

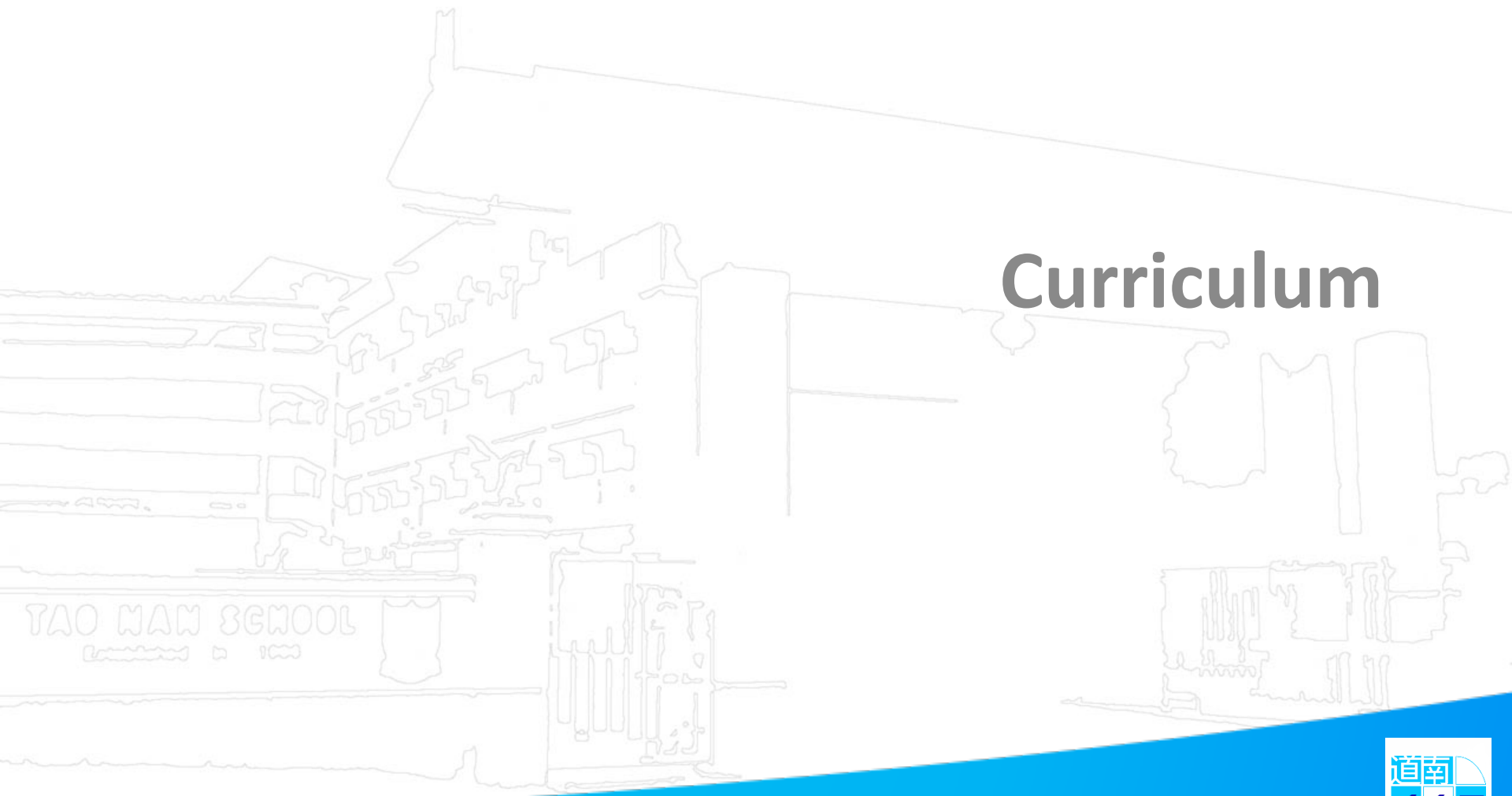


# 2022 P6 Science Curriculum Information





# Curriculum



# Themes and Topics Covered in P6

Theme	Topic
Energy	<ul style="list-style-type: none"><li>• Forms and Uses of Energy</li><li>• Sources of Energy</li><li>• Energy Conversion</li></ul>
Interaction	<ul style="list-style-type: none"><li>• Forces</li><li>• Types of Forces</li><li>• Living Together</li><li>• Characteristics of the Environment/Factors affecting the environment</li><li>• Food Chains and Food Webs</li><li>• Adaptation for Survival</li><li>• Man's Impact on the Environment</li></ul>





# Pedagogy



# Teaching Strategies

- **Inquiry-Based Learning approach (IBL)** incorporating **Differentiated Instructions (DI)**
- **L.A.S.E.R.** program
- **Teaching Resources** from Internet, PowerPoint slides, Science-based videos and Science Simulations.
- **Hands-On Experience**
  - ✓ Laboratory Experiments
  - ✓ Outdoor experiential learning experiences
- **Learning Journey**  
(Subject to COVID-19 SMM)





# Inquiry-Based Learning

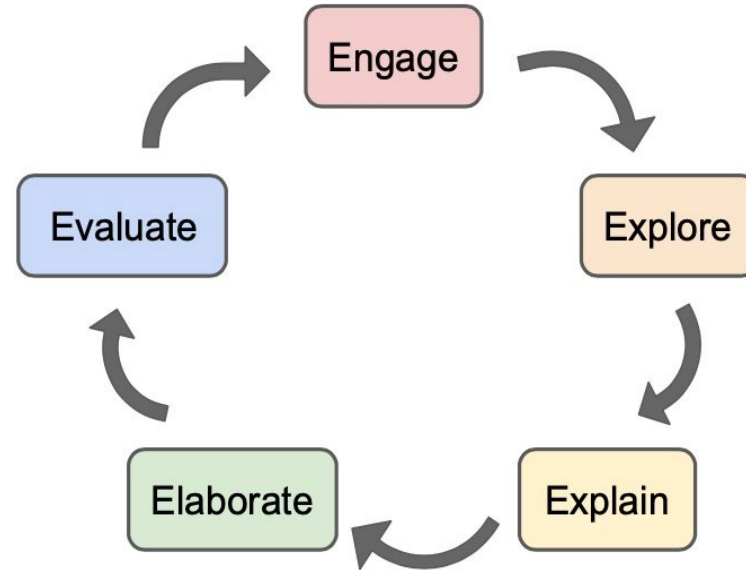


Figure 1: 5Es in Inquiry-Based Learning



***Inquiry-Based Learning (IBL)*** approach is adopted in the learning of Science. The process of [inquiry](#) is facilitated by teachers who would help students make connections and build their understanding of Science concepts using the 5Es – Engage, Explore, Explain, Elaborate and Evaluate.

# L.A.S.E.R. Program

- L.A.S.E.R stands for Learners' Assembly for Science Examination Requirements
- **Progressively equips** students with strategies and techniques to handle examination questions **from P3 to P6**
- **Exposes** students to different question types and problem stimuli.
- **Empowers** students with necessary skills and knowledge to understand and answer examination questions proficiently.
- **L.A.S.E.R.** worksheets would complement the PowerPoint teaching slides used in the classroom .



# Materials used:

- My Pals Are Here Textbooks & Activity books
- Topical Science Notes
- Topical Worksheets
- L.A.S.E.R. Worksheets
- PSLE Booklet (2019 - 2021)
- Practice Papers (Past SA1/Prelims from TNS and other schools)







# Assessment

# Assessment Objectives of Science PSLE

The PSLE Science Paper assesses students' attainment in Science with respect to the aims of Primary Science Education as stated in [the 2014 Science Syllabus](#)

The assessment objectives are as follows:

## I. Knowledge with Understanding

Students should be able to demonstrate knowledge and understanding of scientific facts, concepts and principles.

## II. Application of Knowledge and Process Skills

Students should be able to

- a. apply scientific facts, concepts and principles to new situations.
- b. interpret information (including pictorial, tabular and graphical) and investigate using one or a combination of the following process skills:
  - Inferring
  - Predicting
  - Analysing
  - Evaluating
  - Generating possibilities
  - Formulating hypothesis
  - Communicating



## MYE/Prelim/PSLE Examination Format (Standard Science)

Booklet	Item Type	Number of questions	Number of marks per question	Marks
A	Multiple-choice	28	2	56
B	Open-ended	12 - 13	2 - 5	44

Duration of paper : 1 hour 45 minutes.



## MYE/Prelim/PSLE Examination Format (Foundation Science)

Booklet	Item Type	Number of questions	Number of marks per question	Marks
A	Multiple-choice	18	2	36
B	Structured	6 - 7	2 - 3	14
	Open-ended	5 - 6	2 - 4	20

Duration of paper : 1 hour 15 minutes.

### Provision of Word List

The Foundation Science paper focuses on assessing students' grasp of basic scientific knowledge. **A word list is provided during the examination to allow students to display their knowledge and understanding without being unduly disadvantaged by their weakness in the English language.** It should be appreciated that the list is not exhaustive.

Table of specifications for PSLE Standard Science/Foundation Science			
Theme	Life Science	Physical Science	Weighting
Diversity	<ul style="list-style-type: none"> <li>Diversity of Living things P3</li> </ul>	<ul style="list-style-type: none"> <li>Diversity of non-living things P3</li> <li>Diversity of materials P3</li> </ul>	5-10%
Cycles	<ul style="list-style-type: none"> <li>Life cycles of plants &amp; animals P4</li> </ul>	<ul style="list-style-type: none"> <li>Cycles in matter P4</li> <li>Cycles in water P5</li> </ul>	20-25%
Systems	<ul style="list-style-type: none"> <li>Plant system P5</li> <li>Human system P5</li> <li><u>Cell system</u> P5</li> </ul>	<ul style="list-style-type: none"> <li>Electrical system P5</li> </ul>	15-25%
Interactions	<ul style="list-style-type: none"> <li>Interaction within the environment P6</li> </ul>	<ul style="list-style-type: none"> <li>Interaction of forces P3 (Magnetic force) and P6 (Gravitational force, Frictional force, <u>Elastic Spring Force</u>)</li> </ul>	25-30%
Energy	<ul style="list-style-type: none"> <li>Energy forms &amp; uses (Photosynthesis) P5</li> </ul>	<ul style="list-style-type: none"> <li>Energy forms &amp; uses P4 &amp; P6</li> <li><u>Energy conversion</u> P6</li> </ul>	15-20%
Weighting	45-55%	45-55%	100%

# 2022 Assessment Overview

P6 Science	Semester 1 (30%)		Semester 2 (70%)	
	Mid-Year Examination (Term 2)		Preliminary Examination (Term 3)	
Topics Tested	P3, P4, P5 [All themes] P6 [Energy, Interaction] (excluding Man’s impact on the environment]		P3 to P6 [All themes]	
Duration of paper	1 hour 45 minute		1 hour 45 minute	
Paper/Booklet	Booklet A	Booklet B	Booklet A	Booklet B
Type of Questions	Multiple choice questions	Open-ended questions	Multiple choice questions	Open-ended questions
No. of Questions	28	12-13	28	12-13
Marks per Question	2	2,3,4,5	2	2,3,4,5
Total for each section	56	44	56	44
Total marks for the paper	100		100	
Overall Weighting	30%		70%	
Total	100%			

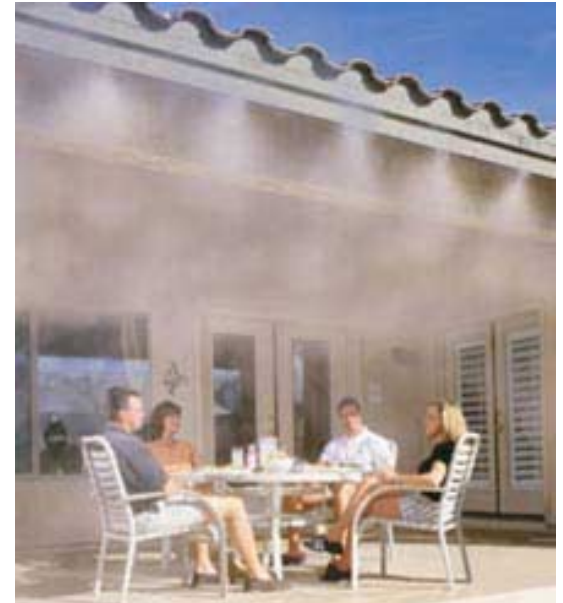
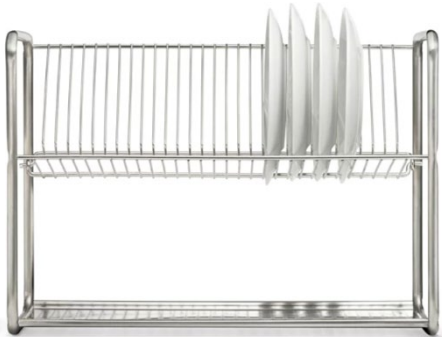




# Home-School Partnership

# Strategies to help your child

- a) Help your child to be familiar with the concepts/facts of the topics taught.
- b) Point out real life scenarios for your child to apply his/her Science concept.



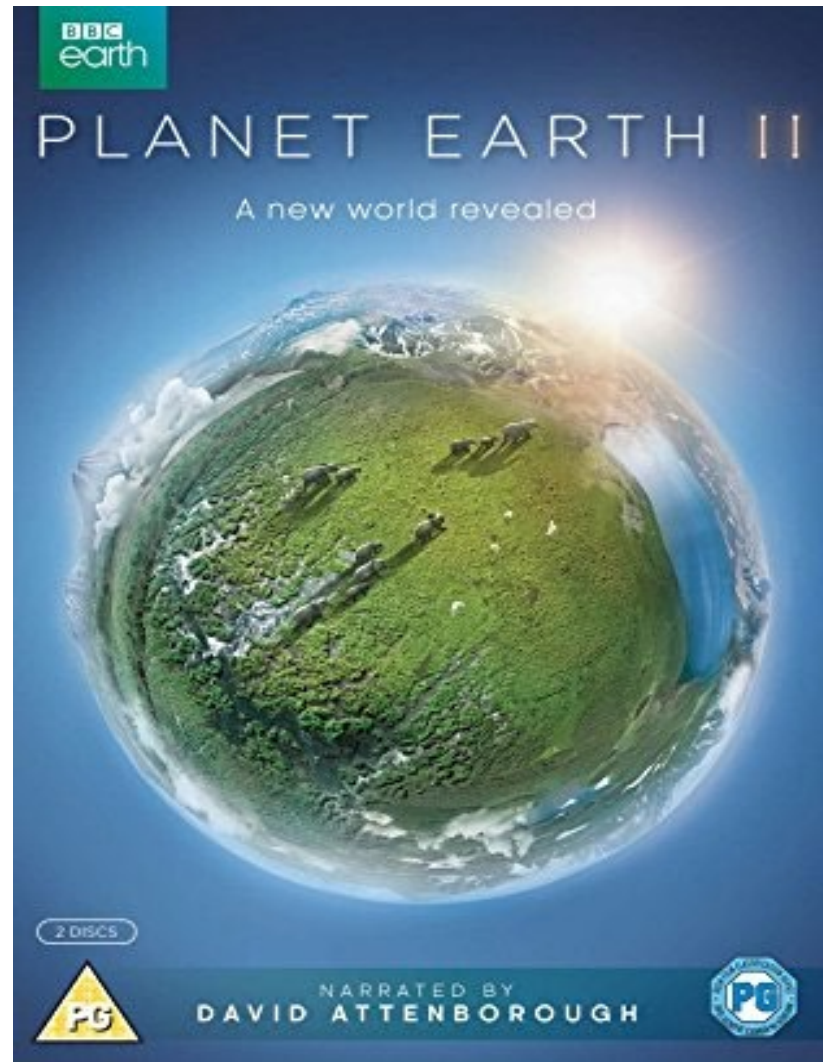
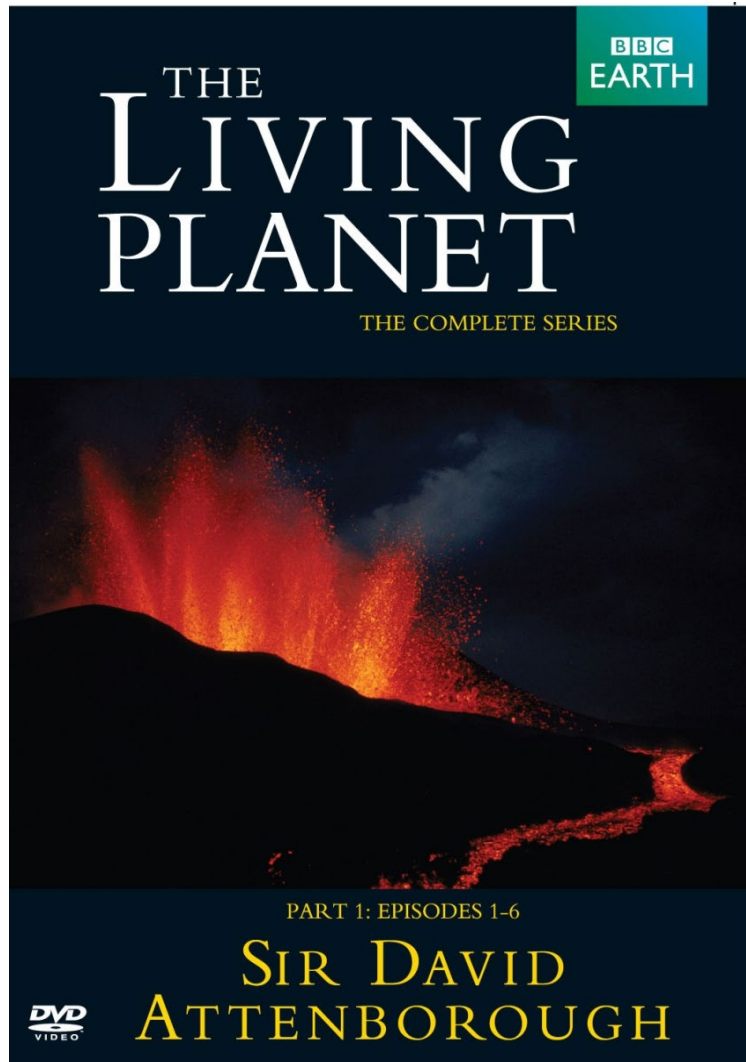
# Strategies to help your child

- c) Ensure that all homework is carefully completed and submitted punctually.
- d) Encourage your child to read a wide variety of Science-related reading materials.





e) Encourage your child to watch Science documentaries. (Eg: Animal Planets, National Geographic channels, and other BBC videos)



# Strategies to help your child

- f) Revise P3 to P5 Science concepts.
- g) Use concept maps or mind maps to organise notes.
- h) Go through the work (Activity books/topical worksheets/Practice papers) marked by the teachers to learn from the mistakes made.



**Thank you.**

