2022
P4 Science Curriculum Information

Curriculum

Themes and Topics Covered in P4

Theme	Topic
Cycles	• Life cycles in some animals • Life cycles of plants • Matter
Energy	• Light and Shadow • Heat and Temperature

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

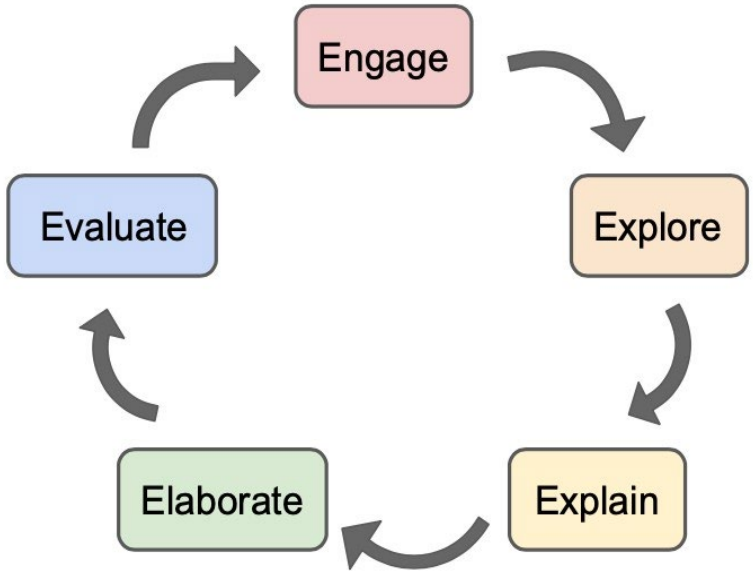


Figure 1: 5Es in Inquiry-Based Learning

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**
- **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
- EOY practice papers of previous year

Assessment

2022 Assessment Overview

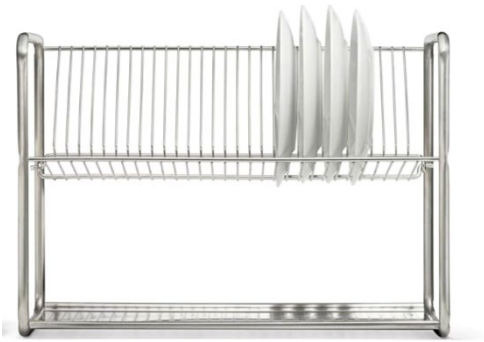
P4 Science	Semester 1 (30%)		Semester 2 (70%)		
	Mid-Year Examination (Term 2)		**Practical (Term 3)**	**End-of-Year Examination (Term 4)**	
Topics Tested	20-30%: All P3 topics 70-80%: P4 topics (Life cycles of plants & animals, Matters, Light)		P3 & P4 Topics Science Process Skills (Observation, use of apparatus for measurement, etc)	20-25%: All P3 topics in Diversity, Interaction, System 75-80%: All P4 topics in Cycles, Energy	
Duration of paper	1 h 30 min		~30 min	1 h 30 min	
Paper/Booklet	**Booklet A**	**Booklet B**	Practical Test	**Booklet A**	**Booklet B**
Type of Questions	Multiple choice questions	Open-ended questions	Practical test	Multiple choice questions	Open-ended questions
No. of Questions	22	12	4	22	12
Marks per Question	2	2, 3, 4	4 - 6	2	2, 3, 4
Total for each section	44	36	20	44	36
Total Marks	**80**		**20 (Non-weighted)**	**80**	
Overall Weighting	30%		0%	70%	
Total	100%				

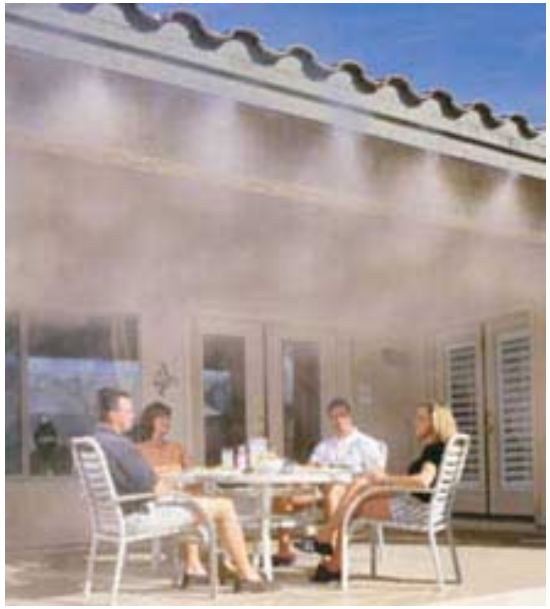
Home-School Partnership

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.

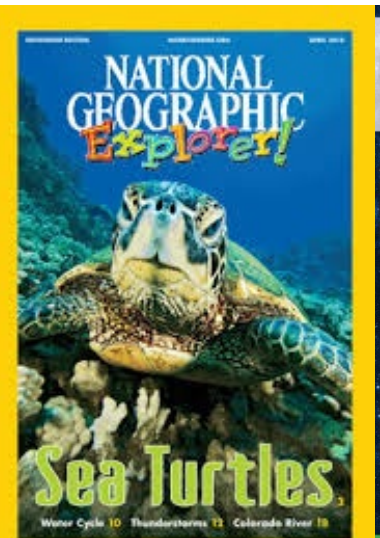


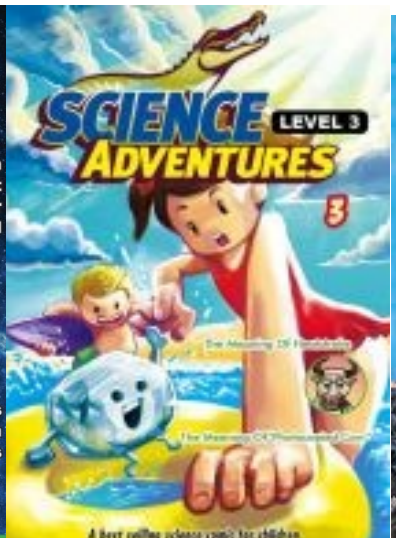


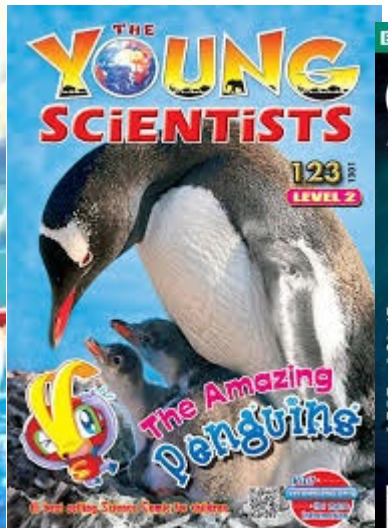
Strategies to help your child

c) Ensure that all homework is carefully completed and submitted punctually.

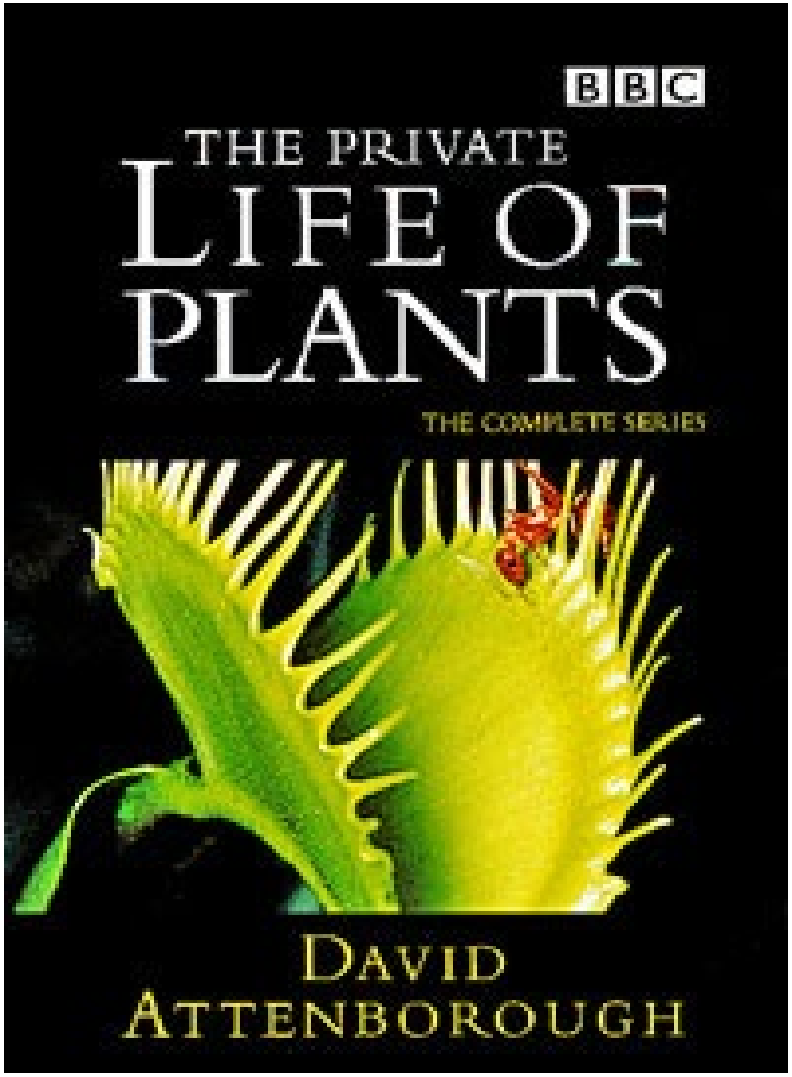
d) Encourage your child to read a wide variety of <u>Science-related reading materials</u>.

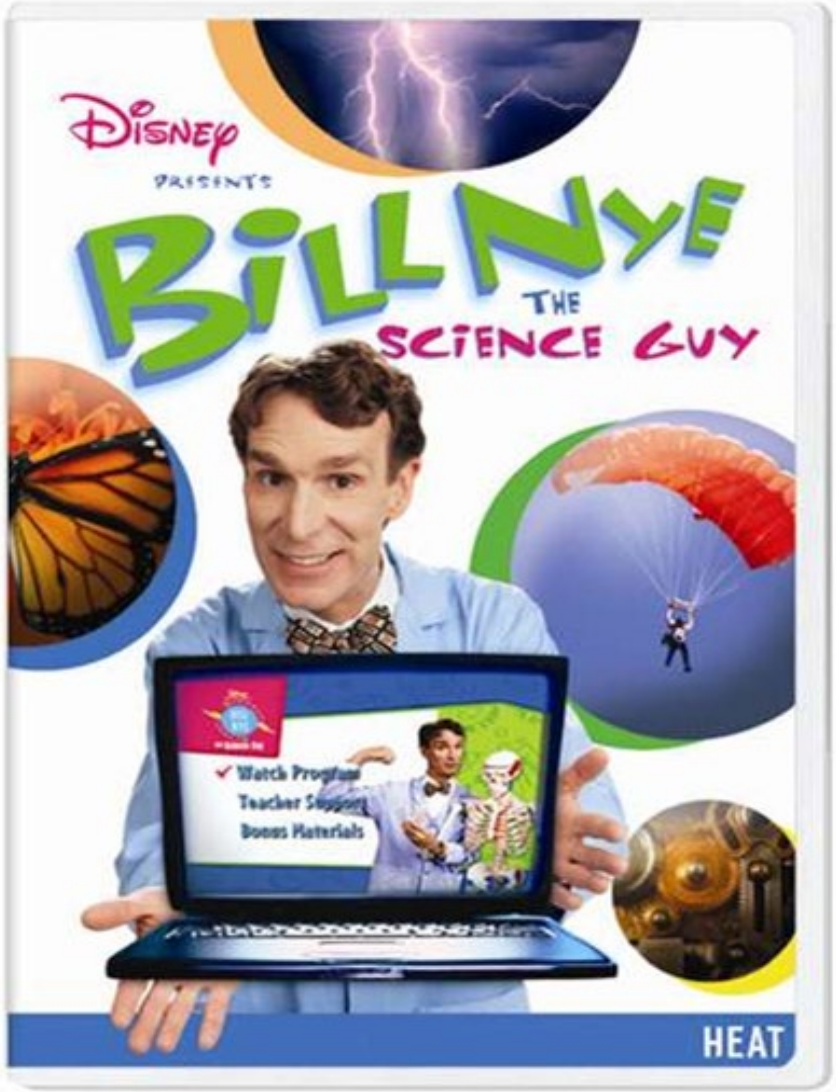






e) Encourage your child to watch Science documentaries. (Eg: Animal Planets, National Geographic channels, and other BBC videos)






Thank you.