




CHILDREN'S DISCOVERY

PRODUCTS



*Where Play
Inspires Lifelong
Learning*

FOR MORE INFO:
www.childrensdiscovery.org.au
CONTACT:
info@childrensdiscovery.org.au

 @childrensdiscovery
 @chldrns_dscvry
 chldrns_dscvry



Children's
Discovery
where play inspires lifelong learning

CATALOGUE

LITTLE BANG DISCOVERY®

LITTLE BANG DISCOVERY CLUB®
LITTLE BANG BOOK OF DISCOVERY
LITTLE BANG DISCOVERY ON DEMAND
LITTLE BANG DISCOVERY PLUS

BIG BANG SCIENCE

BIG BANG BOOK OF SCIENCE
BIG BANG WORKSHOP KITS

SPARK! STEM-THEMED BOXES

SPARK! DISCOVERY
SPARK! JUNIOR
SPARK! TECHNOLOGY
SPARK! CURIOSITY

PRICE LIST/ORDER FORM



“Hi Adam,
We love your kits! We have
been trying to introduce
science experiences into
our libraries and find it
a challenge to provide
appropriate support for
non-science staff to deliver
programs. Your kits fill a gap
for us – thanks!”

Suzy Arthur-Smith, Richmond Tweed
Regional Library

Contents of Discovery and Spark sets are subject to availability and may be substituted. Guides and Information sheets are regularly updated to reflect content changes and other improvements. All written materials are provided.

Our Mission

We seek to improve outcomes for children by creating opportunities for children and their families to engage in life-long learning experiences, that encourage curiosity, creativity, communication, collaboration and a can-do attitude.



LITTLE BANG[®] DISCOVERY CLUB

The *Little Bang Discovery Club*[®] is designed around the interests and skills of children at pre-school and lower primary age. Children are accompanied by adult ‘co-discoverers’ who encourage them to be **curious**, to **try things** out for themselves and to **communicate** their discoveries.



Little Bang Discovery Club
Passport and Certificate

There are **four facilitated sessions**, each building from ideas of the previous, which develops the pathway for genuine scientific enquiry. Each child also has use of a **Discovery Box**, containing tools and materials that they will use throughout the program. The *Little Bang Book of Discovery* provides ideas for further discovery at home.

The aim of the *Little Bang Discovery Club*[®] is to provide enough “how to” that allows children to continue to explore and develop their understanding about the world around them. Activities experienced during each session can be safely replicated at home.

Little Bang[®] is designed to be engaging for both children and accompanying adults. Key features include the hands-on ‘table-top’ explorations, question and answer time and the **Discovery Box** and book loaned to each child for the duration of the Club.

A Discovery Club Passport is also provided to each child and stamped after each session, with a ‘graduation ceremony’ following a science fair in the final session. The program is divided into the following sessions:

SESSION 1: COLLECTING & CLASSIFYING

Making discoveries and thinking scientifically begins with the simple task of looking, collecting and sorting things. In this first session we learn about collecting and sorting and how classifying helps us make sense of our world.

SESSION 3: EXPERIMENTING

Experimenting always starts with a question, like “What happens when...?”. We learn how to ask the sort of questions we can answer with an experiment. There are experiments to try during the session to give you ideas for your own experiments to do at home.

SESSION 2: MEASURING & RECORDING

In this session we learn all about measuring – one of the first and most important skills of being a good discoverer. We learn to use measuring tools, make some of our own and learn good ways to record our data.

SESSION 4: SCIENCE FAIR & GRADUATION

In the final session participants take part in their very own science fair to share their discoveries. The session includes more experimenting and concludes with a graduation ceremony where each child receives a certificate.



LITTLE BANG[®] DISCOVERY BOX

Little Bang Discovery Club[®] is designed around each participating child having access to a Discovery Box for the duration of the program.

Items are used throughout the course with further investigations encouraged at home between sessions. Individual items may also be purchased.



DISCOVERY
BOX



“Little Bang Discovery Club is still being embraced by families in our district. We have just finished our #10th club! Term 3 will be offering #11 which looks like being booked out at this stage. It is a testament to what a fantastic program it is!”

JM, Cummins School Community Library



LITTLE BANG[®] DISCOVERY CLUB FACILITATOR SET

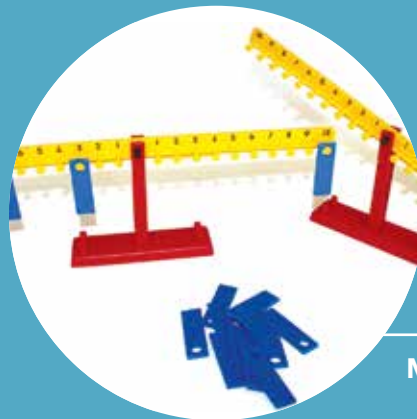
The *Little Bang Discovery Club*[®] facilitator set contains all the essential items to run your own program. Included in the set are materials for each session; including items for **sorting**, sample **collections**, items for **measuring** and **recording**, and materials to show **experiments** that allow fair test **comparing**.

The set includes the Table-Top science encounters that allow participants to explore natural phenomena; such as sound, balance, air and magnets. Sets of 'guides' are provided so that these items can also be used for science fairs and other events.

As well as all these materials, the facilitator set includes digital copies of instruction sheets, user guides, workshop plans and access to on-line videos for training.



COLLECTING &
CLASSIFYING



MEASURING &
RECORDING



EXPERIMENTING



SCIENCE FAIR &
GRADUATION



LITTLE BANG[®] BOOK OF DISCOVERY

Young children are natural scientists, inquisitive and curious. This book is full of engaging experiments that can be safely and easily conducted at home using items that are already on hand. Designed specifically for children aged between three to eight years, the *Little Bang Book of Discovery* encourages children to make their own discoveries through observation, investigation and experimentation.

LITTLE BANG[®] DISCOVERY ON DEMAND

This four-video set comes with adapted workshop plans and equipment lists which allows families to participate from home. Host on your own server or provide private links to your YouTube channel. Adaptions include showing families how to put together their own Discovery Box using items commonly found in the home, or readily available from the grocery shop.

Perfect for isolated learning!



“Hi Adam and Wendy,
Thank you so very much for
the videos. These are just
brilliant - just what we needed
for our on demand section of
our website.”

JH, Logan City Library



LITTLE BANG DISCOVERY® PLUS FACILITATOR SET

Little Bang Discovery Plus is the extension program for those who have completed the original *Little Bang Discovery Club* and want to do more! Building on the experiences, knowledge and skills gained in the *Little Bang Discovery Club*, this facilitator set contains the materials for continuing **eight sessions** of discovery to develop science skills further. Each session includes new equipment and experiments to do, and investigations to explore at home. The Discovery Plus Box contains new items for children to explore these new topics.

LITTLE BANG DISCOVERY® PLUS BOX

The Discovery Plus Box provides each child participating in *Little Bang Discovery Plus* with their own set of tools and materials for the new eight-part series. Includes items such as a Discovery Diary, measuring cylinder, pedometer, electronic balance, and various timers - it's a treasure box of discovery tools!

**BIG
BANG**

BIG BANG BOOK OF SCIENCE

The *Big Bang Book of Science* has 24 of our favourite science workshops for children aged 5 to 12, in two volumes. You can also buy workshop kits which include reusable equipment and consumables that you will use the first time you run the workshop (except for perishable and common stationery items). These workshops are designed so that consumables are easy to replenish from local sources.



Our two volumes of the *Big Bang Book of Science*

BIG BANG WORKSHOP KITS

FOR 5-8 YEAR OLDS*

Air All Around Us

Get blown away in the investigation of the invisible as you discover everything about the air all around us, and make a tornado in a bottle to take home.

All About Plants

Explore the fascinating world of plants as you create a leaf rubbing, press flowers and leaves, and design a growth experiment to continue at home.

Balancing the Improbable

Explore the science of balancing through a series of 'centre of mass' experiments, and make your own gravity-defying Wacky Wobbler to take home!

Dino Doings

Join palaeontologists in exploring the prehistoric world of dinosaurs through fossils and make a fizzy dinosaur egg to take home!

Eggsperiments

Eggsperiment with major ideas in physics, chemistry and biology and explain everyday phenomena using the humble egg!

I Like to Move It

(Linked to Early Stage 1 Science and Technology Curriculum) Discover what it really takes to 'move it' like the cast of *Madagascar* and use this to impress your family and friends with a clever physics trick.

Magic Magnets

Discover which materials cannot escape a magnet's powers of attraction, and make a magnetic fishing game to take home.

Sounds of Silence

(Linked to Stage 1 Science and Technology Curriculum) Lend your ears to the exploration of sound through a series of hands (and ears) on sound experiments and make your own sound maker (kazoo) to take home.



BIG BANG BOOK OF SCIENCE WORKSHOP KITS

FOR 9-12 YEAR OLDS*

Air Ball Basketball

Sport meets science in this creative construction workshop as you explore the nature of air and how it behaves, and construct an Air Ball Basketball device to take home.

Awesome Astronomy

Explore all things lunar as you make your own phases of the moon model to take home and test your critical thinking skills in a moon survival challenge!

Chemistry Lab

Investigate liquids that mix, those that are not so friendly and those that break up the party with simple experiments you can repeat at home.

DNA Extraction

Crack the genetic code as you extract DNA from the cells of various fruits and investigate how genetic traits are inherited.

Feel the Pressure!

Investigate the invisible as we explore the incredible effects of air pressure, and make a Cartesian Diver to take home

Kitchen Chemistry

Combine your inner chemist and chef as we explore clever chemistry experiments you can do at home, using common kitchen cooking ingredients and household items.

May the Force Be With You

(Linked to Stage 2 Science and Technology Curriculum) Find 'the force' in your everyday life and use it to impress your family and friends with some clever tricks.

Potato Clock

Discover how electric circuits and batteries work by experimenting with electrical conductors and power a digital clock with a potato!

See Light in a New Light

(Linked to Stage 3 Science and Technology Curriculum) Experience light like never before as you experiment with light and how it behaves, and make a shadow puppet to take home.

Tricks of the Eye

Blink and you'll miss this intriguing workshop exploring visual illusions and how we view the world, and make a thaumatrope to take home.

FOR 5-12 YEAR OLDS*

Our Amazing Bodies

Put your body to the test through a series of fun, but challenging activities that explore the seven senses and use your melon to examine the efficacy of helmets.

Science of Sherbet

Explore the sometimes explosive effects of acid-base reactions to discover how sherbet tingles your tongue, and make your own to take home.

Slime

Don't get squeamish as you use your hands to explore all things slimy, including creating an awesome guar gum slime to take home.

Unbelievabubbles

Mix like a chemist as you make your own bubble mixture and use your scientific investigation skills to help you master the art of Bubbleology.

Water Works

Try to stay dry as you discover how the wonderful water molecule works and all the tricks it performs in this challenge-based workshop.

Wind Things

Explore the science of flight through a series of construction activities, including a working model wing, a whirligig and a paper plane to take home.

* The workshop activities described are for 60-minute sessions for up to 25 children. Most workshops can be adapted to run for different times and to suit different age groups.



BIG BANG KIT EXAMPLES

Balancing the Improbable



Dino Doings



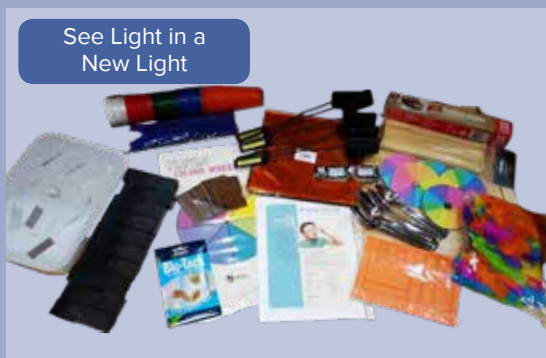
Magic Magnets



Eggsperiment



See Light in a New Light



All About Plants



Slime



Awesome Astronomy





BIG BANG BOOK EXAMPLES

1 **IS ANYTHING EVER REALLY EMPTY?**
FOR AGES 5-8

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

1 **DO YOU HAVE A GREEN THUMB?**
FOR AGES 5-8

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

2 **BALANCING THE IMPROBABLE**
FOR AGES 5-8

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

2 **JURASSIC EXPERIENCE**
FOR AGES 5-8

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

3 **EGGSPERIMENTS**
FOR AGES 5-8

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

4 **I LIKE TO MOVE IT**
FOR AGES 5-8

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

3 **MAGIC MAGNETS**
FOR AGES 5-8

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

4 **LET'S MAKE A SOUND**
FOR AGES 5-8

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

5 **AIR BALL BASKETBALL**
FOR AGES 9-12

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

6 **AWESOME ASTRONOMY**
FOR AGES 9-12

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

5 **CHEMISTRY LAB**
FOR AGES 9-12

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

6 **DNA EXTRACTION**
FOR AGES 9-12

KEY MESSAGES

EQUIPMENT

COMPLETIONES

EXTENSION

BIG BANG BOOK EXAMPLES

7 **FEEL THE PRESSURE**
FOR AGES 9-12

EVER FEEL LIKE YOU'RE UNDER PRESSURE?



KEY MESSAGES

- AIR PRESSURE IS ALWAYS PRESENT AND ALWAYS TENDS TO EQUALIZE. PUSHING DOWN ON THE LIQUID PRESSURE.
- AIR PRESSURE CAN EXERCISE INFLUENCE IN SOME VERY TINY WAYS.
- AIR IS MORE DENSE COMPRESSED THAN UNITS.
- AIR PRESSURE AFFECTS HOW WEIGHT THINGS ARE.

EQUIPMENT

- 1 Glass
- 1 Straw
- 1 Spoon
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Glass
- 1 Straw
- 1 Spoon
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the straw float in the water.
- Try to make the straw sink in the water.

8 **KITCHEN CHEMISTRY**
FOR AGES 9-12

THE KITCHEN ISN'T ONLY FOR COOKING!



KEY MESSAGES

- CHEMISTRY IS THE SCIENCE OF MATTER AND HOW IT BEHAVES AS AN ATOM OR MOLECULE.
- CHEMISTRY IS THE SCIENCE OF MATTER AND HOW IT BEHAVES AS AN ATOM OR MOLECULE.

EQUIPMENT

- 1 Glass
- 1 Spoon
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Glass
- 1 Spoon
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the mixture change color.
- Try to make the mixture change texture.

7 **MAY THE FORCE BE WITH YOU**
FOR AGES 9-12

EXPLORE THE LAWS OF FORCE



KEY MESSAGES

- A FORCE CAN BE DESCRIBED AS A PUSH OR PULL ACTION.
- APPLYING A FORCE TO AN OBJECT CAN CHANGE ITS MOTION, WHICH IS DESCRIBED BY THE SPEED AND DIRECTION OF THE OBJECT'S MOTION.

EQUIPMENT

- 1 Paper
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Paper
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the paper airplane fly for a longer time.
- Try to make the paper airplane fly in a different direction.

8 **POTATO CLOCK**
FOR AGES 9-12

FASCINATION ABOUT THE HUMBLE SPUD



KEY MESSAGES

- POTATOES ARE THE FLESH OF TUBER TUBERS.
- THE POTATO CLOCK IS ONE OF THE SIMPLEST AND MOST ACCURATE TIMEKEEPERS.

EQUIPMENT

- 1 Potato
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Potato
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the potato clock run for a longer time.
- Try to make the potato clock run in a different direction.

9 **SEE LIGHT IN A NEW LIGHT**
FOR AGES 9-12

WHAT LIGHT THROUGH YOUR WINDOW BREAKS?



KEY MESSAGES

- LIGHT TRAVELS IN A STRAIGHT LINE UNTIL IT HITS AN OBJECT.
- LIGHT CAN BE REFLECTED AND REFRACTED.

EQUIPMENT

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the light change color.
- Try to make the light change direction.

8 **TRICKS OF THE EYE**
FOR AGES 9-12

LOOK DEEP INTO MY EYES AND TELL ME WHAT YOU SEE



KEY MESSAGES

- THE IMAGE OF THE EYE AND EYE OF THE MIRROR IS THE SAME SIZE AND DISTANCE.
- IMAGES ARE ALWAYS THE SAME SIZE AND DISTANCE.

EQUIPMENT

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the image change color.
- Try to make the image change direction.

10 **OUR AMAZING BODIES**
FOR AGES 9-12

THE HUMAN BODY IS THE WORLD'S GREATEST MACHINE!



KEY MESSAGES

- THE HUMAN BODY IS A COMPLEX MACHINE.
- THE HUMAN BODY IS A COMPLEX MACHINE.

EQUIPMENT

- 1 Paper
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Paper
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the skeleton change color.
- Try to make the skeleton change direction.

10 **SCIENCE OF SHERBET**
FOR AGES 9-12

LET'S MAKE IT FIZZY



KEY MESSAGES

- SHERBET IS A SWEET AND TASTY TREAT.
- SHERBET IS A SWEET AND TASTY TREAT.

EQUIPMENT

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the sherbet change color.
- Try to make the sherbet change direction.

11 **SLIME**
FOR AGES 9-12

THE NAME SAYS IT ALL!



KEY MESSAGES

- SLIME IS A NON-NEWTONIAN FLUID.
- SLIME IS A NON-NEWTONIAN FLUID.

EQUIPMENT

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the slime change color.
- Try to make the slime change direction.

12 **UNBELIEVABLE BUBBLES**
FOR AGES 9-12

DON'T BURST YOUR BUBBLE!



KEY MESSAGES

- BUBBLES ARE CREATED BY MIXING WATER AND SOAP.
- BUBBLES ARE CREATED BY MIXING WATER AND SOAP.

EQUIPMENT

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the bubbles change color.
- Try to make the bubbles change direction.

11 **WATER WORKS**
FOR AGES 9-12

DISCOVER THE MAGIC OF WATER



KEY MESSAGES

- WATER STAYS IN WATER BOWLS AND OTHER CLOSED CONTAINERS.
- WATER HAS A HIGH SURFACE TENSION.
- WATER IS A UNIVERSAL SOLVENT.

EQUIPMENT

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Glass
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the water change color.
- Try to make the water change direction.

12 **WIND THINGS**
FOR AGES 9-12

DISCOVER WHY A PLANE CAN FLY AND MUCH MORE



KEY MESSAGES

- THE AIR IS THE KEY TO THE WORKING OF THE PLANE.
- THE AIR IS THE KEY TO THE WORKING OF THE PLANE.

EQUIPMENT

- 1 Paper
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

CONSUMABLES

- 1 Paper
- 1 Paper Plate
- 1 Paper Cup
- 1 Paper Napkin
- 1 Paper Towel

EXTENSION

- Try to make the paper airplane fly for a longer time.
- Try to make the paper airplane fly in a different direction.



SPARK! BOXES

Our Spark! boxes are intended to enhance child, family and community access to age-appropriate, quality scientific equipment.

The boxes are designed for use by children with adult supervision and participation, as children learn best when they share the experience with their adults.

Each box is designed to provide an authentic scientific experience.

A unique feature of the Spark! range are the carefully researched and beautifully designed accompanying notes allowing parents and educators to provide children with maximum benefit from the contents; with things to try, interesting facts to discuss and links to other resources.

Libraries add these boxes to their borrowing collection and some use them to run their own science club activities. Schools use these boxes to 'spark' a new topic in science classes.





SPARK! DISCOVERY

Spark! Discovery boxes are designed for use by children aged 8 to 12.

SPARK! CURIOSITY

Spark! Curiosity boxes are designed for use by children aged 5 to 8.

SPARK! JUNIOR

Spark! Junior boxes are designed for use by children aged 3 to 5.

SPARK! TECHNOLOGY

Spark! Technology boxes are designed for use by children aged 8 to 12.





SPARK! DISCOVERY BOXES

The original collection! Designed for children aged 8 to 12, each **Discovery Box** has been carefully curated to provide opportunities for genuine scientific exploration. The accompanying guides are designed to help children and their accompanying adults explore the topics and access other resources.

AMAZING ANIMALS

Explore a range of animals from inside and out, read x-ray photographs, examine bones and get inside a frog or dog.

What's in the box?

- X-rays and photos of animals
- *Explore Animal* book
- Teeth samples
- Knucklebone game

THE HUMAN BODY

Get inside out with the human body. Examine human x-ray images, understand the location of human organs in a model torso, and head/brain.

What's in the box?

- Soft Head Model/Brain Model
- Torso Model
- Human X-Rays
- Lightbox

MAGNETISM

Explore the natural phenomenon of magnetism. See 'invisible' magnetic fields made visible. Learn how a magnetic compass works to help in navigation.

What's in the box?

- Magnetic Field Demonstrator
- Two magnets
- Magnetic Levitator
- Compass

MINI BEASTS

Discover the amazing world of mini-beasts. Get up close to examine resin-encased bugs. Be a responsible bug-catcher to observe live bugs in action and learn how to recognise their various life-stages.

What's in the box?

- Magnifying Container 'Bug Jar'
- 8 resin encased mini beasts
- Port-a-bug pop-up container
- Butterfly lifecycle
- Magnifying glass
- Insect Net
- *The Best Book of Bugs* book

PRECISION MICROSCOPE

Learn the science of light and lenses and how microscopes work. Discover an amazing microscopic world by examining the very small details of insects and plants.

What's in the box?

- Microscope
- Magnifying glass
- Prepared Slides
- Tweezers
- Lens paper
- *The Ultimate Guide To Your Microscope* book

SOUND AND MUSIC

Explore the science of sound. Use a range of instruments to make interesting sounds and music.

What's in the box?

- Hand drum
- Wooden agogo with mallet
- Kalimba (thumb piano)
- Two 440 Hz tuning forks
- Two small tumblers
- String
- Music box mechanism

LIGHT AND COLOUR

Explore light and why you see colour. Discover how light can be used to alter the way you see objects.

What's in the box?

- Torch
- Spray Bottle
- Set of lenses
- Blank CD
- Spectroscope

PLANT SCIENCE

Explore how plants work from cells to life-cycles. Understand how much you can learn about climate by examining tree rings.

What's in the box?

- Plant cell model two parts
- Handiscope
- Tree ring

ROCKS AND MINERALS

Explore a mineral and rock collection. Understand how they are sorted by colour, chemical, crystal shape and more. Learn about the importance of minerals in human endeavours.

What's in the box?

- Mineral sample collection
- Fossil collection
- Field magnifier
- nail, streak plate, guide

DOBSONIAN TELESCOPE

Learn to use a telescope to see planets up close. Use a star chart to find your way around the night's sky.

What's in the box?

- Dobsonian Telescope
- Star Chart



SPARK! DISCOVERY BOXES



AMAZING ANIMALS



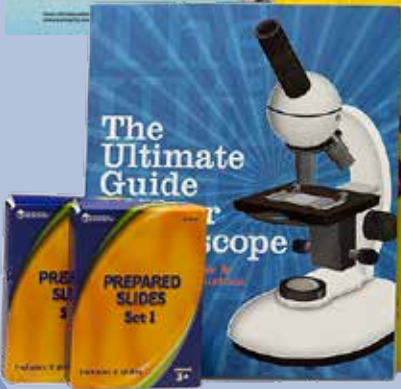
THE HUMAN BODY



MAGNETISM



SPARK! DISCOVERY BOXES



PRECISION
MICROSCOPE



MINI BEASTS



SOUND AND
MUSIC



SPARK! DISCOVERY BOXES



ROCKS AND
MINERALS



PLANT SCIENCE



TELESCOPE



LIGHT AND
COLOUR



SPARK! JUNIOR DISCOVERY BOXES

A new addition to the **Spark!** range of themed discovery boxes are our specially curated **Spark! Junior** kits for children aged 3 to 5 years old.

First launched in 2013 at **Lionel Bowen Library in Sydney**, these have become an outstanding success in the community with over 7,000 loans recorded.



SOUND

Are you good at making noise? Discover what sounds you can make using the instruments in the box.

What's in the box?

- Talking Tube
- Talk and Listen Telephone
- Xylophone and Mallet
- Rhythm Sticks
- Rainmaker

MAGNETISM

Discover what magnets are and how they work. What will you 'catch' with your giant magnet?

What's in the box?

- Giant Horseshoe Magnet
- Magnetic Match Rings
- Magnetic Super Challenge Game
- Matching and Fishing Game

MEASUREMENT

Discover all the different ways we can measure things. What will you find to measure?

What's in the box?

- Mini Motor Math
- Giant Tape Measure
- Junior Balance: scales, containers and assorted bears

LIGHT AND COLOUR

Discover how our eyes see light and colour. Will this box change the way you see things?

What's in the box?

- Colour Mixing Glasses
- Periscope
- Mirror/lens Set
- Bug Eye Viewer

LIFECYCLES & CLASSIFYING

Why does your fruit have seeds in it? Discover how animals and plants grow and change.

What's in the box?

- Life Cycles Kit
- Bug Viewer
- Backyard Bugs and Sorting Jars

PATTERNS & CLASSIFYING

Can you make a pattern? Discover how we use patterns to make sense of the world around us.

What's in the box?

- Lacers
- Tiny Figures
- Sound Matching Gem Blocks

COORDINATION & BALANCE

Are you good at balancing? Discover what your body can do.

What's in the box?

- Stepping Stones
- Toss and Catch
- Up on Top Balance Heads



SPARK! JUNIOR DISCOVERY BOXES



SOUND



MEASUREMENT



MAGNETISM



LIGHT AND COLOUR



SPARK! JUNIOR DISCOVERY BOXES



LIFE CYCLES
AND
CLASSIFYING



PATTERNS AND
CLASSIFYING



COORDINATION
AND
BALANCE



SPARK! TECHNOLOGY DISCOVERY BOXES

Interest in robotics, coding & electronics as well as virtual and augmented reality led to the development of these Spark! Technology boxes. Most require you to provide your own tablet (these can sometimes be borrowed from libraries and schools). These sets will be continuously improved as new items come on the market.



EDISON ROBOT DISCOVERY BOX

Learn to code a robot, starting basic and then get more technical. Use both your hardware engineering skills as well as software creativity with these Lego-compatible robot kits.

What's in the box?

- Edison robots × 2
- Remote control
- EdCreate kit
- Discover Edison booklet
- Batteries

VIRTUAL REALITY DISCOVERY BOX

Explore new worlds while staying home. Understand how virtual and augmented reality can be created and experienced. Enjoy using some cool gadgets to get inside some hidden worlds.

What's in the box?

- MERGE Virtual Reality Smartphone Headset
- MERGE Cube
- *iScience Augmented Reality* book
- *Curioscope* T-shirts

CIRCUITS & ELECTRICITY DISCOVERY BOX

Investigate the nature of electricity and electrical circuits with this immersive kit. Devise some imaginative gadgets as well as making power from a potato.

What's in the box?

- Snap Circuits set
- Instruction book
- Potato Clock Kit
- Energy Stick
- Batteries

OSMO CREATIVE DISCOVERY BOX

Turn a tablet into a crazy fun factory of fabulous frivolity, and gain some great skills at the same time. This creative system from Osmo provides a wide variety of maths and science-based challenges.

What's in the box?

- Osmo creative system
- Yoobi erasable markers
- Yoobi fuzzy eraser pouch

SPARK! TECHNOLOGY DISCOVERY BOXES

Spark! Technology
Circuits & Electricity **Box**

WHAT'S IN THE BOX?

- Potato Clock Kit
- Energy Stick
- Snap-On Circuits™ Kit with instruction book
- 2 x AA batteries (replace with alkaline batteries if required)

USE THE ITEMS PROVIDED TO LEARN ABOUT CIRCUITS AND ELECTRICITY. Please return the box with all equipment packed as you found it. Please report any missing or damaged items to the staff.

www.childrendiscovery.org.au

Spark! Technology
Edison Robots **Box**

WHAT'S IN THE BOX?

- Edison Robots x 2
- EdConnect Cable
- EdCreate kit
- 4 x AAA batteries
- Discover Edison Notes

Use the items provided to learn about the use and programming of robots.

- Please return the box with all equipment packed as you found it.
- Report any missing or damaged items to the staff.

What is a robot?
It can be difficult to define what a robot is, as in the modern world there are so many different kinds. One thing most people agree on is that they are programmable machines that can execute tasks autonomously (automatically by themselves). DISCUSS with an adult what you think a robot is and IDENTIFY any robots in your house.

www.childrendiscovery.org.au

Spark! Technology
OSMO Creative **Box**

WHAT'S IN THE BOX?

- Osmo Base + Periscope
- Whiteboard
- Dry Erase Markers
- Fuzzy Pouch/Eraser
- Notes

Use the items in this box to explore the Osmo games available in the iTunes store. Note: You will need an iPad to play these games. (Compatible with iPad 2, 3, 4, Air, Mini and Pro).

Osmo games are designed for children to play with iPads instead of the screen. The periscope captures your hand-drawn drawings and pulls them into the game's world. Check out these incredible free games that you can only play using the Osmo (creative set).

www.childrendiscovery.org.au

Spark! Technology
Virtual Reality **Box**

WHAT'S IN THE BOX?

- Merge VR headset
- SCIENCE: Augmented Reality - book
- Curioscope t-shirt
- Zoo Kazam markers

Safety Messages

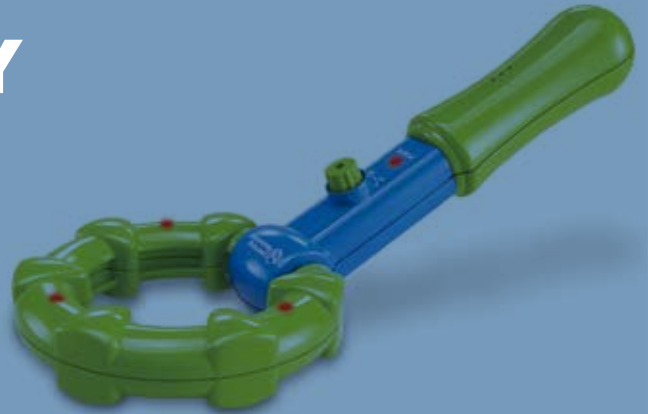
- Young children should always be supervised by an adult when using virtual reality. Merge is not recommended for children under 10 because of the weight on the neck.
- Do not spend more than 15 minutes using virtual reality at any time.
- Take frequent breaks when you are using the VR system.
- Be aware of your surroundings and use your common sense when using the VR headset. Check that your surroundings are free from obstacles and preferably use the virtual reality sitting room.
- Do not point the VR sensor directly at the sun.

www.childrendiscovery.org.au



SPARK! CURIOSITY DISCOVERY BOXES

Spark! Curiosity sets were specially curated to meet the interests of children aged 5 to 7 years old. They include practical investigations such as exploring light through a periscope, investigating air with a parachute and discovering the nature of time with a sun dial.



BALANCED BODIES CURIOSITY DISCOVERY BOX

Investigate the science of balance with cool tricks, and even some great maths!

What's in the box?

- Balance Bird
- Number Balance
- Balance Nails
- Discovery Notes

FLIGHT OR FALL CURIOSITY DISCOVERY BOX

Experience the science of flight through gliders, sky divers and spinners.

What's in the box?

- High Fly Glider
- Sky Diver
- Hand Spinner Kit

TIME AFTER TIME CURIOSITY DISCOVERY BOX

Explore the sands of time, from sunrise to sunset, or go digital.

What's in the box?

- Giant Sand Timer
- Digital timer
- Sun Disc Sundial

HOUDINI'S ESCAPE CURIOSITY DISCOVERY BOX

Stay on top of the science of mathematics. Topology - it's the science of shapes.

What's in the box?

- Pair of Rope Manacles
- Horse Shoe Brainteaser
- Tower of Hanoi Enigma

PERISCOPE CURIOSITY DISCOVERY BOX

Discover the nature of light, such as the use of mirrors to help you see around corners.

What's in the box?

- Periscope
- Flat flexible mirrors × 2
- Mini-scope

METAL DETECTOR CURIOSITY DISCOVERY BOX

Use the items provided to explore the detection of metals and how this can help you find hidden treasures!

What's in the box?

- Metal detector
- Metal practice 'coin' (washer)
- Magnifying lens
- Note pad and pencil
- String and pegs
- Small digger



SPARK! CURIOSITY DISCOVERY BOXES

FOR CHILDREN AGED 5 TO 7 YEARS
To be used with adult supervision AT ALL TIMES

Spark! CURIOSITY DISCOVERY BOX

Up Periscope

WHAT'S IN THE BOX?

- Do It Yourself Periscope kit
- Flat flexible mirrors x 2
- Mini scope
- Discovery notes

Use the items provided to explore mirrors and how they can help you see around corners.

- Please return the box with all equipment clean and packed as you found it.
- Report any missing or damaged items to the staff.

FOR CHILDREN AGED 5 TO 7 YEARS
To be used with adult supervision AT ALL TIMES

Spark! CURIOSITY DISCOVERY BOX

Metal Detector

Use the items provided to explore the detection of metals and how this can help you find hidden treasure!

Please return the box with all equipment clean and packed as you found it. Report any missing or damaged items to the staff.

WHAT'S IN THE BOX?

- Metal detector
- Metal practice 'coins' (washers)
- Magnifying lens
- None point and pencil
- String and pegs (8 sets)
- Small chopper
- Discovery notes

FOR CHILDREN AGED 5 TO 7 YEARS
To be used with adult supervision AT ALL TIMES

Spark! CURIOSITY DISCOVERY BOX

Balanced Bodies

WHAT'S IN THE BOX?

- Balance Bed
- Number Balance
- Balance Nails
- Discovery Notes

Use the items provided to explore the science of balance.

- Please return the box with all equipment clean and packed as you found it.
- Report any missing or damaged items to the staff.

FOR CHILDREN AGED 5 TO 7 YEARS
To be used with adult supervision AT ALL TIMES

Spark! CURIOSITY DISCOVERY BOX

Flight or Fall

WHAT'S IN THE BOX?

- High Fly Glider
- Sky Diver
- Hand Spinner Kit

Use the items provided to explore the science of flight.

- Please return the box with all equipment clean and packed as you found it.
- Report any missing or damaged items to the staff.

FOR CHILDREN AGED 5 TO 7 YEARS
To be used with adult supervision AT ALL TIMES

Spark! CURIOSITY DISCOVERY BOX

Time After Time

WHAT'S IN THE BOX?

- Smart Sand Timer
- Digital timer
- Red Dice Roller

Use the items provided to explore the science of time!

- Please return the box with all equipment clean and packed as you found it.
- Report any missing or damaged items to the staff.

FOR CHILDREN AGED 5 TO 7 YEARS
To be used with adult supervision AT ALL TIMES

Spark! CURIOSITY DISCOVERY BOX

Houdini Escape

Use the items provided to explore the science of escape!

Please return the box with all equipment clean and packed as you found it. Report any missing or damaged items to the staff.

WHAT'S IN THE BOX?

- Plan of Houdini Museum
- Escape Note Book
- Power of Human Engine






*Where Play
Inspires Lifelong
Learning*



Digital Contact Card

FOR MORE INFO:
www.childrensdiscovery.org.au

CONTACT:
info@childrensdiscovery.org.au

 @childrensdiscovery
 @chldrns_dscvry
 chldrns_dscvry

