



Resources for Teachers

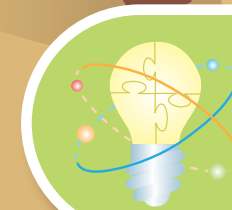
- Scheme of Work
- Lesson Plans



Alston Publishing House, Singapore

enquiry@alstonpublishinghouse.com
www.alstonpublishinghouse.com

HAPPY SCIENCE



INQUIRY BASED LEARNING

Provides intriguing scenarios that encourage pupils to form questions based on observations

Encourages students to develop a curious mind

BRIDGING SCIENCE TO LOWER GRADES

Build meaningful connections between Science and the world
Foster the love of discovery through the lens of Science



5 KEY AREAS OF DEVELOPMENT

Provides a holistic education to allow pupils to reach their full potential

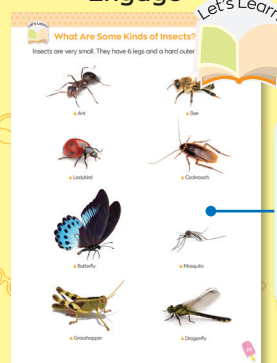




Inquiry-based Learning

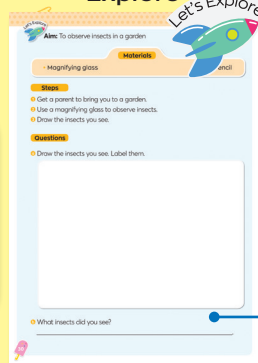
Discovery-centric pedagogy that triggers curiosity, promotes ownership of learning, & motivates pupils to further their understanding through a 3-step framework.

Engage



Teacher's Guide & lesson content are structured to **engage** pupil's attention & **stimulate discovery**

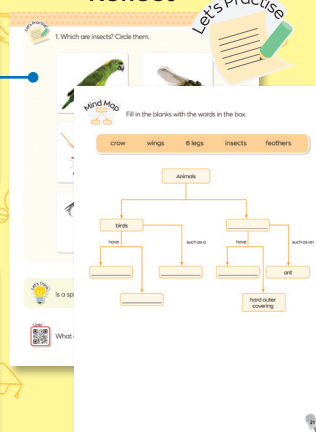
Explore



Pupils are able to **represent** their **understanding** through Pupil's Book and Activity Book activities

Experiments are integrated into lessons to give opportunities for **real-world observations** and **investigations**

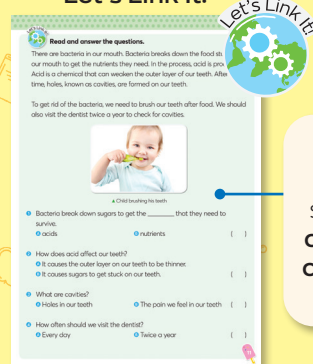
Reflect



Authentic Learning

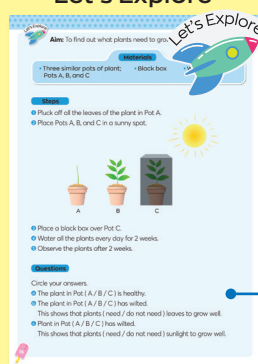
An instructional approach that complements inquiry-based Learning by anchoring lessons to the real world, providing opportunities for pupils to link concepts to the world around them.

Let's Link It!



Provides real world examples so that pupils can **create meaningful connections** to the world

Let's Explore



Realistic visuals **anchors learning** to the real world & trains pupils to **recognise** them outside the classroom

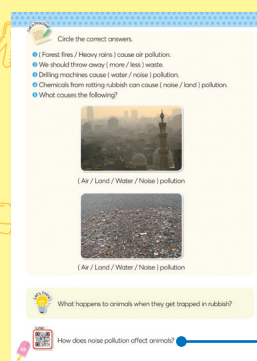
Experiments allow pupils to investigate concepts in a **tangible and scientific manner**

Real World Visuals



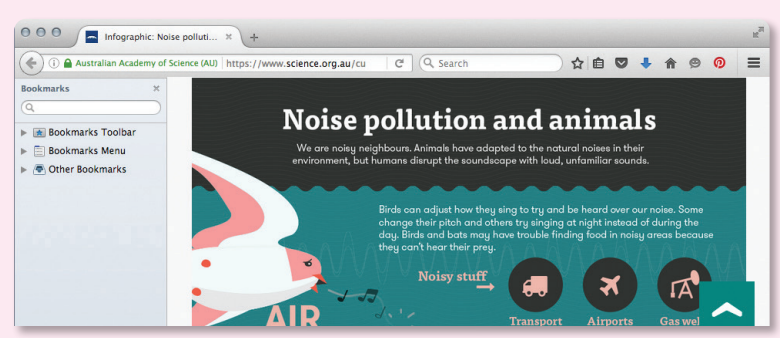
IT Literacy

IT activities to equip pupils to utilise the Internet and technology as a tool to enhance their learning in this age of Information.



How does noise pollution affect animals?

QR codes at the end of every chapter provides additional relevant resources for students.



STEM

An interdisciplinary approach that combines Science, Technology, Engineering and Mathematics to solve real-world problems, encouraging students to apply their knowledge and creative critical thinking skills through hands-on experiences.



1 Empathise

Pupils need to have an understanding of the problem they are trying to solve and the concepts behind it.



3 Ideate

Pupils use their creativity and problem solving skills to come up with possible solutions.



5 Test & Assess

The final product is then put to the test and the results are recorded.



2 Define

After knowing what the problem is, pupils set goals that lead to the completion of the experiment.



4 Prototype

Pupils have to select their best idea and make it into an actual product.



6 Improve

The results are then analysed and pupils look for areas where they can improve upon to achieve better results.

Aim: To create a catapult that can push a marshmallow forward

1 What does a catapult look like? How does it work?

2 What will your catapult look like? Draw.

3 Use any of the things below to make your catapult.



Ice cream sticks



Rubber bands



Bottle caps



Glue

4 How far can your catapult push a marshmallow forward? _____

5 What can you do to make it push the marshmallow further forward? _____

Nurturing an Early Scientific Mind with STEM

Self-Directed Learning: Allow pupils to take charge of their learning through building their interest in Science.

Applied Learning: Engages pupils to be thinkers that understand concepts and apply them to real-world problems.

Interdisciplinary Approach: Introduces and fosters interest in other fields, broadening pupils' knowledge.

Discovery-Centric: Sparks curiosity in pupils to explore solutions creatively & scientifically.

