

P6 Science Curriculum Information



Tao Nan School Science Department

Vision

Curious children, Thinking minds

Mission

Preparing children to understand the world





Science Curriculum

Themes and Topics Covered in P6

Theme	Topic
Energy	Forms and Uses of EnergySources of EnergyEnergy Conversion
Interaction	 Forces Types of Forces Living Together Characteristics of the Environment/Factors affecting the environment Food Chains and Food Webs Adaptation for Survival Man's Impact on the Environment





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





Inquiry-Based Learning





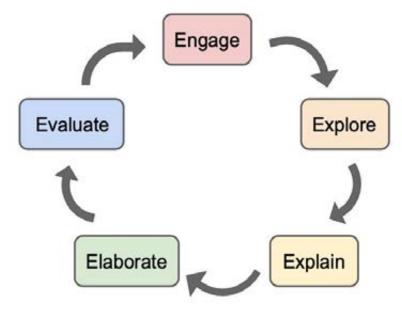


Figure 1: 5Es in Inquiry-Based Learning

Inquiry-Based Learning (IBL) approach adopted in the learning of Science. The process of inquiry is facilitated by teachers who would help connections students make build their and 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 <u>Learners' Assembly for Science</u>
 <u>Examination Requirements</u>
- Progressively equips students with strategies and techniques to handle examination questions from P3 to P6
- Expose students to different question types and problem stimuli.
- Empower 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 (2021 2023)
- Practice Papers (Prelims from TNS and other schools)







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:

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

- apply scientific facts, concepts and principles to new situations.
- 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



Prelim/PSLE Examination Format (Standard Science)

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

Duration of paper: 1 hour 45 minutes.



Prelim/PSLE Examination Format (Foundation Science)

Booklet	Item Type	Number of questions	Number of marks per question	Marks
Α	Multiple-choice	18	2	36
В	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 Life Science Theme Physical Science Weighting **Diversity of non-living Diversity of Living things Diversity** things P3 5-10% **P3 Diversity of materials P3**

Cycles in matter

P4

Life cycles of plants & Cycles Cycles in water **P5** 20-25% animals **P4 P5** Plant system **Human system P5 Electrical system P5 Cell system P5**

Systems 15-25% Interaction of forces P3 (Magnetic force) and Interaction within the

Interaction **25-30%** P6 (Gravitational force, Frictional environment **P6** force.

Elastic Spring Force)

Energy forms & uses Energy forms & uses

P4 & P6 **15-20% Energy** (Photosynthesis) **Energy conversion P6**

45-55% Weighting 45-55% 100%

Intent of changes in SBA:

Reduce excessive focus on testing and academic results and create time and space to further enhance the holistic development of students, including 21CC (e.g., inventive thinking, adaptive thinking, communication skills and civic literacy)



2024 Assessment Overview

P6 Science	Term 2	Term 3
	Common-timed Practice (0%)	Preliminary Examination (100%)
Intent	 Practice time-management skills Details will be provided through your child's Science teacher 	 Consolidation and review of learning ahead of PSLE Format of paper as per PSLE



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.









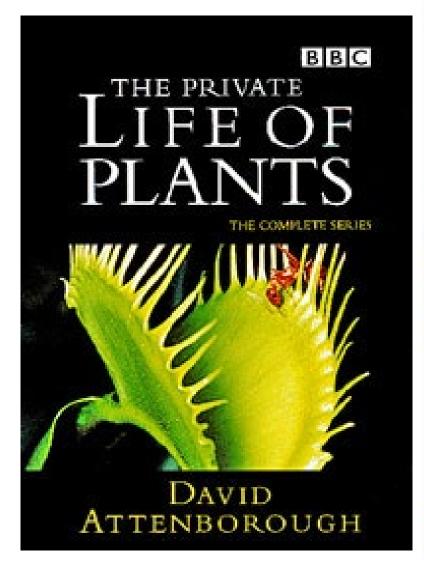


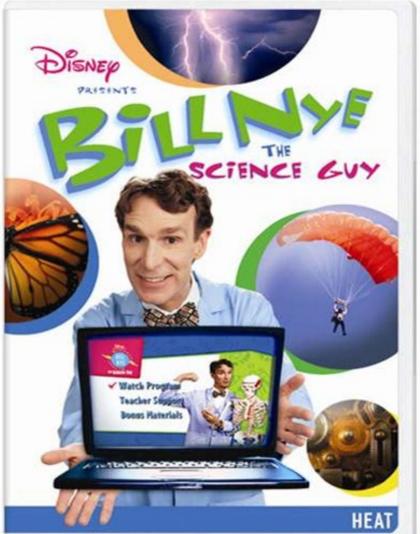
Strategies to help your child

- 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 <u>Science documentaries</u>. (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.

