WinMars Technology

鸿惊智能
科创空间

We make the makers who make the future.

探究 | 设计 | 创意 | 机械 | 电子 | 编程

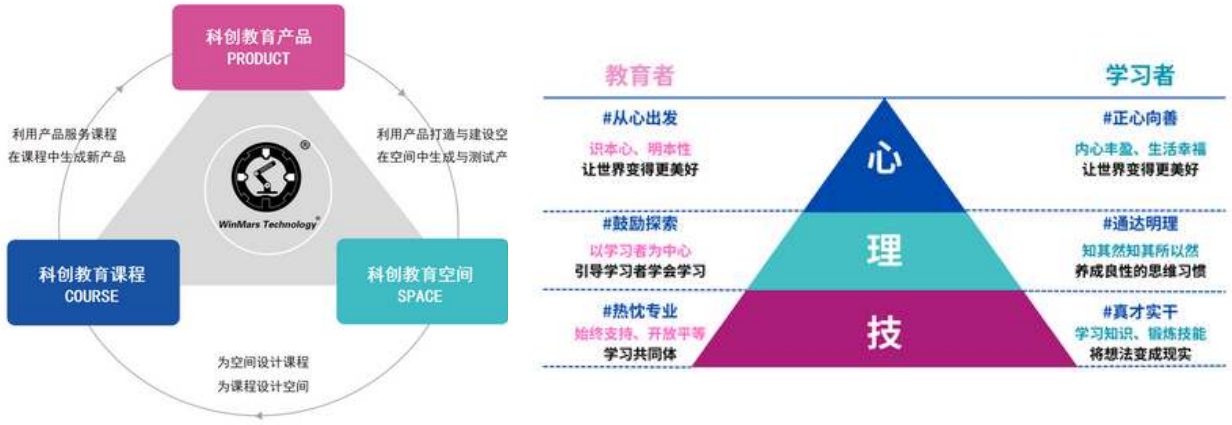
鸿惊智能，以“创”育人，用“智”赋能教育
致力于让每一个孩子都能“动手改变世界”

关于我们 About us

引言

上海鸿惊智能科技有限公司是一家专注于儿童、青少年科技教育与智能创客解决方案的企业。我们深耕STEAM教育领域，围绕人工智能、编程技术、电子工程、结构搭建、绿色科技等方向，提供系统化的课程开发、教学器材定制、教师培训与项目活动实施支持。

公司拥有专业的教研与设计团队，致力于将前沿科技与教育融合，帮助学校、培训机构、科技馆等合作单位高效落地创客课程与科创项目，提升学生的动手能力、创新意识与科学素养。鸿惊智能，以”创"育人，用"智“赋能教育，致力于让每一个孩子都能"动手改变世界"。



▲ WinMars整体运营形态模型

WinMars专注于3-16岁同学的科技创造力教育，开设科创教育空间，自主研发科创教育产品与课程，围绕探究、设计、创意、机械、电子、编程六大内容板块，形成独特的教育内容研发生态与产品闭环。为学校、科技馆、科普中心、教育机构等提供科创教育整体解决方案。

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引言

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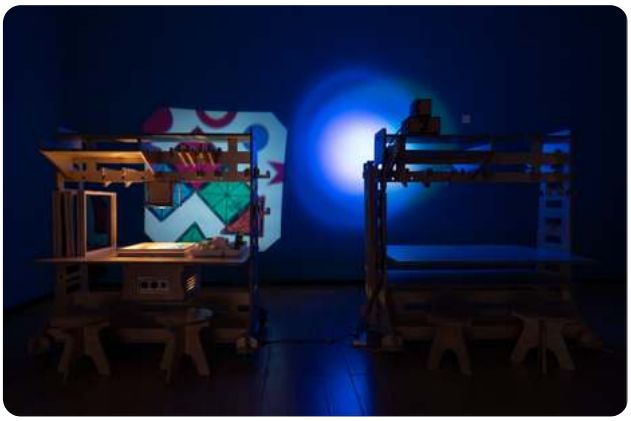
空间名称：创造力飞车探索站

空间名称：创意建构工作坊



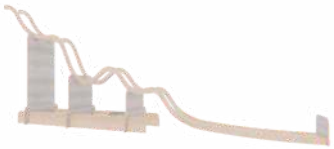
空间名称：光影探索工作坊

空间名称：创意建构工作坊

空间名称：创客DIY工作坊

创造力飞车轨道

强开放性 Highly Open-ended　强互动性 Highly interactivity

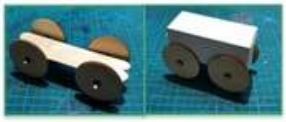


标准版滑道：
Standard Version Track：
7.5m*0.7m*2m（长宽高）
7.5m*0.7m*2m (length x width x height)

跳跃版轨道：
Jumping Verison Track:
3m*0.7m*2m（长宽高）
7.5m*0.7m*2m (length x width x height)

小型版滑道：
Small Version Track:
5m*0.6m*1m（长宽高）
5m*0.6m*1m（(length x width x height)

无动力飞车项目布置
Layout for Unpowered Car Project



无动力小车标准套件
Unpowered Car Standard Accessories

无动力飞车测试轨道
Testing Track for Unpowered Car

无动力小车装饰材料示意
Decorative Material Example for Unpowered Car

无动力飞车模型轨道
Model Track for Unpowered Car

无动力小车作品示意
Unpowered Car Examples

力与运动

风洞工作站

强开放性 Highly Open-ended　飞行器 Aircraft　空气动力学 Aerodynamic

利用飞行器创造站，孩子们可以探索日常物品在气流中的运动状态，是孩子们空气动力学启蒙的第一步。在风洞工作站中，纸杯、塑料袋、丝巾、纸张、吸管、乒乓球、泡沫等寻常材料都变成了供孩子探索的飞行装置。

By using a flying machine maker station, children can explore the motion of everyday objects in airflow, marking the first step in their introduction to aerodynamics. In the wind tunnel, common materials such as paper cups, plastic bags, scarves, paper, straws, ping pong balls, and foam become aircrafts for children to explore.

垂直版风洞装置规格：
600mm*600mm*1820mm
Specification:
600mm*600mm*1820mm

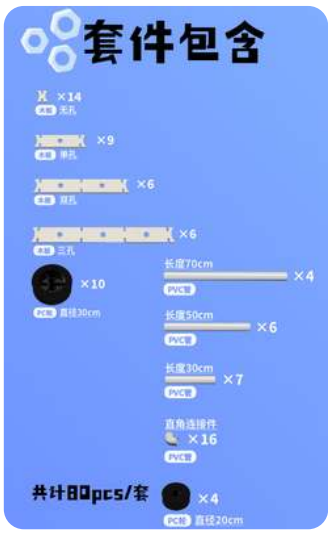
可调节版风洞装置规格：
600mm*500mm*1820mm
Specification:
600mm*500mm*1820mm

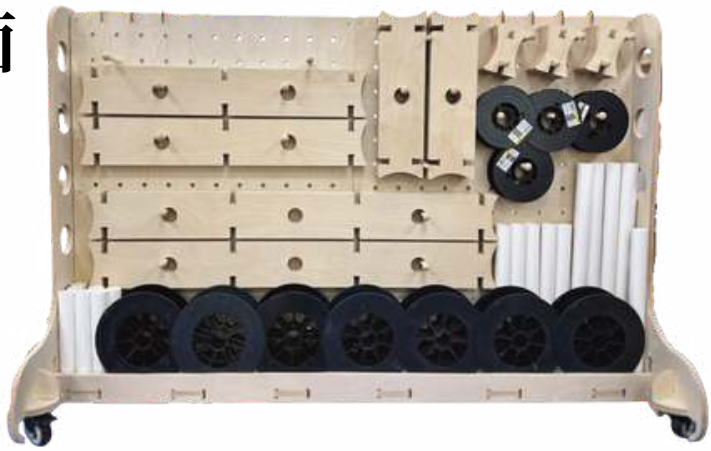
*可搭配创客工作台使用
详情见第27页

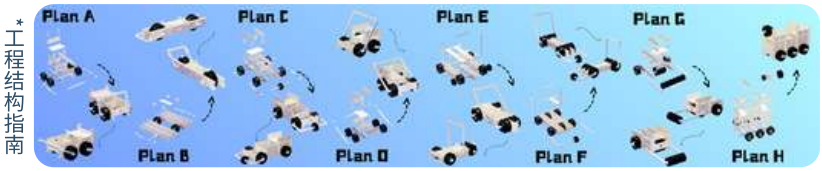
*风洞主题设备配套套件
任何材料都可成为您的创想

工程建构

工程建构可移动墙面







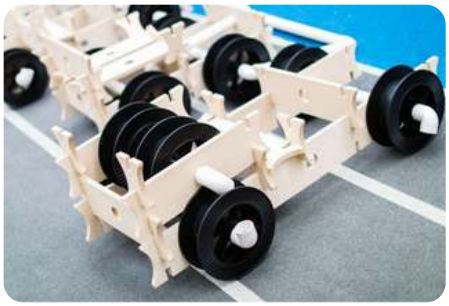
工程建构套件

合作创造 Collaborative Creation

工程建构 Engineering Construction

百变工程建构支持孩子进行完整的工程建构体验，设计建筑，打造熙熙攘攘的城市；组合结构，搭建疾驰的小车；还可以自由打造你心目中的故事场景。套件包括木质结构件、PVC管材、塑料轮轴等材料，满足从结构到功能的搭建需求。

The engineering construction kit provides children with a complete engineering and construction experience. They can design buildings and create bustling cities, assemble structures to build speedy cars, or freely craft story scenes of their imagination. The kit includes wooden structural components, PVC pipes and plastic axles, meeting construction needs from structure to function.



光影工作站

光影探索 Light and Shadow Exploration　多角度思维 Multi-perspective Thinking

光能改变颜色、创造影子、勾勒形状和轮廓，光影现象也颇具美感，对儿童有着天然的吸引力，鼓励孩子们进行自主探索与创造，帮助孩子们发展认知能力、建立科学意识、培养多角度思维。

Light can change colors, create shadows, and outline shapes and contours. Light and shadow phenomena are visually appealing and naturally attracting children, encouraging them to explore and create independently. This helps children develop cognitive skills, build scientific awareness, and cultivate multi-perspective thinking.

光影工作站装置规格：
1320mm*800mm*1360mm
Specification:
1320mm*800mm*1360mm

三原色互动装置（3W/7W）

色光叠加性 Superposition of colored light　光的三原色 Three- Primary Colors of Light

利用三原色互动装置，你可以探索色光三原色的奥秘，用最基础的红光、蓝光和绿光创造出有规律却百变的光影世界。加上一些想象，还能打造一个充满童话色彩的世界。

Using the RGB light interactive device, you can explore the mysteries of the three primary colors of light, create a world of orderly yet ever-changing light and shadow with basic red, blue, and green lights. With a bit of imagination, it can even transform into a world full of fairy-tale colors.

3W规格：190mm*144mm*144mm，共3个
7W规格：250mm*164mm*162mm，共3个
3W:200mm*110mm*120mm each, 3 units totally
7W:200mm*110mm*120mm each, 3 units totally

光影探究

光控面板

复色生成 Complex color generation

光的三原色 Three- Primary Colors of Light

三个物理旋钮可让孩子们直接控制颜色和强度，调节红、蓝、绿光的强度，实现无限的色彩组合。

Three physical knobs let children directly control color and brightness, adjusting the intensity of red, blue, and green light to create endless color combinations.

光控面板装置规格：
880mm*880mm*36mm
Specification:
880mm*880mm*36mm

光控实验台

复色生成 Complex color generation

三个物理旋钮可让孩子们直接控制颜色和强度，调节红、蓝、绿光的强度，实现无限的色彩组合。本套装包含光面板、储物盒以及众多配件，助力探索光影。

Three physical knobs let children directly control color and brightness, adjusting the intensity of red, blue, and green light to create endless color combinations. The set includes a light panel, a storage box, and various accessories to support the exploration of light and shadow.

光的三原色 Three- Primary Colors of Light

光控面板装置规格：
880mm*880mm*500mm
Specification:
880mm*880mm*500mm

光谱实验室

基色 - 复色 - 白光对照 Primary Colors - Polychromatic Colors - White Light Comparison

多角度思维 Multi-perspective Thinking

光谱实验室不仅仅是一件教室设备，更是邀请孩子们探索、实验和发挥创造力的平台！这款互动实验室旨在吸引孩子们的注意力，它拥有两块明亮的光板：一块是白光，另一块是三色光，上面配有趣味十足的旋钮，可以用来混合颜色。内置储物柜不仅能支撑灯板，还能提供充足的空间用于整理材料。从科学角到艺术工作室，光谱实验室 (Spectrum Light Lab) 可将任何空间打造成一个充满启发的学习环境。

The Spectrum Light Lab is more than just a classroom device—it’s a platform that invites children to explore, experiment, and unleash their creativity! Designed to capture kids’ attention, this interactive lab features two bright light panels—one white light and one three-color panel—equipped with fun knobs for mixing colors. The built-in storage cabinet not only supports the light panels but also provides ample space for organizing materials. From science corners to art studios, the Spectrum Light Lab can transform any space into an inspiring learning environment.

光谱实验室装置规格：
1210mm*730mm*530mm
Specification:1210mm*730mm*530mm

灯光涂鸦板

动态光绘 Dynamic Light Painting

蓄光特性 Light-Retaining Property

这是一款充满创意与科技感的光影绘画工具，孩子可以使用配套的光笔在面板上自由“作画”，留下短暂又梦幻的光痕。画面会随着时间逐渐消退，反复使用，无需颜料，安全环保。

LumiDoodle Panel is a creative and tech-inspired light painting tool. Kids can use the included light pen to freely "draw" on the panel, leaving glowing trails that slowly fade away. It’s reusable, mess-free, and environmentally friendly — no ink or paint required..

灯光涂鸦板装置规格：
800mm*300mm*1285mm
Specification：800mm*300mm*1285mm

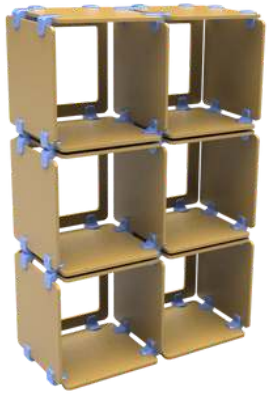
光影探究

光影小剧场

强开放性 Highly Open-ended　High displayability 强展示性

一个专为小探索家设计的光影小剧场，当红、绿、蓝三原色灯光像彩虹精灵的魔法棒一样遇上旋转的动力机器人小伙伴，会在半透明的幕布上变出会跳舞的彩色影子！就像给影子穿上了彩虹舞裙，在木质的展示架上呈现多彩的舞台效果。

A light-and-shadow theater designed for little explorers: when the red, green, and blue primary-colored lights—like the magic wands of rainbow sprites—meet the spinning power of their robot friends, colorful dancing shadows appear on the translucent screen! It’s as if the shadows are wearing rainbow skirts, creating a vibrant stage effect on the wooden display stand.



光影小剧场装置规格：1380mm*900mm*430mm
Specification：1380mm*900mm*430mm

光影探究配套套件

光影探索 Light and Shadow Exploration　创意与创造 Creative Ideas and Creation

昆虫、动物、人体骨骼X光片

彩色亚克力片-平面

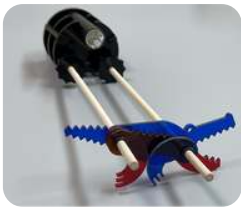
彩色亚克力片-立体

彩色透明鹅卵石

彩虹钉

色彩片

临摹板



光影探索套件

机械主题探究

机械运转的秘密(3D打印版)

3D打印探索 3D Printing Exploration　　机械运转 How Machines Work

机械运转套件把复杂难懂的机械原理用最直接的方式呈现，可直接进行互动操作。孩子们可以直接动手体验每一款机械的运转状态，了解日常物品的工作原理，洞悉机械运转的秘密。

The How-Machines-Work Set presents complex and difficult-to-understand mechanical principles in the most direct way, allowing for hands-on interaction. It helps children look beyond the familiar and understand the workings of everyday objects, unveiling the secrets of how machines work.

机械运转的秘密(3D打印版)装置规格：
800mm*1200m*300m
Specification：800mm*1200m*300m

机械运转的秘密(激光切割版)

机械运转 How Machines Work　　机械原理 Mechanical Priciples

机械运转的秘密(激光切割版)装置规格：
270mm*170mm*3mm
Specification：270mm*170mm*3mm

一起绕到习以为常的事物背后，阅读机械绘本，了解物品的工作原理，学习机械结构的发展史，洞悉机械运转的秘密，孩子们通过动手项目将学到斜面、杠杆、曲柄、轮轴、齿轮齿条、凸轮、棘轮、滑轮等经典机械结构及其生活应用。

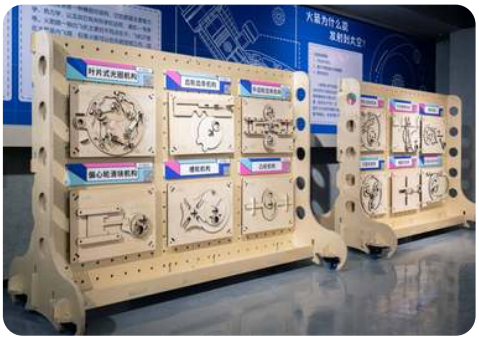
Children will explore beyond familiar objects, read mechanical storybooks, understand the working principles of items, learn about the history of mechanical structures, and uncover the secrets of how machines work. Through hands-on projects, children will learn about classic mechanical structures such as ramp, lever, crank, wheel axle, gear and rack, cam, ratchet, and pulley, as well as their applications in daily life.

机械互动板

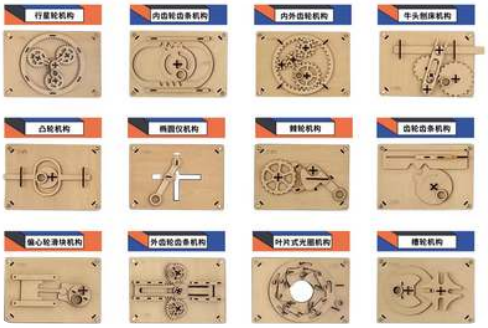
强互动性 Highly interactivity　机械原理 Mechanical Priciples

互动性极强的大型机械互动板，各机械结构模块均支持亲手操作。孩子们可通过转动、推拉、啮合等动作，亲自探索连杆往复、凸轮、齿轮齿条等机构的运转逻辑，在动手实践中直观理解斜面、杠杆、棘轮等经典结构的工作原理与生活应用，沉浸式互动体验，开启机械奥秘的探索之旅。

This large-scale mechanical interactive board boasts extremely strong interactivity, with all mechanical structure modules supporting hands-on operation. Children can personally explore the operation logic of mechanisms like reciprocating links, cams, and gear racks through actions such as rotating, pushing, pulling, and meshing. In hands-on practice, they intuitively grasp the working principles and real-life applications of classic structures—inclined planes, levers, ratchets, and more. Through immersive interactive experiences, they embark on a journey to explore the mysteries of machinery.



机械互动版装置规格：
1900mm*820mm*1275mm
Specification：1900mm*820mm*1275mm



机巧工坊—3D打印机械主题拼装探索盒

机械设计 Mechanical Design　3D打印探索 3D Printing Exploration

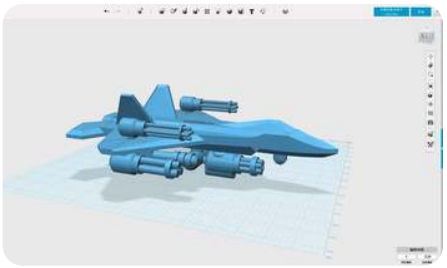
机巧工坊探索盒规格：
10合1版
Specification：10-in-1

每种模型表示相关的机械传动原理，方便教学演示与探究式学习
所有模型适用于课堂实验、展览演示、学生项目挑战。零件结构清晰，便于学生理解“力的传递”与“运动转换”原理。

Each model represents a specific mechanical transmission principle, ideal for demonstration and inquiry-based learning
All models are suitable for classroom experiments, exhibition demonstrations, and student project challenges
Clear part structures help students better understand the principles of force transmission and motion conversion.

三维建模及3D打印

三维建模探究课程



几何与数学 Geometry and Mathematics　3D建模探索 3D Modeling Exploration

三维建模及3D打印课程是一门集三维建模技术、3D打印技术和创新设计为一体的综合性课程。该课程旨在让学生了解并掌握三维建模和3D打印的基本原理和应用，通过实践操作，培养学生的创新思维和实践能力。

介绍三维建模的基本概念、软件界面及基本操作，让学生了解三维模型的设计思路和流程。了解3D打印的原理、设备组成、材料选择等知识，让学生了解3D打印技术的发展和应用。

The 3D Modeling and 3D Printing course is a comprehensive course integrating 3D modeling techniques, 3D printing technology, and innovative design. This course aims to help students understand and master the basic principles and applications of 3D modeling and 3D printing, and to cultivate their innovative thinking and practical skills through hands-on practice.

It introduces the basic concepts of 3D modeling, software interfaces, and basic operations, allowing students to understand the design ideas and processes of 3D models. It also covers the principles of 3D printing, equipment composition, material selection, and other knowledge, helping students gain insight into the development and applications of 3D printing technology.

3D打印笔套装

空间想象力 Spatial Imagination　艺术与美感 Artistic Sense and Aesthetics

把想象力 “画” 成现实，3D 打印笔创意工坊是专为青少年设计的趣味科技实践课程，以 “立体绘画” 为核心，将前沿的 3D 打印技术转化为简单易操作的创作工具。不同于传统绘画的平面表达，3D 打印笔能让线条瞬间凝固成立体结构，让青少年的奇思妙想从纸上 “站起来”，是连接创意与现实的 “魔法画笔” 课程。

Turning Imagination into Reality, the 3D Printing Pen Creative Workshop is a fun, tech-based hands-on course designed specifically for teenagers. Centered on "three-dimensional drawing," it transforms cutting-edge 3D printing technology into an easy-to-use creative tool.Unlike traditional flat painting, the 3D printing pen allows lines to instantly solidify into three-dimensional structures, letting teenagers’ imaginative ideas “stand up” off the page. This course acts as a "magic brush," connecting creativity with reality.

创意建构类

纸板创意工具套装

高度开放 highly open　低结构材料 low-structure materials　可回收 recyclable

纸箱创意工具套装专为3-8岁儿童设计，采用3D打印PLA材质制作安全切割锯、折痕滚刀等专业工具，搭配可循环纸箱连接扣。通过趣味手工搭建激发孩子创造力，在切割、打孔、组装过程中培养动手能力，同时践行环保理念，鼓励利用废旧纸箱进行艺术创作，让环保意识与科技启蒙在寓教于乐中萌芽。

The Cardboard Creative Tool Kit is specially designed for children aged 3-8. It includes professional tools like a safety cutting saw and creasing wheel cutter made from 3D-printed PLA material, along with reusable cardboard connectors. Through fun hands-on building activities, it sparks children's creativity and nurtures their practical skills in cutting, punching, and assembling. At the same time, it promotes eco-friendly values by encouraging artistic creations using recycled cardboard boxes—fostering environmental awareness and technological inspiration in a playful, educational way.

环保创意建构

高度开放 highly open　低结构材料 low-structure materials　工程建构 Engineering construction

利用最普通的材料完成非凡的创意，关爱地球、永续发展，利用回收纸板与可复用的纸箱扣，大开脑洞，实现自己的想法。从设计到制作，从团队协作到独立创造，培养儿童的环保意识，解锁创造力，提升问题解决能力，让孩子从玩具消费者成长为创意设计师。

Use the most ordinary materials to achieve extraordinary creativity. Care for the Earth and promote sustainable development by utilizing recycled cardboard and reusable cardboard connectors to unlock your imagination and realize your ideas. From design to production, from teamwork to independent creation, this course cultivates children's environmental awareness, unlocks their creativity, and enhances their problem-solving skills, transforming them from toy consumers into creative designers.

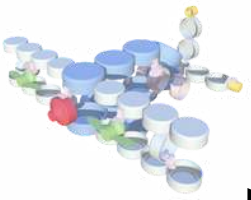
创意建构类

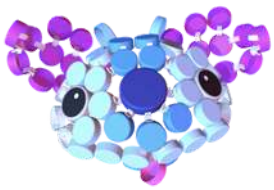
瓶盖百变建构

创意建构 Creative Construction　环保再利用 Eco-friendly Reuse

利用最普通的材料完成非凡的创意，关爱地球、永续发展，利用可回收的瓶盖加上瓶盖连接件，实现自己的3D创意设计，接口可以兼容乐高型积木，有很强的延展性，和家里的玩具结合使用，继续深化创意。

Use the most ordinary materials to achieve extraordinary creativity. Care for the earth and promote sustainable development by using recyclable bottle caps along with bottle cap connectors to realize your 3D creative designs. The connectors are compatible with LEGO-style blocks, offering high versatility and allowing for integration with household toys to further deepen creative possibilities.



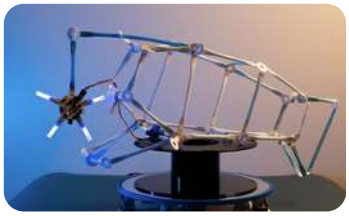


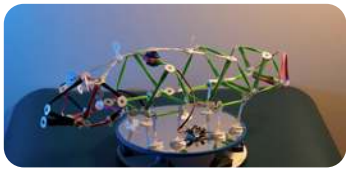
吸管创意建构

创意建构 Creative Construction　环保再利用 Eco-friendly Reuse　工程建构 Engineering construction

以 “情景导入 + 动手制作 + 拓展游戏” 为核心教学模式。采用可重复使用的吸管与连接件，低结构设计让幼儿轻松上手，高年级学生还可搭配电子元件创作。课程全方位培养孩子的空间想象力、动手能力与工程创造力，在趣味搭建中提升问题解决能力，覆盖多类经典儿童教育主题，适用年龄广泛，让孩子在实践中探索建构乐趣。

It adopts the core teaching model of "situational introduction + hands-on creation + expansive games". Using reusable straws and connectors, its low-structured design makes it easy for young children to get started, while older students can further incorporate electronic components for creation. The course comprehensively fosters children’ s spatial imagination, hands-on ability and engineering creativity, enhances their problem-solving skills through fun construction, and covers various classic early childhood education themes. With a wide age range, it allows children to explore the joy of construction in practice.



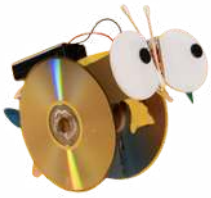


创意机器人

电子电路 Electronic and Circuit　创新创意 Innovation and Creativity

利用电源与电机，并借助生活中的一些简单材料制作一个有趣的破烂变形机器人。
原理：电池给减速电机供电，减速电机带动变形机器人的动力件转动，变形机器人的动力件与地面间的摩擦力，让变形机器人向前行进。

Create an interesting junk-transformation robot by using a power source, motor, and simple materials.
Principle: The battery powers a geared motor, which drives the robot’ s moving part. The friction between the moving part and the ground propels the robot forward.

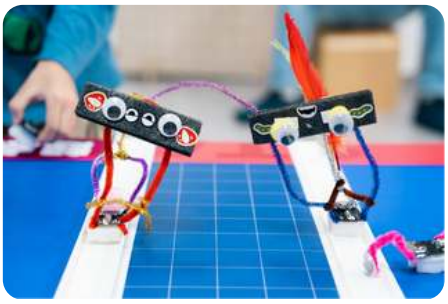


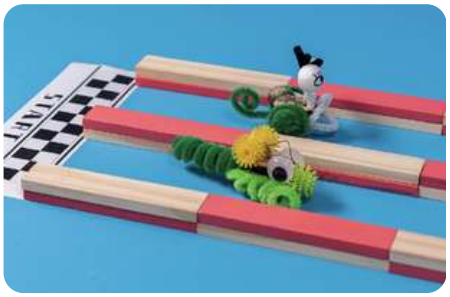
牙刷机器人(A阶+B阶)

电子电路 Electronic and Circuit　振动马达 Vibration Motor

利用振动马达、电容、开关等电子元器件设计与制作牙刷机器人，参与牙刷机器人大挑战，学习科学原理，解锁科技创造力。

Design and create toothbrush robots using components such as vibration motors, capacitors, and switches. Participate in the toothbrush robot challenge to learn scientific principles and unlock technological creativity.





创意机器人类

战斗机器人

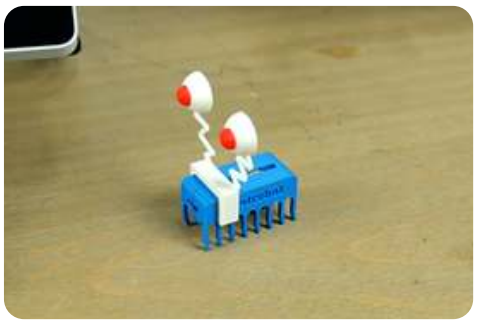
电子电路 Electronic and Circuit　创新创意 Innovation and Creativity

本课程将教授学生如何通过一个小的3D打印战斗机器人项目来创建自己的简单战斗机器人。学生们可以装饰、修改并用这些简单的机器人进行战斗。在建造这些令人敬畏的战斗机器人时，学生们将学习3D设计、3D打印和基本电子学！
非常适合激发年轻创客的创造力和STEM技能！

This course will teach students how to create their own simple battle robots through a small 3D-printed combat robot project. Students can decorate, modify, and battle with these straightforward robotic creations.While building these awesome fighting robots, students will learn about 3D design, 3D printing, and basic electronics!
Perfect for inspiring creativity and STEM skills in young makers!

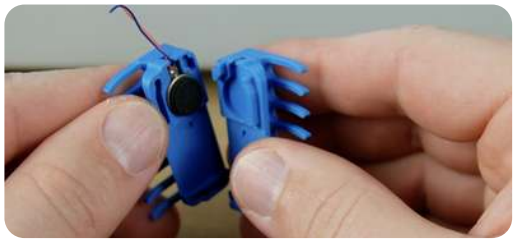
3D打印振动机器人

3D打印 3D Printed　振动马达 Vibration Motor



一款通过3D打印打造的微型机器人，搭载震动马达与脉冲电池模块，通电后会产生独特的抖动与跳跃运动，仿佛拥有“生命脉冲”。孩子们在组装过程中可以了解简单的机械运动原理与电子控制方式，激发他们对机器人与工程的兴趣。

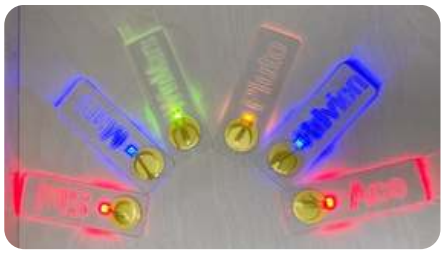
A micro robot crafted through 3D printing, equipped with a vibration motor and pulse-powered battery. Once activated, it jitters and hops with rhythmic motion, mimicking a “living pulse.” Through hands-on assembly, kids explore basic mechanical motion and electronic control, sparking curiosity in robotics and engineering.



可穿戴电路

时尚科技 Tech & Fashion　创意电子 Creative Electronics

*LED名牌



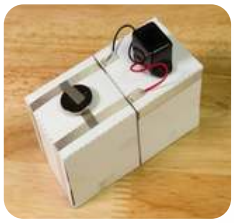
本系列集合了多个融合科学、技术、工程、艺术与数学的综合实践项目。通过动手搭建、编程控制、创意设计等方式，引导孩子们在真实问题中探索知识，培养跨学科思维、解决问题能力与创新意识。项目内容丰富多样，适用于多年龄段的STEAM教学与创客教育场景。

This series brings together a wide range of hands-on projects that integrate Science, Technology, Engineering, Art, and Math. Each project encourages students to explore real-world problems through building, coding, and creative design—developing interdisciplinary thinking, problem-solving skills, and innovation. Ideal for STEAM education and maker-based learning across various age groups.

*LED帽子

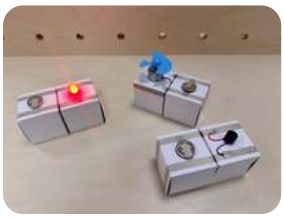
几何跃动电路

电子探索 Electronic Exploration　模块电路 Modular Circuits



这是一套将电子元件与几何模块结合的互动电路教具。每个几何盒子内含不同电子组件（如马达、LED、蜂鸣器等），通过电路连接可实现“亮起来”、“转起来”、“响起来”等多种动态反应。孩子们可自由组合、测试与探索，培养逻辑思维、电子知识与系统搭建能力。

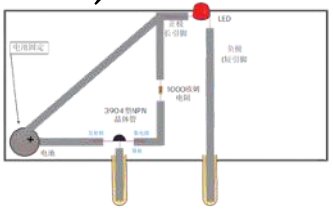
An interactive circuit learning kit that integrates electronic components into geometric modules. Each cube contains a unique element—like a motor, LED, or buzzer—that responds with motion, light, or sound when powered. Kids can freely connect, test, and experiment, developing logical thinking, circuit knowledge, and system-building skills.

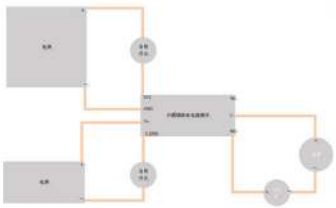


创意电路

平面电路实践探索(基础版 / 模块版)

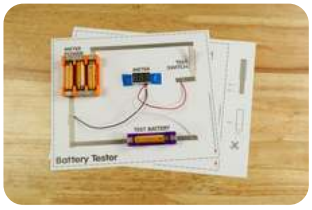
时尚科技 Tech & Fashion　创意电子 Creative Electronics

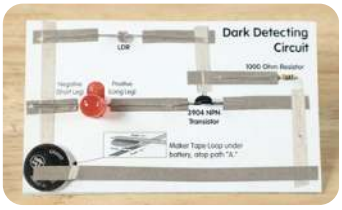




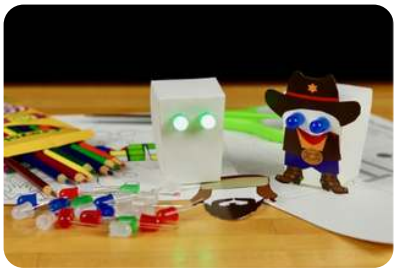
本课程分基础与模块双阶段，带领青少年循序渐进掌握电路知识。打破传统电路搭建的枯燥模式，以趣味纸质载体 + 模块化组件为核心，让青少年在玩中学电路！在趣味实践中夯实电路基础，提升创新与工程实践能力。

This course consists of two stages: basic and modular, guiding teenagers to gradually master circuit knowledge. It breaks the boring pattern of traditional circuit construction, with interesting paper-based carriers and modular components as the core, allowing teenagers to learn circuit knowledge through play! Through interesting practices, teenagers can solidify the foundation of circuits and improve their innovative and engineering practical abilities.





创意电路之机器人伙伴



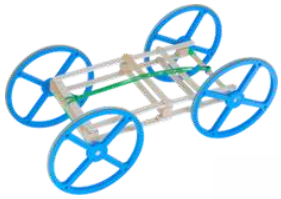
时尚科技 Tech & Fashion　创意电子 Creative Electronics

《创意电路之-机器人伙伴》是一场充满创意与科技感的动手实践活动。孩子们将在活动中学习基础电路与简单机械结构的原理，运用电机、电池、导线等元件，亲手制作属于自己的小机器人伙伴。通过设计与组装，让孩子们在轻松有趣的氛围中，提升动手能力、逻辑思维与创新意识，感受机器人世界的无限魅力。

Creative Circuits: Robot Buddy is a hands-on activity full of creativity and technological fun. Children will learn the basic principles of circuits and simple mechanical structures while using components like motors, batteries, and wires to build their very own robot buddy. Through design and assembly, they’ ll improve their hands-on skills, logical thinking, and creativity in a relaxed and enjoyable environment, experiencing the endless charm of the world of robots.

多元STEAM实践

创客项目 Maker Projects　跨学科学习 Interdisciplinary Learning



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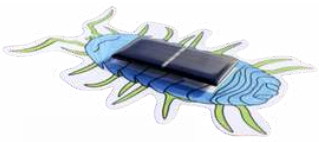
This series brings together a wide range of hands-on projects that integrate Science, Technology, Engineering, Art, and Math. Each project encourages students to explore real-world problems through building, coding, and creative design—developing interdisciplinary thinking, problem-solving skills, and innovation. Ideal for STEAM education and maker-based learning across various age groups.

太阳能主题小动物

创意电子 Creative Electronics　跨学科学习 Interdisciplinary Learning



“太阳能主题小动物” 是一门融合趣味手工、科学探究与清洁能源知识的实践课程！专为热爱动手、好奇自然与科技的学生设计，通过搭建 “太阳能虫 2.0”“太阳能爬行动物 / 两栖动物” 创意套件，让学生在亲手组装、测试探索中，直观感受太阳能转化为机械能的神奇过程，解锁清洁能源的基础原理。

"Solar-Powered Animal Kits" is a practical course that integrates fun crafts, scientific inquiry, and clean energy knowledge! Designed specifically for students who love hands-on activities and are curious about nature and technology, this course guides students to build creative kits like "Solar Bug 2.0" and "Solar-Powered Reptiles/Amphibians". Through hands-on assembly and experimental exploration, students will intuitively experience the magical process of converting solar energy into mechanical energy and unlock the basic principles of clean energy.

创客设计营
主题套件

科学应用营(教学套件)

科学原理 scientific principles　　应用实践 application practice

科学应用营聚焦科学原理与应用实践的深度融合。在这里，你能探秘 ChatBot AI 智能体的虚实结合原理，动手搭建支持多语言模型的专属智能体；拆解计算机运作机理，亲手搭建迷你电脑；以工程设计思维解析智慧家居逻辑，从电路设计、编程逻辑到空间布局，将草图转化为联动智能的家居方案，在原理探究与动手实践中解锁科技应用的乐趣。

The Science Application Camp focuses on the in-depth integration of scientific principles and applied practice. Here, you can explore the principles of integrating physical and virtual entities in ChatBot AI agents, and build customized agents supporting multiple language models with your own hands; disassemble the operating mechanisms of computers and construct a mini computer yourself; with an engineering design mindset, analyze the logic of smart homes—from circuit design and programming logic to spatial layout—and turn sketches into smart home solutions with integrated intelligence. Unlock the joy of technological application through principle exploration and hands-on practice.

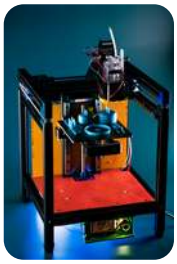
*ChatBot AI智能体

*电力探索装置

*智能气象站

*迷你电脑

*智慧家居



*自制3D打印机

*智慧农场

多元STEM主题探究

创意玩家营(教学套件)

工程探索 engineering exploration　　互动竞技 interactive competition

创意玩家营融合工程探索与互动竞技的双重魅力。在这里，你能拆解格斗机器人的功能原理，亲手设计制造并组队参与挑战赛；探秘抓娃娃机运作机制，从拆解到搭建实现专属玩具；从竹蜻蜓入门，掌握空气动力学，造出适应多环境的无人机；学习电动车原理，智造创客卡丁车并拓展创意功能。在动手探索工程奥秘的同时，通过竞技比拼释放热情，体验从设计到实战的满满成就感！

Creative Players Camp blends the dual charm of engineering exploration and interactive competition. Here, you can disassemble the functional principles of combat robots, design and build them with your own hands, then team up for challenge competitions; explore the operating mechanisms of claw machines, turning disassembly into building your exclusive toy; start with bamboo dragonflies to master aerodynamics and craft multi-environment-adaptable drones; learn electric vehicle principles to create maker go-karts and expand their creative functions. While exploring engineering mysteries hands-on, release passion through competitions and savor the full sense of achievement from design to actual combat!

*DIY街机游戏机

*海陆空三栖无人机

*激光切割格斗机器人

*创客卡丁车

*抓娃娃机

智能硬件创新实践课程

智能硬件 Smart Hardware　强综合性 High Comprehensiveness

本课程是一套以智能硬件为核心的跨学科PBL（项目制学习）课程体系，专为青少年及创客爱好者设计，涵盖机器人技术、物联网（IoT）、智慧生活、人工智能、自动化控制等多种内容。课程包含16个完整项目，每个项目均围绕真实场景需求展开，让学生从硬件搭建、编程开发、系统调试到功能优化，通过"设计-编程-制造-测试"完整流程，学生将掌握智能硬件开发全链路技能，体验完整的智能硬件开发流程。

This course is a cross-disciplinary PBL (Project-Based Learning) curriculum system centered on smart hardware, designed for teenagers and maker enthusiasts. It covers robotics, IoT (Internet of Things), smart living, artificial intelligence, automation control, and more. The course includes 16 complete projects, each based on real-world scenarios, allowing students to experience the full cycle of smart hardware development—from hardware assembly, programming, and system debugging to functional optimization. Through the "Design-Code-Build-Test" workflow, students will master end-to-end smart hardware development skills and gain hands-on experience in the complete product development process.

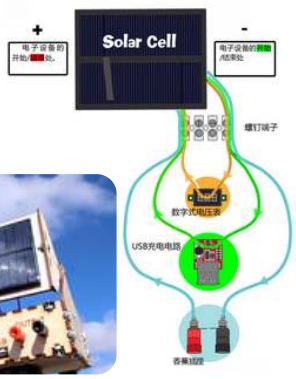
多元STEM主题探究

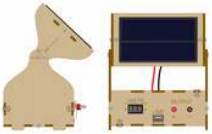
清洁能源科学站(太阳能)

清洁能源 Clean Energy　智能制造 Intelligent Manufacturing

聚焦太阳能清洁能源，依托材料清单、电路布局图、电子流向图、组装说明等文件，引导学生掌握原子结构、电路原理等知识，亲手组装太阳能科学站，探究串并联阵列的电压电流变化，测试涂层清洁度对发电效率的影响。课程贯穿环保理念，让学生理解太阳能低碳优势，树立绿色能源意识，同步提升科学实践与环保素养。

Focusing on solar energy as a clean energy source, and relying on documents including Material List (Cleanliness Level 3), Simple Circuit Layout (Heliocleanliness Level 1).pdf, Electron Flow Diagram (Heliocleanliness Level 2).pdf, and Solar Energy Science Station Assembly Instructions.pdf, this course guides students to master knowledge such as atomic structure and circuit principles. Students assemble solar energy science stations with their own hands, explore voltage and current changes in series and parallel arrays, and test the impact of coating cleanliness on power generation efficiency. The course embeds environmental protection concepts throughout, helping students understand the low-carbon advantages of solar energy, establish green energy awareness, and simultaneously improve their scientific practical abilities and environmental literacy.





智能制造工作站

3D打印工作站

智能智造 Intelligent Manufacturing　自己做玩具 DIY Toys

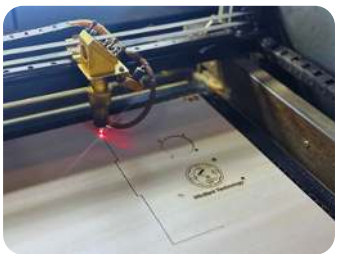
WinMars 3D 打印工作站是专为教育场景定制的创新教学工具！聚焦 STEAM 教育核心，不仅配备专属 3D 打印机，更整合了 3D 打印处理工具、处理设备及钻床、锯床等实用器械，为造物实践提供全方位硬件支持。助力开放造物教学的同时，更鼓励孩子们亲手 “造玩具”，搭配系统的三维建模课程，让创意从设计到成型无缝落地，既赋能教学，又激发学生的动手能力与创新思维。

The WinMars 3D Printing Workstation is an innovative teaching tool tailored specifically for educational settings! Centered on the core of STEAM education, it not only comes with a dedicated 3D printer but also integrates 3D printing processing tools, handling equipment, and practical machinery such as drill presses and band saws, providing comprehensive hardware support for making practices. While supporting open-ended making education (with professional teacher training and STEAM educational toy design files for educators), it encourages children to "make their own toys" with their hands. Paired with systematic 3D modeling courses, it enables seamless realization of ideas from design to completion, empowering teaching while stimulating students' hands-on skills and innovative thinking.

3D打印核心要素展板规格：
800mm*1500mm*300mm
Specification：1900mm*820mm*1275mm

激光工作站

智能智造 Intelligent Manufacturing　自己做玩具 DIY Toys



*如意纹与激光加工技术结合

WinMars 激光工作站是专为教育场景定制的 STEAM 创新教学平台！以专业激光切割机为核心设备，整合材料固定装置、安全防护工具等配套器械，为精准切割、创意建模提供安全高效的硬件支撑。搭配系统的激光切割课程，引导孩子从设计草图到材料切割、成品组装，亲手将创意转化为实体作品，既夯实技术应用能力，又激发空间设计思维与创新创造力，赋能趣味与专业兼具的造物教学。

WinMars Laser Workstation is an innovative STEAM teaching platform tailored specifically for educational settings! With a professional laser cutter as its core equipment, it integrates material fixing devices, safety protection tools, and other supporting equipment, providing safe and efficient hardware support for precision cutting and creative modeling. Paired with systematic laser cutting courses, it guides children from design sketches to material cutting and finished product assembly, enabling them to turn their ideas into physical works with their own hands. It not only solidifies their technical application skills but also stimulates spatial design thinking and innovative creativity, empowering engaging and professional making education.

*激光雕刻卡通相框

*激光雕刻世界地图

*激光雕刻机

人工智能工作站

智能智造 Intelligent Manufacturing　区域规划 Regional Planning

本人工智能工作站聚焦多元主题与智能制造，涵盖智慧农业、智能家居、机器人竞技等丰富场景。依托 Scratch、Python、Mixly 等多语言编程工具，搭配 ESP32 主控、各类传感器及结构件，实现从创意构思到实物智造的全流程落地。支持模块化拼搭、AI 模型训练与物联网联动，适配竞赛需求，让学生在动手实践中锤炼创新思维，解锁智能制造的无限可能。

This AI Workstation focuses on diverse themes and intelligent manufacturing, covering rich scenarios such as smart agriculture, smart home, and robot competitions. Relying on multi-language programming tools including Scratch, Python, and Mixly, and matched with ESP32 main controller, various sensors and structural components, it realizes the full-process implementation from creative conception to physical intelligent manufacturing. It supports modular assembly, AI model training and IoT connection, meets competition requirements, enabling students to refine their innovative thinking through hands-on practice and unlock the infinite possibilities of intelligent manufacturing.

*根据建设目标将中心划分为六个独立、功能关联的区域

*星火系列套件

*竞赛地图

*竞赛学习套件

*刷卡编程

*开源智能物联套装

创客储物柜种植架
可移动创客储物柜
创客工作桌储物柜

环境布置 Environment Creation　功能性家具 Functional Furniture

创客场景专属储物收纳套装，兼具灵活实用性与空间巧思！多功能工作台可搭配洞洞板，实现展示陈列、互动项目摆放与动手桌面多重功能，桌腿间隙还能衔接低结构建构材料，让家具融入互动场景。支持单独使用或背靠背 、端对端组合，轻松分隔开放空间、定义功能区域。储物柜提供充足收纳，高度兼顾坐姿隐私与站姿使用，可锁设计 + 植物种植空间，既安全存放物品，又添绿色生机，完美适配创客环境的存储、分隔与美化需求。

This storage and organization set is exclusive for maker scenarios, combining flexibility, practicality, and spatial ingenuity! The multifunctional workbench can be paired with pegboards, fulfilling multiple roles such as display, interactive project placement, and a hands-on work surface. The gaps between its legs can also connect low-structured construction materials, integrating furniture into interactive scenarios. Supporting standalone use or back-to-back/end-to-end combinations, it easily divides open spaces and defines functional areas. The storage cabinet provides ample space, with a height balancing privacy when seated and usability when standing. Featuring a lockable design plus plant-growing space, it safely stores items while adding green vitality, perfectly meeting the storage, division, and beautification needs of maker environments.

创客工作桌储物柜置规格：
500mm*400mm*600mm
Specification:1320mm*800mm*1360mm

可移动创客储物柜(每格)装置规格：
380mm*330mm*340mm
Specification:380mm*330mm*340mm

创客储物柜种植架(每格)装置规格：
380mm*330mm*340mm
Specification:380mm*330mm*340mm
种植架装置规格：
1140mm*200mm*340mm
Specification:1140mm*200mm*340mm

分组工作桌

墙面工具台&洞洞板

升降式创客工作桌

创客工作台

环境布置 Environment Creation　功能性家具 Functional Furniture

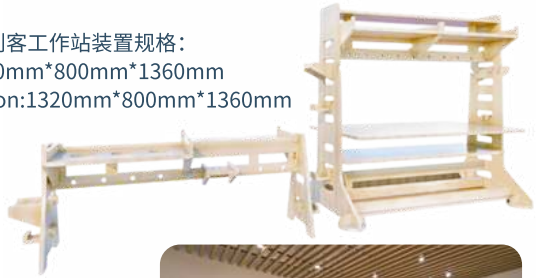
创客场景专属的多功能工作台，打造灵活互动的空间布局！可移动隔断带可锁脚轮，高度可调工作台可切换坐姿、吧台及站立高度，双人协作一分钟完成调节，坐姿状态下含实用置物架；木质创客工作站配拓展台面与滑轮，可悬挂教具、收纳工具，侧面可加装互动板，让家具融入动手实践，完美适配创客空间的分隔、办公与互动需求。

A maker-scene-specific multifunctional workbench, creating a flexible and interactive spatial layout! It features movable partitions with lockable casters. The height-adjustable workbenches can switch between sitting, bar, and standing heights—two people can collaborate to complete adjustments in just one minute, and they include a practical shelf in the sitting position. The wooden maker workstations come with expandable worktops and pulleys, allowing hanging of teaching aids, tool storage, and addition of interactive boards on the side. Integrating furniture into hands-on practice, they perfectly meet the partitioning, office, and interaction needs of maker spaces.

分组工作桌装置规格：
1100mm*705mm*1000mm
Specification:1100mm*705mm*1200mm

墙面工具台&洞洞板装置规格：
1500mm*35mm*800mm
Specification:1500mm*35mm*800mm

创客工作站装置规格：
1320mm*800mm*1360mm
Specification:1320mm*800mm*1360mm



升降式创客工作桌装置规格：
1100mm*705mm*1200mm
Specification:1100mm*705mm*1200mm

创客工作台
A款规格：
1200mm*800mm*1200mm
Model A Specification：1200mm*800mm*1200mm
B款规格：
1200mm*800mm*1500mm
Model B Specification：1200mm*800mm*1500mm

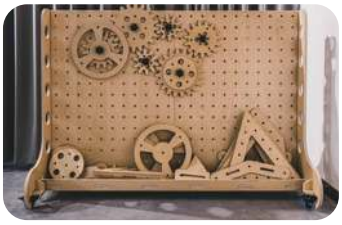
书写板(屏风板)
可移动墙洞洞板
可移动磁力墙
可移动展示墙

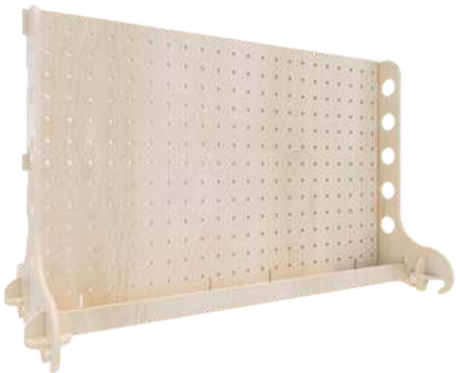
环境布置 Environment Creation　功能性家具 Functional Furniture

多功能书写板可移动隔断带可锁脚轮，支持多件组合成隔断墙，提供白板、看板、桦木三种配置，兼具书写记录、任务管理与展示功能。一款易于移动的创客工具展示墙，适用于多种教学与创作空间。可板面带有标准洞洞板孔位，可搭配挂钩、支架等配件，自由挂放工具、材料或学生作品。底部配有托盘，用于临时摆放模型、小件物品等，便于整理和展示。

This multifunctional writing board serves as a movable partition with lockable casters, supporting combination of multiple units into a partition wall. It comes in three configurations: whiteboard, bulletin board, and birch, integrating functions of writing/recording, task management, and display. As an easily movable maker tool display wall, it suits various teaching and creative spaces. The board features standard pegboard holes, compatible with accessories like hooks and brackets for freely hanging tools, materials, or students' works. A tray at the bottom allows temporary placement of models and small items, facilitating organization and display.

书写板(屏风板)装置规格：
2000mm*1113mm*610mm
Specification:2000mm*1113mm*610mm

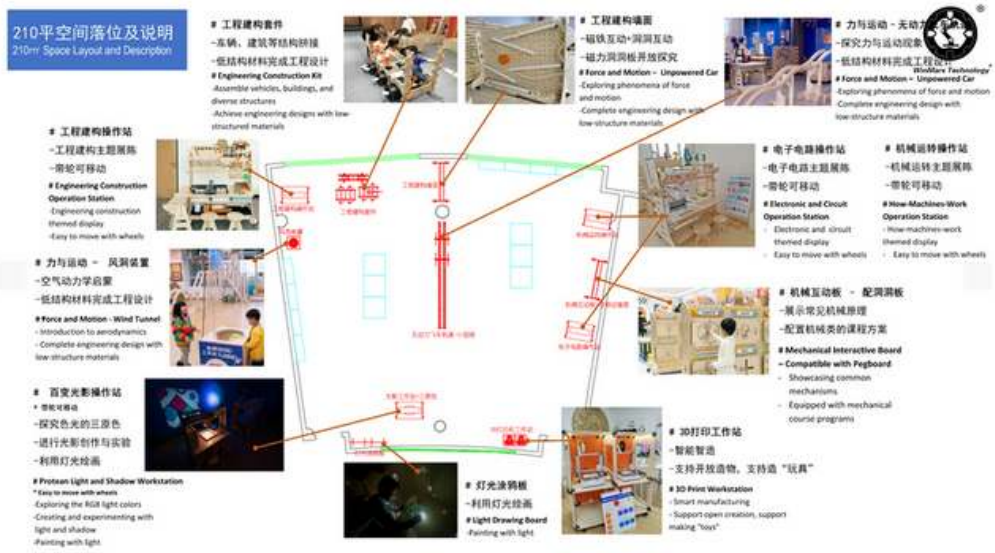


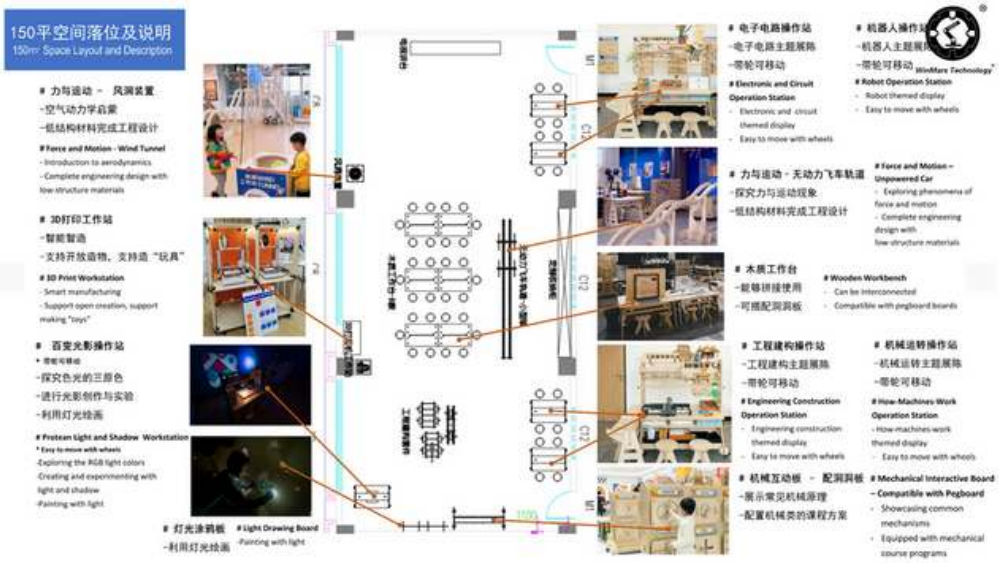


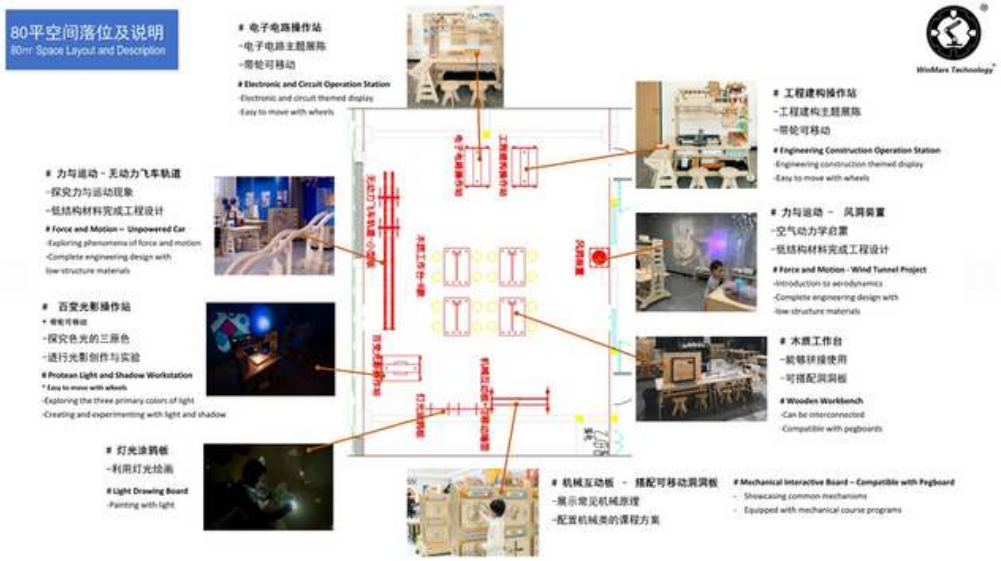
可移动墙装置规格：1900mm*820mm*1275mm
Specification: 1900mm*820mm*1275mm

*多用途的可移动墙，打破固定思维
助力创客空间的创造力表现

创客项目与家具空间落位图







定制化创客空间

在这个飞速变化的时代，

未来属于那些具备创造力、解决问题能力和持续学习力的人。

我们创立 WinMars，

不仅是为了教孩子“做”一个作品，

而是希望通过一个个项目，

培养他们成为拥有成长型思维的终身学习者和创造者。

我们关注的不只是作品是否成功，

而是孩子有没有学会独立思考、敢于提问、勇于尝试。

我们在意的不只是知识的传授，

而是通过一次次试错与探索，

让孩子意识到：“我可以做到。”

在WinMars MakerSpace，

每一个孩子，都是未来世界的缔造者。

我们做的不只是教育，

我们在赋能未来。

——Mars老师

WinMars Technology

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13816882364 Mars 老师
17721330429 Pluto 老师

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