical construction set. Add motion, lights, sensors and interaction to your projects. Create new inventions. Or take your old ideas to exciting new levels!

code.strawbees.com 

3 WAYS TO CODE

FLOW • BLOCK • TEXT



STRAWBEES CODE



POWERED BY
SCRATCH BLOCKS



ARDUINO
COMPATIBLE

Learn to code using one of our three ways to program. Quick and accessible, our visual coding interface is designed for all. No previous experience needed.

Quirkbot

Easy attach LED

Servo Backpack

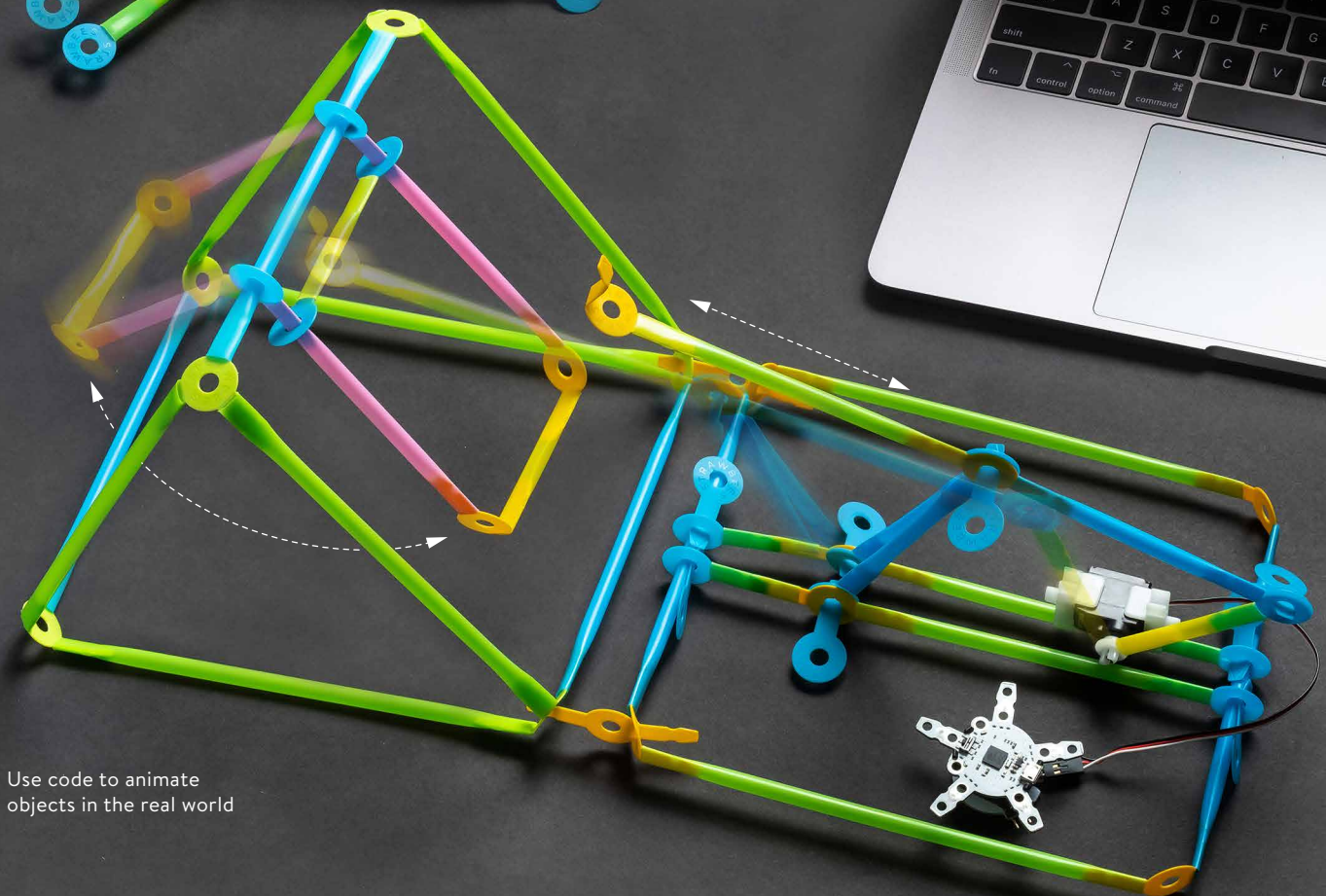
Servo Motor
with Mounts

Electronic Strawbee

Add movement using
our smart motors and
connectors.

LEDs and
Light sensors

Servo Arm



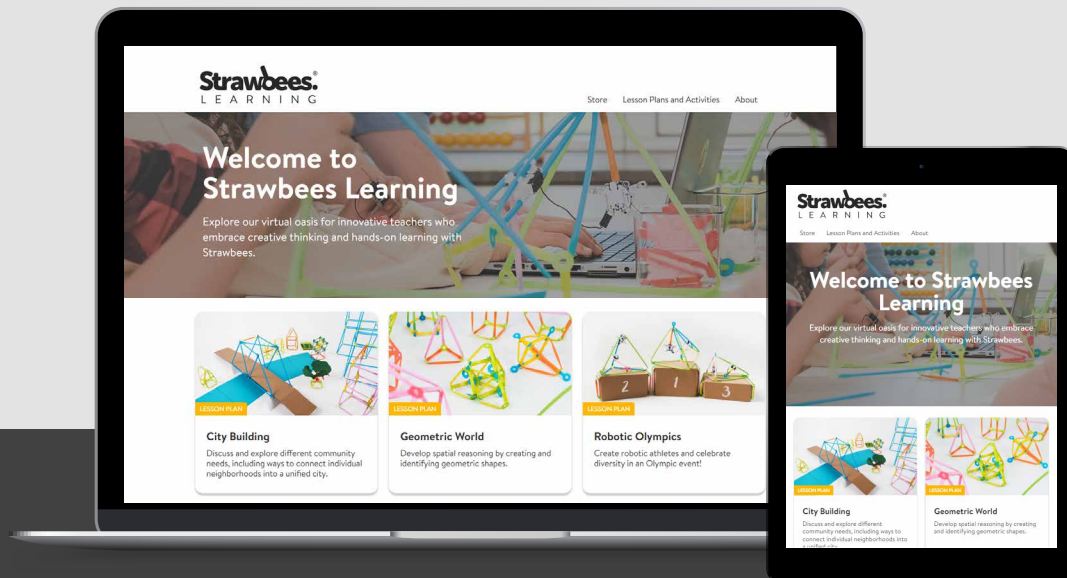
Use code to animate
objects in the real world



Strawbees Learning is an online platform for teachers who embrace hands-on learning.


You'll find inspiring lesson plans, activities and exploration ideas, and lots more support material to help students thrive in the classroom.

Through our wide and versatile range of student-centered projects, together we can encourage children to explore their ideas in fresh and inspiring ways.



Visit our learning platform to see our materials at

learning.strawbees.com 



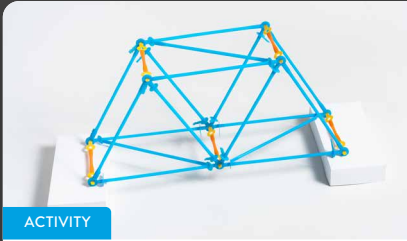
LESSON PLAN

City Building

Discuss and explore different community needs, including ways to connect individual neighborhoods into a unified city.

▲ LESSON PLAN

Teacher facilitation guides on how to engage in project-based and thematic learning with clear objectives for student agency and intrinsic motivation.




ACTIVITY

Build A Truss Bridge

Build a truss bridge and use your hands to understand structural integrity.

▲ ACTIVITY

Base models with building instructions, tips, and tricks, complete with videos and photos to guide and give examples.



EXPLORATION

Truss Bridge: Problem Solving

Gain and demonstrate proficiency in problem solving with this bridge exploration.

▲ EXPLORATION

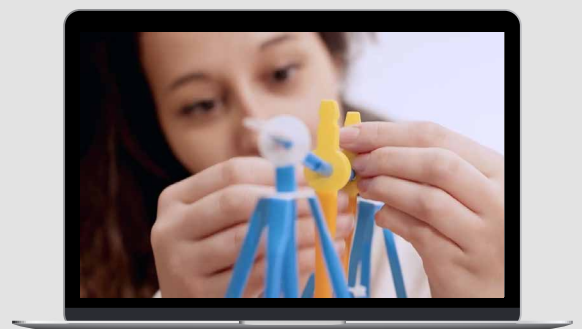
Competency-based education strategies to help your students gain and demonstrate required skills in your classroom using Strawbees.



PROFESSIONAL DEVELOPMENT

Our professional development program designed to help teachers and educators feel confident using Strawbees and with hands-on teaching in classrooms, libraries, and makerspaces.

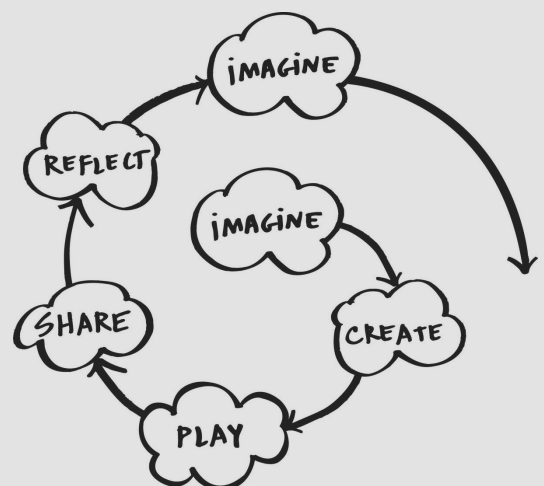
If you are an educator, email us at educator@strawbees.com to find out when the next one is or to schedule one with us. Engage in our sessions to become fully trained in our educational range and pedagogy.



CREATIVE LEARNING SPIRAL

Learning by doing isn't good enough. Learning by trying is the future. We believe in developing students' creative confidence and love of technology so they can make sense of the world and solve new problems. Knowing how to build, explore, test and experiment is vital because exciting breakthroughs doesn't come gift-wrapped.

We want to see students fully engage in the Creative Learning Spiral by Mitch Resnick of MIT Media Lab of Lifelong Kindergarten. When students are excited about learning, can demonstrate their grasp of new knowledge, and can improve skills such as collaboration and problem-solving through projects –, this is the ultimate achievement.

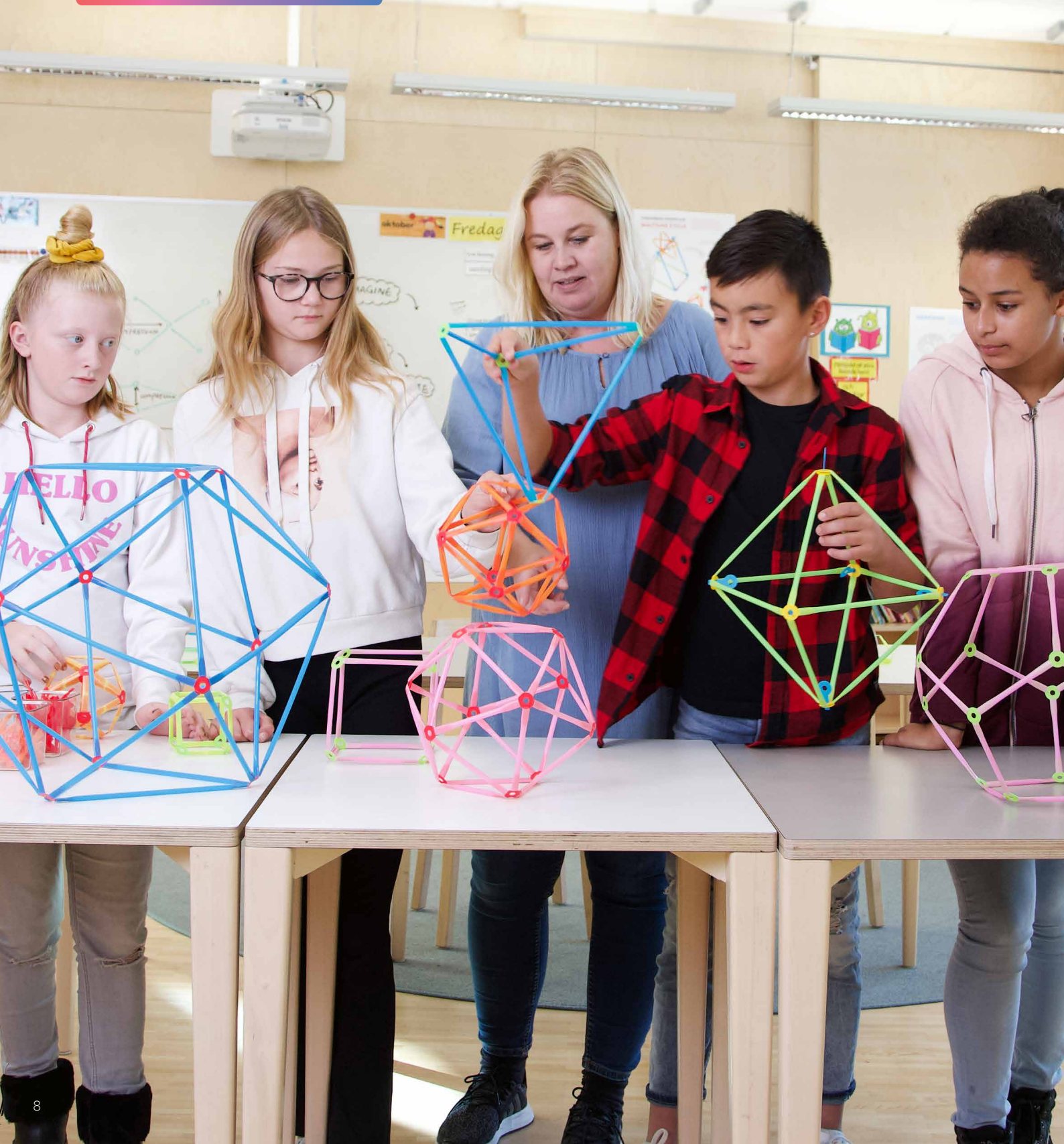


*Creative Learning Spiral by Mitch Resnick
of MIT Media Lab of Lifelong Kindergarten*

BUILDING STEAM KITS

Let kids create! The power of the Strawbees building system is speed, simplicity, and scale. Building together teaches problem-solving and collaboration. Dream, create, learn, repeat! Ready to bring your ideas to life?

Dream, create, learn, repeat!



STEAM SCHOOL KIT

25+ STUDENTS

The STEAM School Kit is our most massive construction kit providing over 4000 pieces enough for an entire classroom of students. Build a large cityscape, a large rollercoaster track for a ball to run through, a large pyramid structure taller than you, and create moving mechanical arms and claws.

The building set comes with 5 different precut straw sizes and 4 color-coded connectors in a storage box with pull-out material trays to get started building!

This kit comes with the Pocketful of Ideas card deck with 100+ challenges.




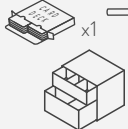




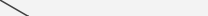

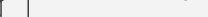

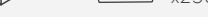
GREAT FOR:

- School Classrooms
- Makerspaces
- Science Centers
- Summer Camps
- Afterschool programs
- Competitions and Events

AGE RANGE:

- Ages 6 and up
- Grade in US schools: 1st grade and up

INCLUDING 4200 PIECES:

			x512						
			x360	x1024					
			x512						
			x256						
2 x Posters		1 x Storage Box			x256		x512		x256

STEAM STARTER KIT

1-2 STUDENTS

The STEAM Starter kit is a personal sized building set with 420 pieces to build several small towers, moving mechanical cranes and arms. The building set comes with 5 different precut straw sizes and 4 color-coded connectors organized in the box.

Includes a colorful and inspirational poster!

For at home: start inventing out of the box and engage learning in your household. For educators: use as a way to build anything from the Strawbees Learning platform or use as an personal kit in a professional training environment.





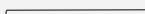





GREAT FOR:

- Teachers
- Librarians
- School Classrooms
- Libraries
- Makerspaces
- Afterschool programs
- Home

AGE RANGE:

- Ages 6 and up
- Grade in US schools: 1st grade and up

INCLUDING 230+ PIECES:

		 x25	 x37	 x18
		 x12		
		 x30		
		 x36	 x25	 x13
1 x Poster	1 x Booklet	 x34		



SAMPLE KIT

1 STUDENT

Included in this kit are 34 pieces in different sizes and colors. Get to know Strawbees by building a Mechanical Arm and a Tetrahedron and learn about physics and geometry hands-on! Recommended for ages 6+.




GREAT FOR:

- Teachers
- Librarians
- School Classrooms
- Libraries
- Makerspaces
- Afterschool programs
- Home

AGE RANGE:

- Ages 6 and up
- Grade in US schools: 1st grade and up

INCLUDING 34 PIECES:

	x6				
	x6				
	x2	x10	x4	x4	x2

POCKETFUL OF IDEAS

25+ STUDENTS

There are over 100 challenges broken down into two deck types! The Inventor deck gives simple inspiration while the Crazy Inventor deck is a story with a problem that you solve.

Pick a card and create something by drawing, building with Strawbees, or adding any material you can find. Construct a new home for your pet fish or build a submarine as solutions to the story!

Add this card deck to other Strawbees kits.

GREAT FOR:

- School Classrooms
- Libraries
- Makerspaces
- Science Centers
- Summer Camps
- Afterschool programs

AGE RANGE:

- All ages
- US schools: all grades

INCLUDING 105 CARDS

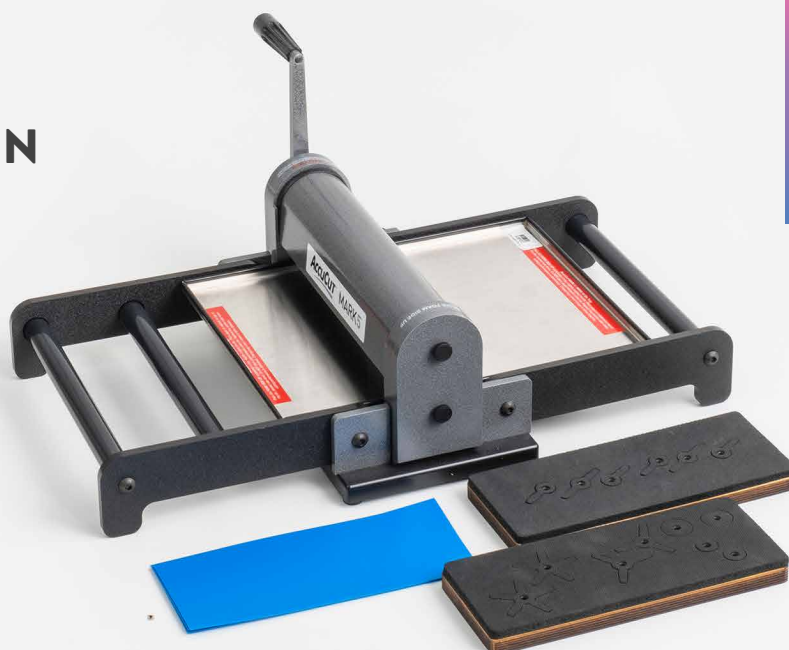


SUSTAINABILITY STATION

1-2 STUDENTS

Use any plastic waste to create your own set of connectors, making the perfect sustainable construction toy creator. The Sustainability Station is a durable hand-operated machine that will last for many years and make precise connectors shapes for you to create your own set. The dies will cut through cardstock, chipboard, plastic sheets and more with ease.

The sides also fold up, giving you more room to work when the machine is not in use.



GREAT FOR:

- School Classrooms
- Libraries
- Makerspaces
- Science Centers
- Summer Camps
- Afterschool programs

AGE RANGE:

- Ages 8 and up
- US schools: 3rd grade and up

INCLUDING 4+ PIECES:

- 1 × Hand-crank die cutter machine
- 1 × Die for 1-leg & 2-leg connectors
- 1 × Die for washers, 3-leg & 5-leg connectors
- 1 × Die tray



ROBOTIC INVENTIONS

for **micro:bit**

Are you a micro:bit user? Robotic Inventions lets you integrate your micro:bit in Strawbees projects and also make them move! Realize your ideas in the physical world in a simple, creative and fast way!

Realize your micro:bit ideas in the physical world!





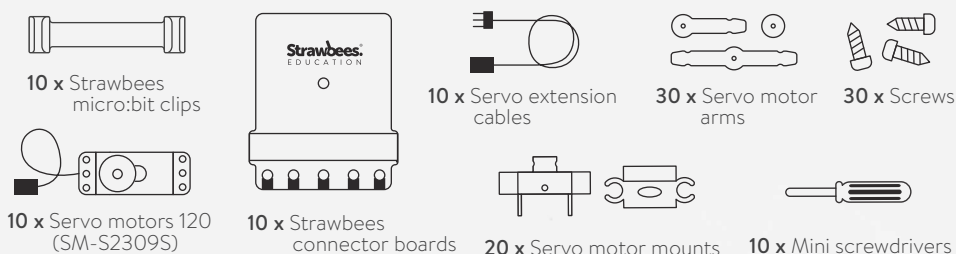
GREAT FOR:

- Afterschool programs
- Competitions and Events
- Libraries
- Makerspaces
- School Classrooms
- Science Centers
- Summer Camps

AGE RANGE:

- Ages 9-14
- Grade in US schools:
4-9th grade

INCLUDING:



CLASSROOM PACK OF 10 ROBOTIC INVENTIONS FOR MICRO:BIT

10-20 STUDENTS

A classroom set of 10 robotics boards to make it even easier to attach and program servo motors with the micro:bit! You can also control two RGB-pixel lights to create a full light spectrum for a show. This board comes with a removable Strawbees building clip to snap connectors and straws for making robots or mechanical structures like a crane.

Write in Microsoft MakeCode's block-based programming platform, upload a program and remove from the computer to run on batteries.

This is an add-on kit and requires the purchase of another Strawbees product for building robots with building pipes and connectors.

ROBOTIC INVENTIONS FOR MICRO:BIT

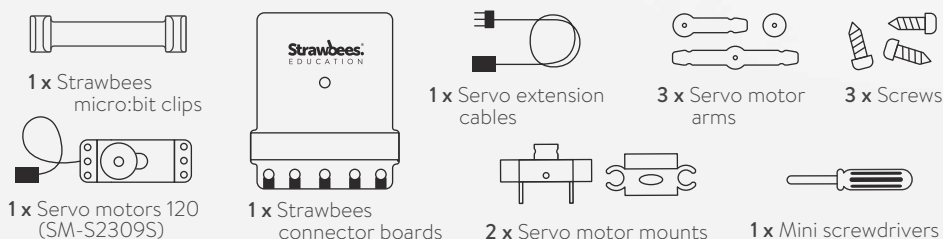
1-2 STUDENTS

This kit is to snap the micro:bit with physical Strawbees constructions and programming mechanical structures with servo motors. A way to create physical interaction with your next project!

As an add-on kit, this requires the purchase of another Strawbees product for building with construction pipes and connectors.

Write in Microsoft MakeCode's block-based programming platform, upload a program and remove from the computer to run on batteries.

INCLUDING:



AGE RANGE:

- Ages 9-14
- Grade in US schools:
4-9th grade

GREAT FOR:

- School Classrooms
- Libraries
- Makerspaces
- Science Centers
- Summer Camps
- Afterschool programs
- Home

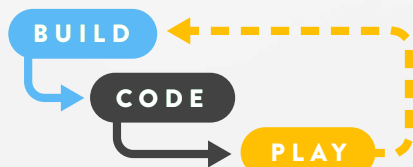
STEAM CLASSROOM KIT FOR MICRO:BIT USERS – BUNDLE

30 STUDENTS

Bundle Includes:

1 x STEAM School Kit - our most massive building set providing over 4000 pieces enough for an entire classroom of students. The building set comes with 5 different precut straw sizes and 4 color-coded connectors for scaling project sizes from miniature to building structures taller than you. This kit arrives as a storage box with pull-out material trays to get started building. Comes with the Pocketful of Ideas card deck with 100+ challenges to stay inspired.

2 x Robotic Inventions for the micro:bit - 10 Pack - include your existing classroom set of micro:bits with the Robotic Inventions board for adding robotic capabilities. The Robotics board includes 2 RGB LEDs and attach up to 3 servo motors to any Strawbees building project. Write in Microsoft MakeCode's block-based programming platform, upload a program and remove from the computer to run on batteries.



AGE RANGE:

- Ages 8-14
- US schools: 3rd-9th grade

GREAT FOR:

- School Classrooms
- Libraries
- Makerspaces
- Science Centers
- Summer Camps
- Afterschool programs
- Competitions and Events

STEAM STARTER KIT FOR MICRO:BIT USERS - BUNDLE

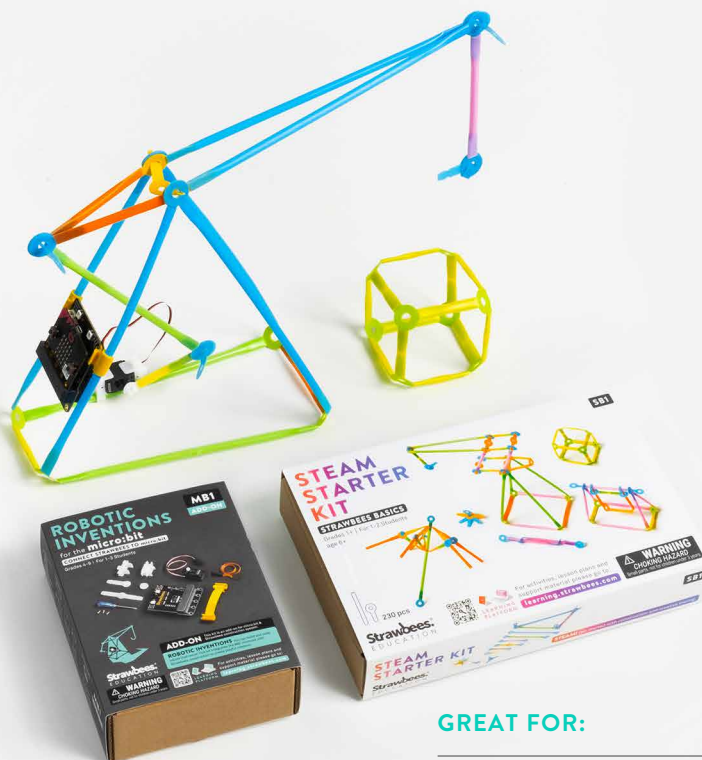
1-2 STUDENTS

Bundle Includes:

The **STEAM Starter kit** - is a personal sized building set with 230 pieces to build several small towers, moving mechanical cranes and arms. The building set comes with 5 different precut straw sizes and 4 color-coded connectors organized in the box. Includes an instructional booklet with 11 activities and 10 challenges from the Pocketful of Ideas plus a colorful introductory poster!

The **Robotic Inventions for the micro:bit** - include your existing micro:bit with the Robotic Inventions board for adding robotic capabilities. The Robotics board includes 2 RGB LEDs and attach up to 3 servo motors to any Strawbees building project.

Write in Microsoft MakeCode's block-based programming platform, upload a program and remove from the computer to run on batteries.



GREAT FOR:

- School Classrooms
- Libraries
- Makerspaces
- Science Centers
- Summer Camps
- Afterschool programs
- Home

AGE RANGE:

- Ages 8-14
- US schools: 3rd-9th grade

MICRO:BIT v2 CLUB - 10 PACK

The exciting entry into the world of electronics using the built-in hardware such as LED screen animations, radio signals, speaker and microphone with the micro:bit v2 club pack fit for a classroom.

- Pocket-sized computer
- LED animation screen
- New built in-built speaker & microphone
- Fun for groups

INCLUDING 50 PIECES

BBC micro:bits × 10
USB cables × 10
AAA batteries × 20
AAA Battery holder × 10



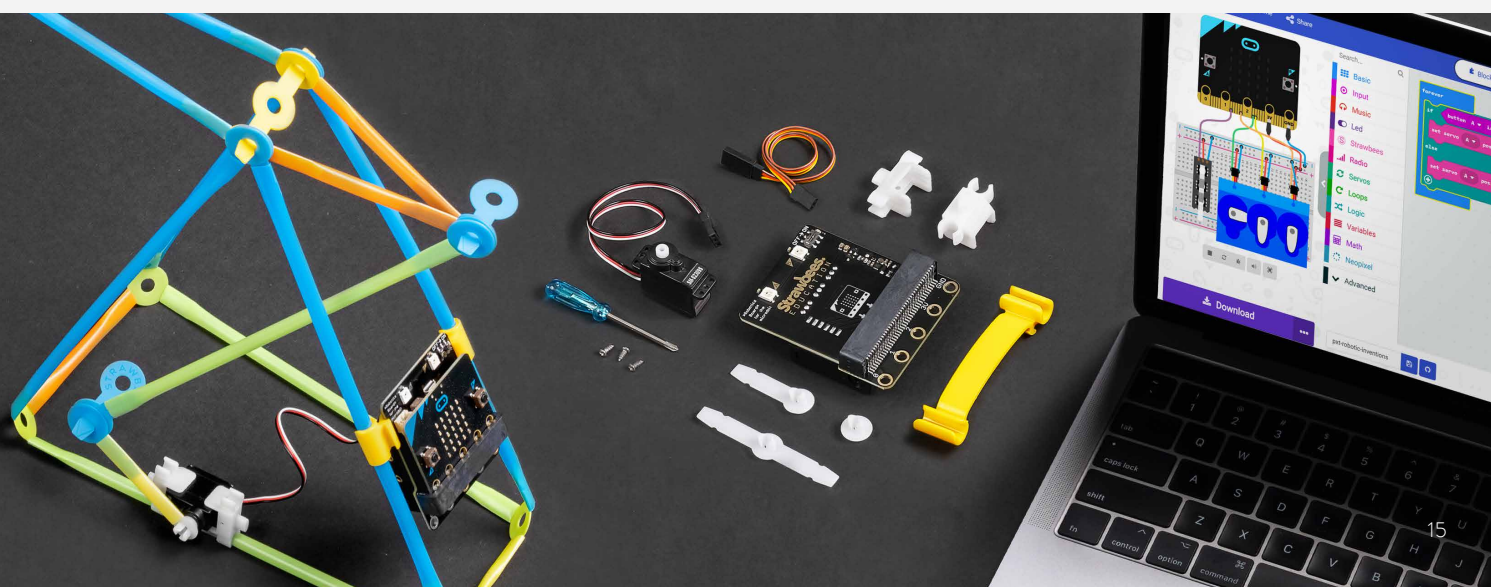
MICRO:BIT v2 GO

The exciting entry into the world of electronics using the built-in hardware such as LED screen animations, radio signals, speaker and microphone with the micro:bit v2!

- Pocket-sized computer
- LED animation screen
- New built in-built speaker & microphone
- Easy and fun

INCLUDING 6 PIECES

BBC micro:bits × 1 AAA batteries × 2
USB cables × 1 AAA Battery holder × 1
Starter guide × 1



CODING & ROBOTICS

with **Quirkbot**

Add movement and interaction to your prototypes with 'the Quirkbot', our Coding and Robotics kits developed especially for the Strawbees building system.

The Quirkbot is designed by Strawbees and fits perfectly with our building system. You can code it in 3 programming languages using our app Strawbees CODE.

Build + Code = Play



CLASSROOM PACK OF 12 CODING & ROBOTICS SCHOOL KIT

12-40 STUDENTS

Transform your Strawbees projects into interactive robots using electronic construction pieces with Quirkbot. Simply connect to the computer and then code and upload a program that can tell your invention to move, blink, or both! Make a walker, a blinking star, or a pig shake in fear when it senses darkness.

With the Coding and Robotics kit, you can learn how to program in three different ways: flow, block, and text for all levels of experience. View our programming interface at code.strawbees.com

GREAT FOR:

- School Classrooms
- Makerspaces
- Science Centers
- Summer Camps
- Events

AGE RANGE:

- Ages 10-16
- US Schools: 5th-11th grade

INCLUDING 1630+ PIECES:

- | | |
|---------------------------|-----------------------|
| 12 x Organizer boxes | 24x Servo motor mount |
| 12x Quirkbot with battery | 24x Servo motor arm |
| 12x Servo backpack | 72x Two color LEDs |
| 12x Servo motor | 24x Light sensor |
| 12x USB cable | 12x Mini screwdriver |
| 24 x Alligator clips | |



CODING & ROBOTICS KIT

1-3 STUDENTS

Learn creative coding and building with the Quirkbot! Connect to the computer, code, and upload a program to tell it to move, blink or both! Make a walker, a blinking star, or a pig shake in fear when it senses darkness. The Quirkbot has a rechargeable battery and can be removed from the computer to let your project come alive in the real world.

You can learn how to program in three different ways: flow, block, and C++ text designed for all levels of experience.

The Strawbees CODE app works offline on Windows & MacOS and directly from the browser on Chromebooks.

GREAT FOR:

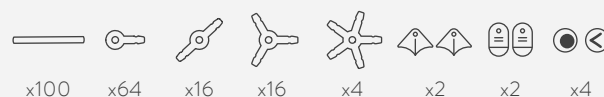
- Libraries
- Makerspaces
- Afterschool programs

AGE RANGE:

- Ages 10 and up
- US Schools: 5th grade and up

INCLUDING 300 PIECES:

- | | | |
|--------------------|------------------------|----------------------|
| Quirkbot | Servo extension cables | Light sensor x2 |
| Servo backpack | USB cable | Dual colored LED x10 |
| Servo motor | Mini screwdriver | Alligator clips x6 |
| Electric Strawbees | | |



RETAIL KITS

Strawbees STEAM Retail Kits engage students at home in project-based learning and creative problem-solving. What can you expect from those no-tech, high student engagement and low cost STEAM retail kits? Science - Unplugged Technology - Engineering - Art - Math

Make STEAM learning fun at home!



MAKER KIT

1 STUDENT

The Maker kit is an introduction to building with Strawbees and comes with 200 pieces plus instructions for 16 activities. Experiment with the connectors by building geometric shapes, a puppy, butterfly, or let the extra activities inspire you!

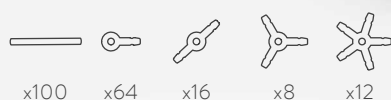
GREAT FOR:

- Libraries
- Makerspaces
- Afterschool programs
- Home

AGE RANGE:

- Ages 6-12
- US Schools: 1st-7th grade

INCLUDING 200 PIECES:



INVENTOR KIT

1-2 STUDENTS

Our Inventor kit comes with 450 pieces plus instructions for 21 activities to create several small projects including a dino head and catapult. Grab a friend and invent something amazing together.



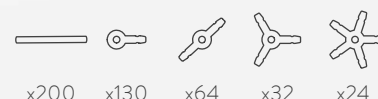
GREAT FOR:

- Libraries
- Makerspaces
- Home

AGE RANGE:

- Ages 6-14
- US Schools: 1st-9th grade

INCLUDING 450 PIECES:



IMAGINATION KIT

1-2 STUDENTS

Practice storytelling and problem-solving with the Imagination Kit. Pick a challenge, sketch your idea in the imagination sketchbook then build your solution to complete the story.

Create an amusement park, shears for sheep, a sports arena, a pollution-fighting device. Discover these and more with 100+ challenges in the card deck!










GREAT FOR:

- Afterschool programs
- Home
- Libraries
- Makerspaces

AGE RANGE:

- All ages
- US Schools: all grades

INCLUDING 400 PIECES & 105 CHALLENGE CARDS:

						
x100	x130	x64	x32	x24	x50	x1

HOVERCRAFT

WORLDS FASTEST RECYCLED TOY

1 STUDENT

Conduct scientific experiments! Learn about aerodynamics and physics! Drive a Hovercraft that drifts on a cushion of air by remote control! Start with the base, fin and skirt materials provided, and test as you go.

Take your prototyping even further and use the templates to make your skirt and base designs with cardboard and household trash or around school recycling bins. Try making different shapes for each part and watch your Hovercraft drifts!



AGE RANGE:

- Ages 18 and up

GREAT FOR:

- School Classrooms
- Makerspaces
- Summer Camps
- Afterschool programs
- Home

INCLUDING 76 PIECES & 1 POSTER

1 x die cut fin	1 x sing sided tape
1 x die cut base	2 x sticker sheet
4 x plastic sheets	1 x receiver
1 x skirt template	1 x brushless motor
1 x speed controller	1 x remote control
1 x double sided tape	1 x USB charging cable
	1 x motor pod assembly: fan, cover, duct
	1 x battery 7.4V lipo 1200mAh
	1 x servo motor with arm

	
x40	x15

**BUILD!
RACE!
WRECK!
REPEAT!**

CURRICULUM ALIGNMENT

We understand how important it is to align our hands-on learning tools to curriculum standards for easier implementation. Below are examples of how to incorporate Strawbees effectively with national standards.



The Next Generation Science Standards (NGSS) are K–12 science content standards. Standards set the expectations for what students should know and be able to do. The NGSS were developed by states to improve science education for all students.

SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) blueprint is based on global needs to create a more sustainable world by 2030. To fulfill this, our young people need to use problem-solving and become creative thinkers to build a more sustainable society together.

Erik Thorstensson, our Chief Innovation Officer and inventor behind Strawbees, is a mechanical engineer specialized in environmental product design: *“We are a company full of young aspirational engineers, environmentalists, developers, creatives and educators. To aim for a closed-loop system and to reduce, reuse and recycle is simply part of our DNA.”*



AWARDS

K12 Award
2020 short listed

QS REIMAGINE
EDUCATION

Wharton THE ALFRED WEST JR.
UNIVERSITY OF PENNSYLVANIA LEARNING LAB

**2020 NORDIC
BALTIC EDTECH**

50
Holon IQ

FRAMTIDSBOLAG
2020
TECHARENA
CHALLENGE

**#KIDS
JUDGE**

bett

BETT 2020 KIDS JUDGE AWARD

**NORDIC
EDTECH
AWARD
2018**

NORRSKEN AWARD
THE BIGGEST NORDIC PRIZE FOR IMPACT STARTUPS
NOMINATED 2019

Swedish Recycling
Återvinningssgalan 2011
AWARD
Årets Entrepreneur

Make:
Maker of the year 2014

WHAT OUR CUSTOMERS SAY

“

We purchased several of these kits to put in my classroom (6th-9th grade) as part of my 'Maker Space' activities. It is great for building creativity, engineering skills, and teamwork. The kids have LOVED the Strawbees station!

”



A definite hit
Teacher

“

What do I love about Strawbees? They empower students to create what's in their mind without any predetermined outcomes. All the components of the design process are there for teachers who want students to take control of their own learning outcomes.

”



An extremely dedicated STEM teacher

“

The students loved it. It was great to see them fueling their imagination and getting in touch with their inner engineer.

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A great open-ended toy for kids
Ashley Waring, STEM educator
Alabama, USA

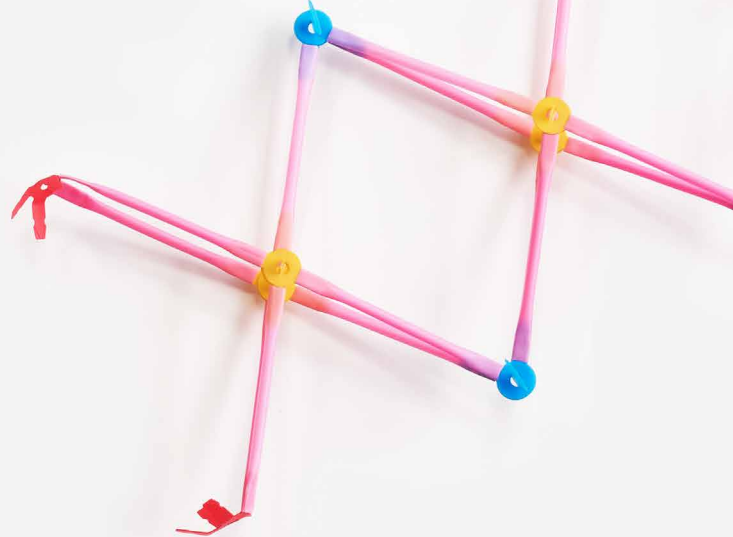
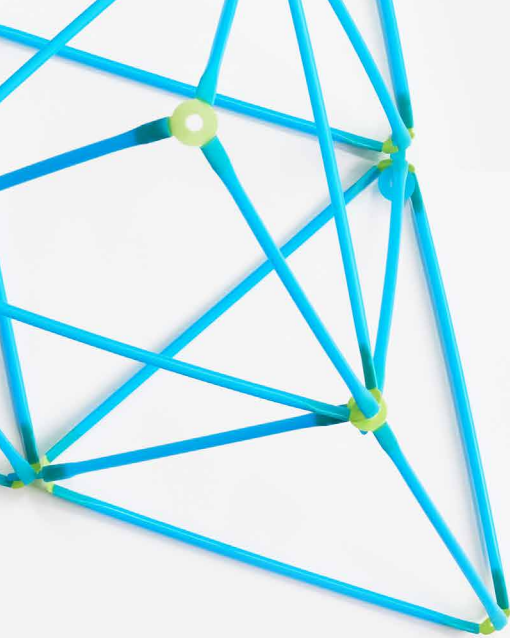
“

My 9 year old son played with these at school for STEM. Was so excited to have his own set!

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Great STEM building activity!
Mum of 1 boy, UK



Boost your creative confidence through construction, programming and robotics!
Strawbees is an award-winning Swedish edtech company here to inspire the next generation of inventors. No matter your age or ability, our flexible modular imagination systems help develop problem-solving and design thinking on and offline, for fun at home or in the classroom.

Dream, create, learn, repeat. Ready to bring your ideas to life?

Our core values:

1. POSSIBILITIES!

If you can dream it, you can build it. That's why Strawbees comes without rules, restrictions or wrong turns. You can use computers, your hands, your initiative, your imagination. You can recycle or upcycle whatever you can get your hands on. Problems may be endless but with Strawbees, possibilities are infinite.

2. LEARNING BY TRYING

Learning by doing isn't good enough. Learning by trying is the future. We believe in

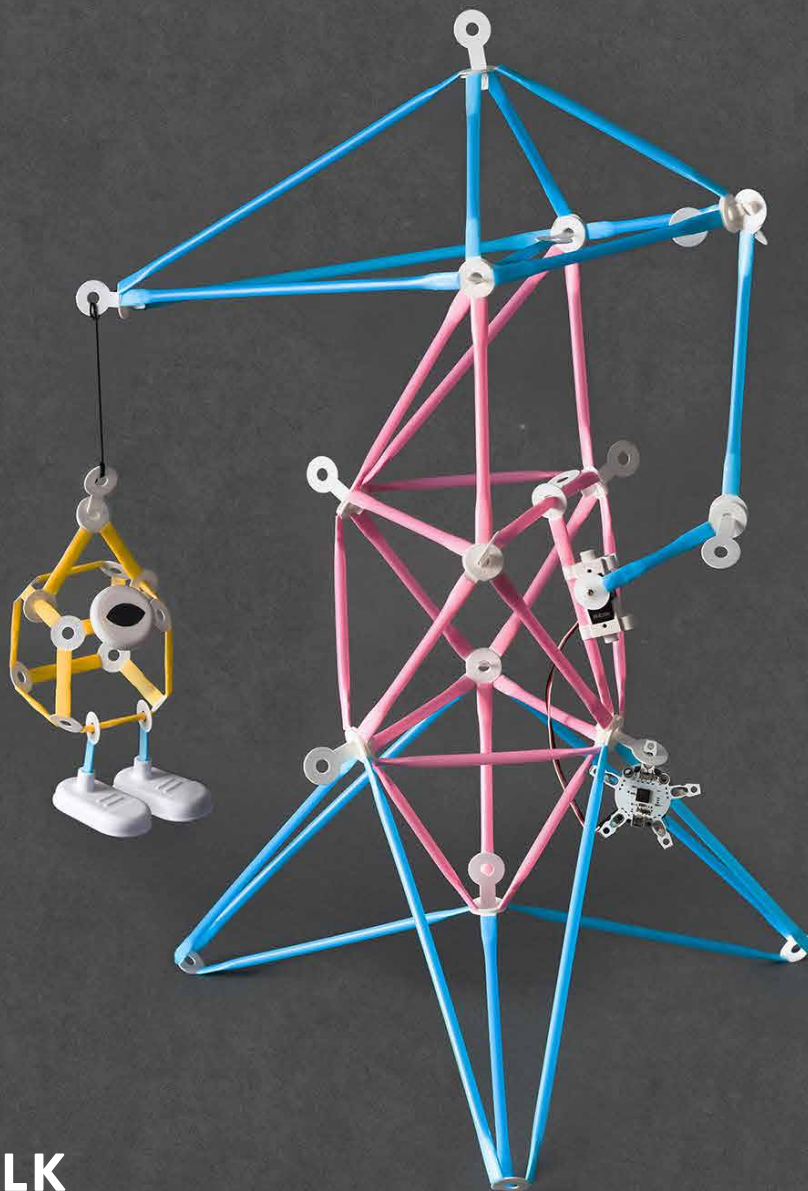
developing students' creative confidence and love of technology so they can make sense of the world and solve new problems. Knowing how to build, explore, test and experiment is vital because exciting breakthroughs don't come gift-wrapped.

3. MAKING CONNECTIONS

Strawbees is the glue that binds technologies, materials and mindsets. We merge the physical with the digital. We introduce students to their potential. We fit any teaching style, objective and budget like a glove. We inspire communities and forge exciting partnerships. We link thought leadership with grassroots endeavours. We bridge today with tomorrow. We are a connector in more ways than one.



D E S I G N E D I N S W E D E N



LET'S TALK

Got any comments or questions?
We want to hear them.

For order support and making purchase orders:
[**orders@strawbees.com**](mailto:orders@strawbees.com)

For questions about education and programs:
[**education@strawbees.com**](mailto:education@strawbees.com)

For anything else:
[**info@strawbees.com**](mailto:info@strawbees.com)
[**www.strawbees.com**](http://www.strawbees.com)

Let kids create!

Strawbees.®

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