

2023

TINKERER

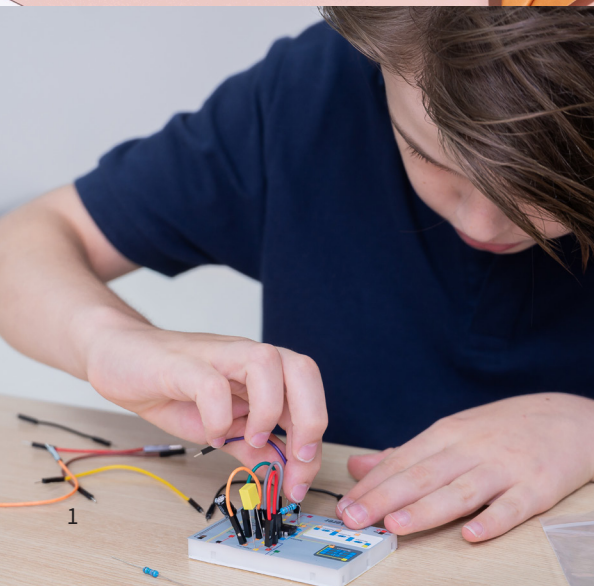
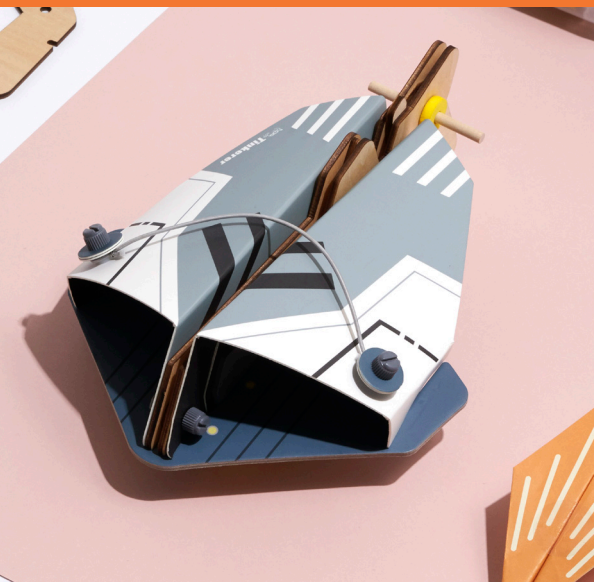
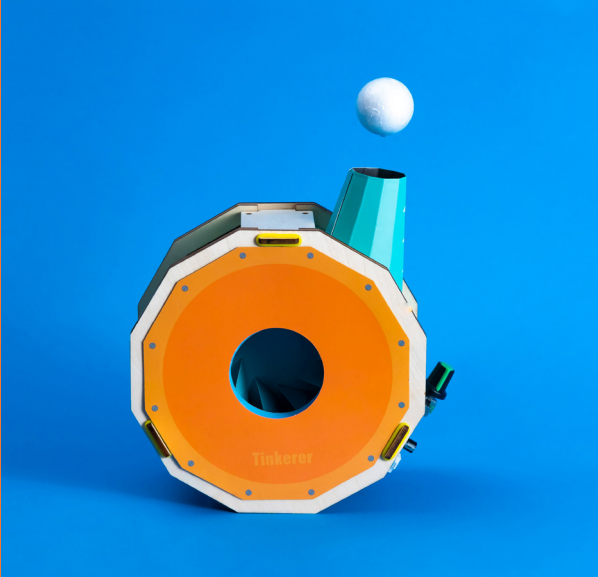
PRODUCT CATALOGUE



About Us

Tinkerer is a creative brand of educational STEAM boxes from Hong Kong.

All our boxes are developed in-house and aims to accompany children between the ages of 3-12 on a creative journey of scientific exploration. Tinkerer boxes combine hands-on making, arts & craft projects and age-appropriate science magazines for an immersive and fun-bound STEAM exploratory experience.





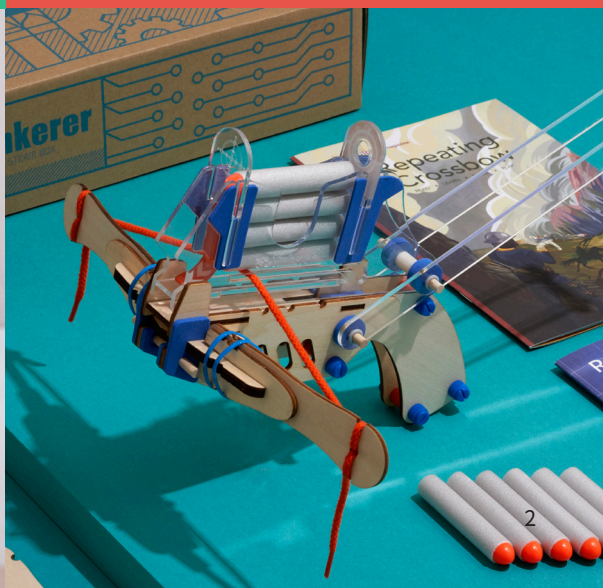
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Wonder box

3-5



Fun multi-sensory
experiences for
children aged 3-5



Music

Your little one will create three musical instruments, a bird xylophone, crocodile castanets and hedgehog handbells. After, they have made and decorated the instruments they can dance and play along to their favourite songs.

Explore STEAM

1. Matching & patterns
2. Gross & fine motor skills
3. Listening to and following a rhythm or beat



Getting Around

With this box, children will learn about cities and also allow them to get creative with painting their own creations on the map with water while the map will dry with no trace of any drawings allowing the surface to be reused for hours of fun.

Explore STEAM

1. Wheel mechanics
2. Creative design challenge



Golf

Grab the putter and hit the ball through the shark tunnel to the hungry crocodile hole. Then, settle down and read the phonics story book, Mole's Trick.

Explore STEAM

1. Practice aiming at a target
2. Develop hand-eye coordination
3. Learn about odd and even numbers





Life Cycle

In this box, the little ones will be learning about the life cycle of animals. They can get hands-on when they create their own plush toy, searching for caterpillar food, and learning how the caterpillar turns into a butterfly.

Explore STEAM

1. Learn about the life cycle of the caterpillar and the turtle
2. Experiment with a coloured lens
3. Design patterns for the butterfly



Native Americans

In this box, the little ones will learn all about Native Americans. The box contains all the pieces need to construct a bow, arrow, quiver and headdress. They will learn about beautiful Native American crafts and symbols in the magazine.

Explore STEAM

1. Develop coordination and aim when trying to hit the target with the arrows
2. Practice stitching and tying knots when making the quiver and headdress



Savanna Safari

In this box, the little ones will go to the savanna to learn all about the habitat and the animals that live there.

Explore STEAM

1. Learn about the savanna habitat and how animals camouflage themselves
2. Experiment with lenses and perspective
3. Build a moving cart from its base elements



Farm

In this box, your little one will build a felt barn then create felt animals to go inside. Play the guessing game with the farm pieces, can your child figure out who is hiding inside the barn and be the winner?

Explore STEAM

1. Be able to identify facial features and put them in the correct place
2. Develop motor skills by winding the walkers
3. Show logical and verbal reasoning while playing the guess who game



Under the Sea

In this box, your little one will explore the depths of the ocean. They'll create a fishing rod for the game and make felt creatures to reel in. Then, they can get creative and decorate a fishy bag to store the game inside.

Explore STEAM

1. Learn about the ocean
2. Challenge gross motor skills
3. Recognizing patterns

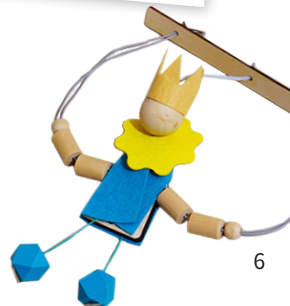


Stories With Puppets

The little ones will construct their own rotating stage and they can design their own scenery. After this, they can make their own puppets and learn all about the different types of puppets.

Explore STEAM

1. Make a rotating stage
2. Create puppets
3. Design colourful scenery





Birds

With this box, little ones will be creating their own bird costume comprising of wings and masks, so they can have fun being a bird!

Explore STEAM

1. Learn about birds
2. Make a bird-like kite
3. Create a stork beak to pick up things



Lights in Nature

Make a plush jellyfish that glows in the dark and draw with a blacklight pen to decorate the jellyfish with lighting patterns. Then build a firefly lantern that lights up at night.

Explore STEAM

1. Glows in nature
2. Phonics reading skill
3. Educational puzzles and games



Coral Reef

Create a beautiful coral reef garden, personalise a colourful tote bag using paper dye, and lastly build your very own peekaboo shell to reveal different sea creatures.

Explore STEAM

1. Corals are living animals
2. The science of corals
3. Animals living in the reef
4. Art skill: use bleeding paper
5. Animal sudoku game



Pirates

In this box, your little ones will design and make a pirate's hat, build a cannon and fire foam cannon balls onto the Treasure map provided in the kit. They will also practice fine motor skills with yarn wrapping to create outfits for two wooden pirate puppets.

Explore STEAM

1. Learn about pirates
2. Read independently with the phonics story
3. Learn about the oceans



South Pole

Build a polar-themed marble run, sew two hand puppets to play a snow ball catching game, and help unleash your child's imagination with an ice-painting Antarctic animals.

Explore STEAM

1. Animals and Habitat
2. Observe gravity
3. Sewing and painting



Castle and catapult Explore STEAM

Build your very own magic castle and add wooden tracks to create a fun marble run.

1. Build a dragon catapult and shoot wooden marbles at your targets
2. Build early literacy skills with storytelling cards



Shadow Play

Assemble a shadow box and explore the fascinating science of shadows. Kit comes with a set of 3 projection slides, 5 story figures and the classic story book of the Little Red Riding Hood.

Explore STEAM

1. Encourage children to think, explore, investigate and question the world around them
2. Active exploration and discovery of light and shadow
3. Creative role play



Mini market

With this kit, children will embark on an exciting journey of building their very own market stall and creating a delightful array of felt vegetable pieces. Dive into a world of imaginative play and embark on a magical shopping adventure!

Explore STEAM

1. Number recognition, addition, and subtraction
2. Fine motor skills
3. Language and communication
4. Pretended play

Dinosaur World

Build a triceratops costume, make three dinosaur stamps, and create your very own dinosaur board-game. The box also comes with a dinosaur storybook, Wonder activity book and a parent assistance guide.

Explore STEAM

1. Learn about dinosaurs
2. Logic deduction games
3. Create and follow rules
4. Spatial development
5. Shape matching



Animal Bowling

The Animal Bowling kit lets kids create 3 animal bowling pins and a ball launcher. With a stamp map and geometric stamps, they can design unique animal patterns.

Explore STEAM

1. Fine motor skills include lacing and twisting
2. Geometric shapes and patterns
3. Spatial awareness of distance



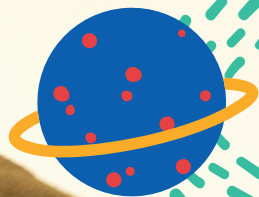
Pizza Maths

Introducing our Pizza Maths Kit—a delicious blend of culinary creativity and mathematical exploration. Kids make pizza dough from scratch, play a fractions game, and design a chef's hat with stencils. It's hands-on, educational, and fun.

Explore STEAM

1. Sensory play
2. Numeracy skill: Fraction
3. Pretended play
4. Creative arts

A creative combination
of arts and science for
children aged 6-8



6-8



Odyssey box



Coloured Science

In this box, the kids will learn how coloured inks mix to make new colours, then how to separate inks back into their original pigments using chromatography. Using this knowledge, they can get creative and mix the inks themselves to make their own coloured pens.



Explore Space

Discover the wonders of the planets in our solar system then decorate your own solar system poster. Learn all about the International Space Station and the many space crafts that have been sent out into the solar system.



Mirror Vision

Paint and create your very own artistic wooden puzzles, build two mirror goggles, and challenge your brain with reverse thinking skills to solve the puzzle. Connect two goggles to create an adjustable periscope and explore how it works. A bonus mirror illusion coin bank project will help you dazzle your friends with this amazing illusion!



Manta Sweeper

Did you know that not all animals feed in the same way? Learn all about the amazing animals that filter feed and the teeny-tiny plankton they strain from the water. Make a Manta Sweeper to feed on the plankton pom-poms and learn all about these wonderful creatures.





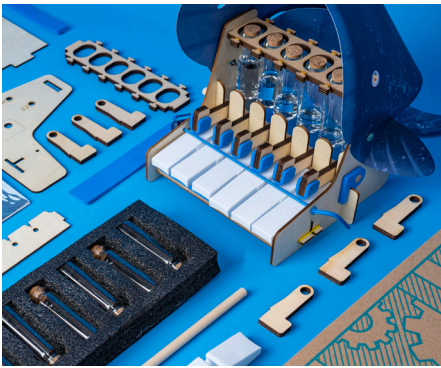
Chameleon

Build a lit and colour-changing chameleon. Decorate the wooden skins with 8 magic colour-shifting pens. Explore the colourful world and amazing abilities of chameleons. Learn how this awesome creature change colours in the natural world.



Basketball Catapult

It's time to head to the court and work on your layout. Build a basketball catapult and learn the science of trajectory and projectile motion. Then challenge your family and friends to a competition to see who can get the best score on the basketball court.



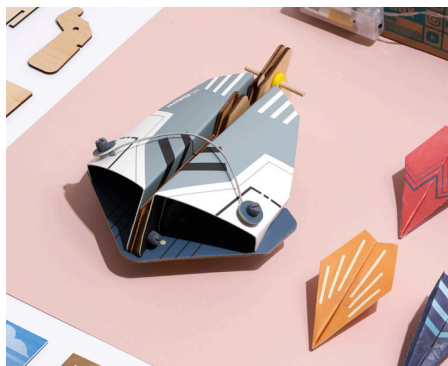
Whale Song

In this box, kids will get musical and make their very own water piano toy that can play different notes. They will learn bleeding paper painting technique and decorate their own whale. But that's not all, by reading the magazine they can learn all about the science of sound, and create their own sound experiments.



Dinosaurs

Take a journey to the Mesozoic era with our Dinosaurs box. In this box, the kids will have fun and learn whilst playing the Tinkerer board game, Mesozoic Fossil Hunt. Then, stomp and roar after constructing their own dinosaur head. Are you ready to dig deeper and discover the dinosaurs found across China?



Plane Launcher

It is time to take off! In this box, there is everything needed to take to the sky and engineer a plane launcher! Complete with colourful planes and fully lit display runway, there is plenty to make and Tinker at!



Ultraviolet Light

By combining arts and mechanics, they will create a colourful set-piece of movable characters that will come to life using ultraviolet light. In addition, they will be able to create a UV bracelet, draw with UV pens using templates, and with our Odyssey magazine, understand concepts like fluorescence.



Anatomy

A human body learning apron, organ pieces, reusable skeleton stickers and a glow-in-the-dark sticker board will be included for three activities. Children will learn to sew and stuff felt organs, place them on the apron to learn where they belong in the human body, and mimic an x-ray experiment.



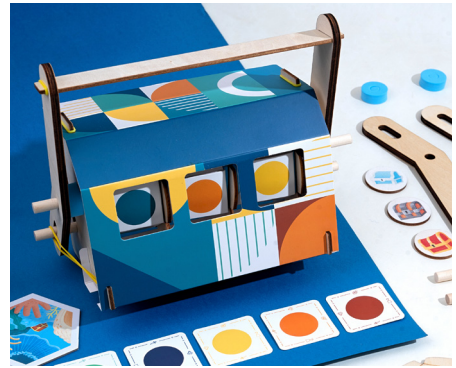
Hydraulic Tortoise

Does your child know the power of water? In this box, they will learn all about water pressure and hydraulics systems. After, they will apply this knowledge and construct a walking tortoise powered by water. Then, read the magazine, filled with science, English comic and activities.



Articulated Claw

Is your child ready to catch monsters! Construct a moving, extendable claw to try to snatch the fluffy monsters. Learn about first and second class levers and read the comic story in the magazine. Then, get crafty and create yarn pom-poms.



Probability Science

Have you heard of probability? In this box, your child will make a hand-cranked probability machine. Pull the handle to spin the discs inside. When they stop, can you guess the probability of getting three of the same patterns? The box also comes with a pirate probability game for some fun family time!



Polarisation

This box will let your young Tinkerers build a fabulous polarisation viewer. This box explores the physics of polarisation with open-ended activities for children to create their own artistic creations combining physics and art using polarising filters to realise colourful effects.



Capillary Action

In this box, children will see capillary action ... actually in action! Make paper flowers and watch coloured water flow up flower stems and petals, and finally learn the technique to even change the flowers' colours. Create two cactus monsters using the science. Build a balancing cactus and invite friends and families for a fun game.





Air Cannon

Ready, Set, Bang! When you let go of your balloon trigger, the air inside the hand-held cannon gets pushed and squeezed. While air rushes out through the cannon opening, a strong and stable ring of air is formed. This makes the air molecules march forward like an army until they hit your target!



Water Blaster

Water fight! Put on your colour changing water reactive jacket and invite friends for a cool summer water shooting contest. Learn how valves help control water and gas flows and experiment with making a one way pump to pump up your balloon monsters for target practice or some serious summer fun!



Loopy racers

Unleash your child's inner engineer and race into a world of excitement with our DIY Loopy Racer Kit. Watch as they construct a thrilling roller coaster track, launch racers through loops, and aim for the fire ring target.

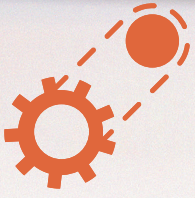
STEAM Concept: Centrifugal force



Stamp press

Stamp Press Kit empowers kids to build their very own printing press and explore the art of pattern-making. Children will construct a functional printing press, use silicone stamps and vibrant stamp pads to create unique patterns, and even learn to make their own custom stamps through cutting and tracing. After stamping their patterns, children add vibrant hues to the patterns and turn them into stickers.

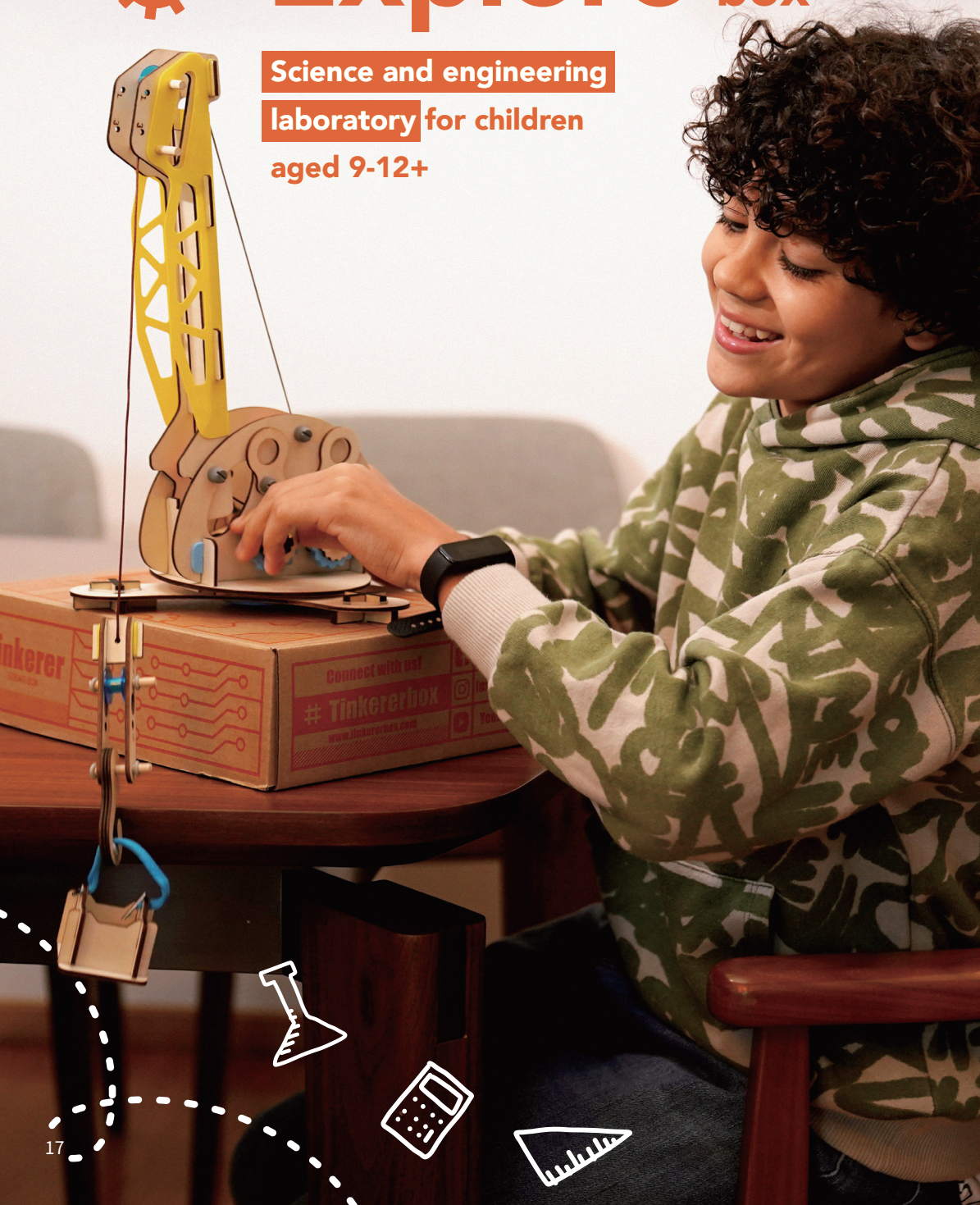
STEAM Concept: Pressure, creative arts



9-12+

Explore box

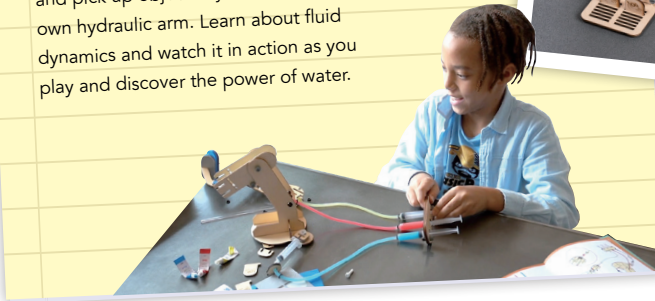
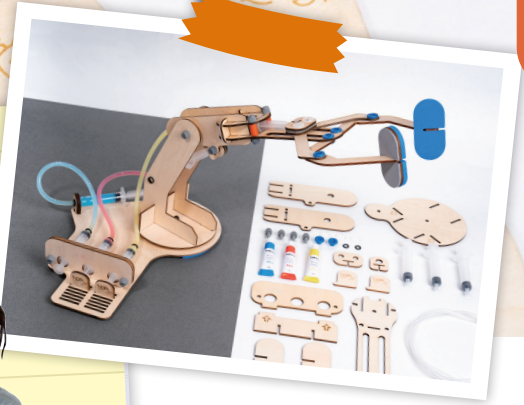
Science and engineering
laboratory for children
aged 9-12+





Hydraulic Arm

Harness the power of hydraulics to move and pick up objects by building your very own hydraulic arm. Learn about fluid dynamics and watch it in action as you play and discover the power of water.



Infinity Mirror

Explore the amazing world of infinity with our infinity mirror and Explore magazine. Assemble an infinity mirror using a set of mirrors and lights, as well as learn about different types of light reflections. Understand the concept of infinity through history and its many uses in art and science. Play with mirrors and learn how infinity can be created.



Pepper's Illusion

Discover the science behind this genius magic in the history: Pepper's Illusion. Build your very own illusion box, dazzle your friends with an eyeball-rolling owl and watch the eyeballs disappear right in front of your eyes.

Chemical Tornado

Explore the science of acids and bases in this colourful chemistry box. Make a chemical mixer to conduct the experiments then observe the changes of the chemical indicator. Learn and experiment further by reading the accompanying magazine, Colourful Chemistry.



Explore STEAM

1. Build a chemical mixer
2. Complete a colourful acid and base reaction
3. Learn how to make a pH indicator in the magazine

Construct a marble run automaton



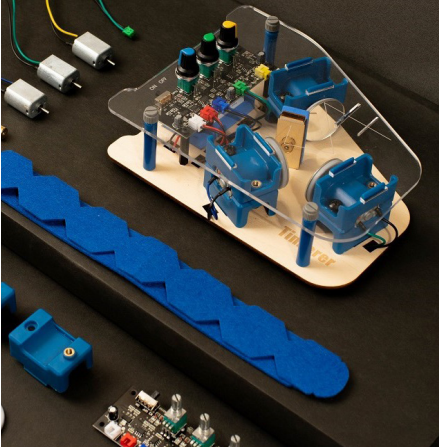
Automaton

Designed to get our Tinkerers ready for the automated future, explore the beginnings of automation with the Tinkerer Automaton box. Starting off with assembling and playing with a fun and stress relieving automaton, our magazine will also tell them about the history and mechanics of automation up to the computers we use every day!



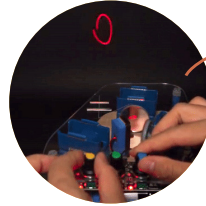
Explore the use of cams in automation





Laser Light Show

Turn down the lights and have a laser light show in your bedroom. Watch the laser beam reflect off the mirrors then pass through the diffraction grate to make multiple roulettes.



Construct an electrical device by following instructions



Learn about potential and kinetic energy

Repeating Crossbow

This box comes equipped with everything needed to build a modernised repeating crossbow. The repeating crossbow was an ingenious invention that revolutionised warfare the world over, join us and build your own today!



Planetarium

It is time to turn down the lights and learn all about the wonders of the night sky. This box contains everything they need to build their very own planetarium. Navigate the stars with our Star Wheel and learn how to identify the constellations.





Pinhole Camera

Become a photographer! Join the pinhole revolution by building your own very own pinhole camera. Learn the physics and chemistry behind photography, and experiment by taking pictures. Understand how development works.



Learn about the chemistry behind the art of photography



Secret Box

It takes imagination and science to open this secret puzzle box! Make a wooden secret box, set your code, and secure your secrets in an unexpected way. Your secret box contains a dual-layer locking mechanism - a magnetic code and a centrifugal lock. Learn how to use science and imagination to keep your most important secrets safe!



Air Engine

Build an air engine from the turbine up and create an airstream that levitates balls in mid-air! Explore the Bernoulli principle and discover how the science works. Build a wooden disk launcher and challenge your friends to a fun shoot-out and see who can knock the balls out of the air!



Trebuchet

Build a fully functioning trebuchet and learn all about this historic machine. Try to hit the targets to win points and save the princess from the castle. Then, set up an experiment to observe the effect weight and material has on the distance the balls can travel.



Roulette Drawer

Make beautiful roulettes, which are geometrical patterns, with our Roulette Drawer. The combinations are endless thanks to changeable gears and the different versions of marker holder. The only limit is your creativity!



Flying Saucer

Construct a flying saucer launcher and 3 flying saucers. Explore the science of vertical flight and learn about the underlying aerodynamics. Discover the science of helicopters with the Explore magazine.

Crane

Discover the power of the pulley by constructing a moving crane. Lift objects and lower them with ease as you learn how a pulley can make work easier to do by improving the mechanical advantage. Then, learn about the first crane, the Mesopotamian shadoof, in the magazine.

Experiment with different pulley setups

Learn how to calculate the force needed to move the load



Synthesizer

Build an analogue synthesizer from scratch and experience the art of electronic sound. Learn first-hand the working principals of various basic electronic components.



Printing Press

The DIY Printing Press Kit empowers kids to become master printers. By following simple instructions, they'll assemble their own self-inking press, giving them the ability to effortlessly reproduce their favorite patterns with each stamp. It's a hands-on project that combines the joy of crafting with the magic of printing.

Torsion Ballista

Explore the engineering prowess of the Romans and Greeks from more than two millennia ago. Discover the source of power for the mighty ballista and see how the famed Roman Legions used them in their great conquest as one of the most successful empires the world has ever known. Create your own ballista and read about all these interesting facts.



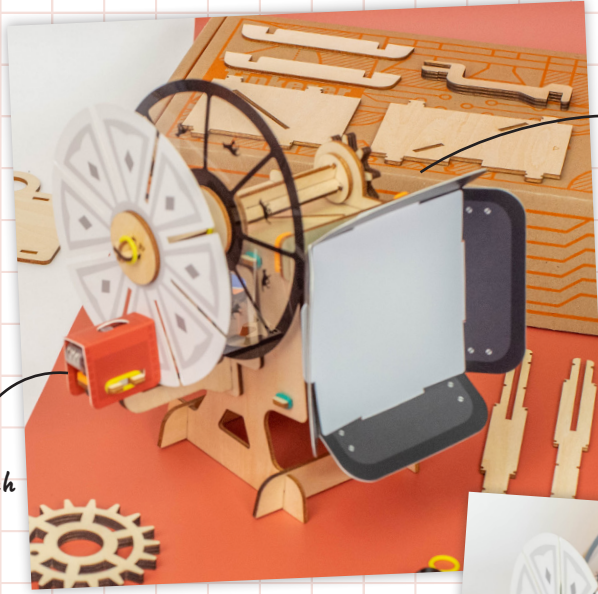
Capsule machine

This coin-operated capsule machine that brings the excitement of surprises right into your hands. With this machine, kids can experience the thrill of turning the handle and unveiling a lucky capsule filled with surprises, treats, or small toys. It's a delightful and interactive way to add an element of surprise and anticipation to any day!



Rubber band racer

The Rubber Band Racer kit offers kids a thrilling journey into the world of physics and engineering! With this kit, kids can build their very own rubber band-powered car and embark on a series of captivating experiments. Explore the concepts of friction, power, and motion while witnessing the incredible stunt of the car popping a wheelie.



*Rotate the handle:
The still images will
start forming a
motion picture .*

Light switch

Film projector

This Film Projector kit brings the magic of animation to life! With this kit, children can build their very own functional film projector and witness the mesmerizing transformation of still pictures into a short animation. Get ready to be amazed as a galloping horse comes to life on the projector's screen with every turn of the handle.



Coin Sorter

The Coin Sorter Kit offers an engaging and educational experience. Children will enjoy assembling the sorter using the provided components and easy-to-follow instructions. Once constructed, kids can pour a mixture of coins into the top, and through clever design, the sorter automatically separates them based on their size. The sorted coins neatly stack up in the bottom tray, ready for use.

Holiday Special

Ho Ho Ho Whale Automaton

DIY cam powered whale automaton. Create your own origami whale to make your automaton extra special!



Beeswax Candle

This box contains colored beeswax sheets, template sheets and materials such as crafting tools, wooden Christmas hut, a magazine and graphical instructions.





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