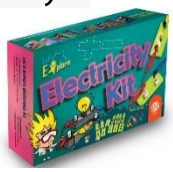
Sci-Center Product Singapore

Let's Explore Kits

Product	Product Description
❶ Simple Machine 	Learn how different machine can help you expand your force through pushing or pulling. Explore the activities in this kit to find out how this is possible.
❷ Air Kit 	Air is invisible, but it still is all around us! It serves many purposes in life. Air keeps fire burning, while moving air powers windmills. Learn the importance of air and its functions with the new 'Let's Explore' Air Kit.
❸ Magnetism Kit 	This kit enhances the child' s understanding of magnetism and the properties of magnets. The guided inquiry helps the child make sense of how magnets behave and their interaction with other materials. The exploration is progressive, fun and challenging.
❹ Electricity Kit 	Learning the key concepts of Electricity can be baffling! This kits enables students to understand how electric circuits work and what affects the flow of current. The guided inquiry helps children learn independently at their own pace, in a fun and challenging way.
❺ Fun with Shadow Kit 	Discover the mystery of shadows using the Let's Explore Fun with Shadows Kit as children learn to observe their own shadow and find out how many shadows they might have. Further exploration will lead children to discern if shadows appear at night and whether they change in size and shape. This kit is specifically designed to help children understand the changes in the length of a shadow cast by an object or a person, as the sun "moves" across the sky at different times of the day; and discover how the length of a person' s shadow changes as he/she walks towards or away from a light source.

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❻ My First Lab on Water Filtration 	Children get to learn and understand how to clean muddy water using a simple water filtration column. **Learning Outcomes:** – Understand simple mechanical filtration of water – Develop a greater appreciation for the clean water we get through our taps – Learn the importance of keeping waterways clean
❼ My First Lab on Volcanic Eruption (New) 	Children get to experience a “volcanic eruption” before their very own eyes while learning about chemical reaction. **Learning Outcomes:** – Understand how a volcano erupts – Learn about the effect and impact of a volcanic eruption – Appreciate the geographic location of Singapore on earth After doing the experiments a few times, the coloured sodium bicarbonate powder and white citric acid powder will be used up. You can replace them with the following items which are commonly found in the kitchen or easily obtainable at the supermarket: – Baking powder to replace the coloured sodium bicarbonate powder (red food colouring can be added to enhance it) – Vinegar to replace the white citric acid powder
❽ My First Lab on Magnetism 	“Let’s Explore” My First Lab Kit on Magnetism, is a scaled down version of the original “Let’s Explore” Magnetism Kit. This kit sis designed to guide children as they discover fascinating properties of magnets, through the guided explorations in the kit. The assortment of magnets included in the kit allows children to further explore on their own, the concepts and uses of magnets through creative and meaningful play.
❾ My First Lab on Electricity 	“ Let’ s Explore” My First Lab Kit on Electricity, is a scaled down version of the original “ Let’ s Explore” Electricity Kit. This kit is designed to guide a child in learning the basic concepts of electricity. The child will begin by learning what a simple electric circuit is and what the functions of its components are. The child is then guided to construct slightly more complex circuits and discover their properties.

STaR Kits

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① Mystery Spongee 	The purpose of Mystery SPONGEE is to help students develop an understanding of the nature of science through a collaborative process of creating knowledge based on observations and inferences. Each Mystery Spongee is accompanied with a user manual that details a list of experiments.
② Magnetism Kit (New) 	The purpose of this Magnetism Kit is to help students develop an understanding of the properties of a magnet and its uses in our daily life. Through the guided inquiry and hands-on activities, students will discover that: • Magnets are made from only iron and steel • A magnet can attract only magnetic objects • When suspended freely, a magnet hangs in the North-South direction • A magnet has two poles — North and South. • A magnet can exert a force – it can attract (pull) or repel (push) • Like poles (N & N; S & S) repel; opposite poles (N & S; S & N) attract • The strength of a piece of magnet is strongest at its two poles • The magnetic force cannot pass through a piece of metal • A temporary magnet could be made by stroking and using electricity • Much of our daily equipment is based on magnetic force
③ Holey Moley 	Are you finding it hard to teach Stoichiometry? Well, the Holey Moley Kit might be just what you need. Designed as a board game based on the popular “ Snakes and Ladders” , Holey Moley can help provide a clearer understanding of the mole concept, atomic structure and stoichiometry. Up to five players can simultaneously use the Holey Moley kit. It includes cards, chips, a die and answer sheets so that students can challenge each other revising for the next Chemistry test – studying has never been more fun!
④ Light Box Kit 	The purpose of the Light Box Kit is to help pupils discover how shadows are produced and the variables that affect their formation.

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⑤ Density Kit 	The Density Kit helps students explore the concept of density by comparing different materials and their ability to sink or float in water. Each Density Kit is accompanies with a user manual that details a list of experiments.
⑥ Friction Kit 	Friction is a force that opposes the movement of a sliding object. Friction can be found everywhere around us, in places where objects come in contact with each other. The experiments in this kit allow students to explore how frictional force affects the movement of objects with different mass, surface area and surface roughness. Teachers can guide students to explore the factors that influence the frictional force between two objects, through the inquiry based learning exercises and accompanying lessons plans. This kit consists of experiments with different wooden block surfaces, weights and a simple pulley system.
⑦ Shadow Arc Kit (New) 	The Shadow Arc Kit simulates a sundial and allows to measure the length of the shadow of an object when light is shone from different angles along the same plane. Students can then visualise how the length of a shadow changes when the incident angle of the light source is varied. They can then relate it to sunlight in the daytime. This kit also clears misconceptions that young learners have on the direction of shadows formed in relation to a light source.
⑧ Heat Kit 	The purpose of the Heat Kit is to help students explore the concept of heat conduction and learn more about the type of materials that make good conductors. Each Heat Kit is accompanied with a user manual that details a list of experiments.
⑨ Stability Kit (New) 	Students will learn how the stability of an object is affected by its base area and centre of gravity while using this kit. The activities will help build their understanding of the centre of gravity as a fundamental concept in the design of buildings and bridges. With this kits, students will clear misconceptions that they have such as: • There is more than one centre of gravity. • The centre of gravity is always at the centre of an object. • The centre of gravity cannot exist outside the base area of an object. • An object that is in a state equilibrium will return to its original position after being given a small displacement. • An object that is stable has its centre of gravity and the line of action for its weight within its base area.

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⑩ EBlocks Electricity Kit (New) 	The EBlocks Electricity Kit represents a novel method for students to form electrical circuits to explore the flow of current. The modular blocks allow students to explore the different outcomes of various permutations of circuit layout in a user friendly manner without the hassle of using stiff crocodile clips or needing to strip off the insulation wires. The activities within the kit encourage students to think and form rational explanations to describe the outcome in circuit layouts.
⑪ Periodic Table Kit (New) 	Students challenge each other in this card game similar to UNO, where they learn to make connections between Chemistry concepts and obtain a better understanding of the periodic table.