





Primary 3 Science Briefing

SC4LIFE@HPPS

### Scope of Sharing

1 Science Curriculum

2

Inquiry, Applied Learning

3

P3 Science

4 Assessment



5 Home Support

#### Primary Science Curriculum

- Provides the Foundation for Science beyond Primary Level
- Driven by Inquiry-based and Applied learning
- Acquisition of knowledge, skills & positive attitudes towards lifelong learning
- Learning of Science is useful and meaningful; as it is relevant to everyday life
- Nurture the love and care for the environment

#### Inquiry-based learning

Takes place by **observing**, asking **questions**, **finding answers** through **investigation** — rather than simply discussing the scientific **content**.

Encourage students to make **observations**, and **inferences**, ask relevant **questions**, find answers through **hands-on** 

In P3, the inquiry-based learning process is **guided** by the Science teacher.

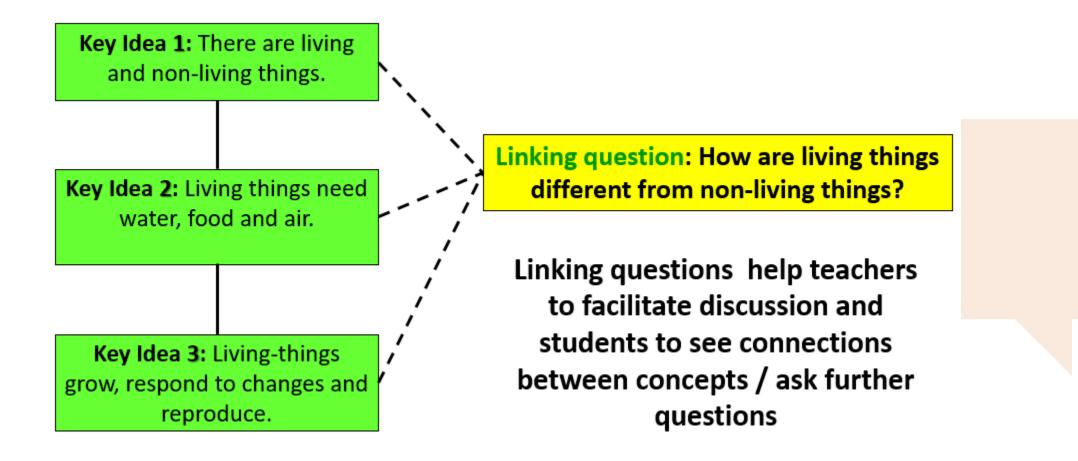
## Thematic Approach to Science Learning

Block	Level	Themes
Upper	P6	Energy, Interactions
	P5	Systems, <b>Cycles</b> , Interactions
Lower	P4	Systems, Cycles, Energy
	Р3	<b>Diversity</b> , Cycles, Interactions

## P3 Syllabus

Diversity & Cycles	Living & Non-Living Things, Animals, Plants, Fungi & Bacteria (Term 1) Animal & Plant Life Cycle (Term 2)
Diversity	Fun with Variables and Materials (Term 3)
Interactions	Magnets (Term 3 & 4)

#### concepts are linked and guided by questions



#### **Process Skills**



- observing (& inferring)
- comparing
- classifying (grouping)
- communicating

#### **Attitudes**



- curiosity
- creativity
- integrity
- objectivity

## Key Process Skills and Attitudes

### **Applied Learning**

Connecting scientific knowledge and process skills to the real world

Makes learning purposeful and relevant

**Students are happy and motivated** 



# Applied Learning in HPPS Sustainability

HPPS Community places emphasis on school-wide **Green Initiatives** such as **environmental education** via curriculum, enriched outdoor learning by **creating more green spaces** around the school, commemorating **Earth Day, reducing food wastage**, driving **paper/plastic recycling.** 







#### P3 Science

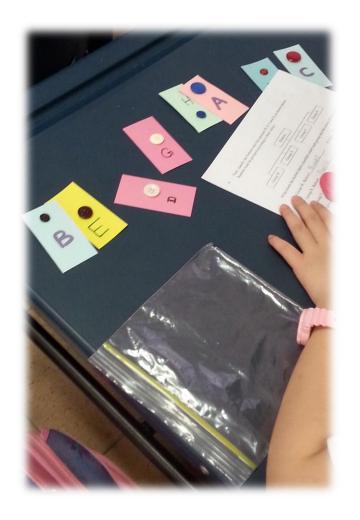
- Zoo LJ Authentic learning experience
- Fun with Variables and Materials Inquiry and Scientific Method
- Every Child A Seed Programme Planting
- Outdoor Learning Fern Garden / Terrarium
- Hands-on activities for all topics

#### P3 Science

- Activity WS (Booklets) Hands-on
- School WS Supplementary Activities & OE WS, Revision WS
- Handouts on answering guidelines
- Vitamindz Booklets Topical / Skills
- Review WS and Practice Papers
- Textbooks are to be used over 2 years P3 & P4
- Please DO NOT discard materials at end of P3 as they are needed for P4 to P6 work



# Assessment



#### **Evaluating Learning:**

#### Class Work - Activities and written work

Semester 1	Semester 2
Weighted Assessment 1 Term Review: Pen and Paper (15%)	Weighted Assessment 2: Performance Task (15%)  SA2 (70%)

#### Format: Term Review: (15%)

Section A: Multiple-choice Questions

Section B: Structured Questions

Section C: Open-ended

Each question carries 2 - 3 marks

#### Format: Performance Task (15%)

Section A: Performance Task

Section B: Structured Questions related to the

Performance Task

Each question carries 1 - 3 marks

#### Format: P3 Science SA2

Duration of the Exam - 1 hour 30 minutes

Section A: 20 MCQs (40 marks)

Section B: 8 Structured Questions (16 marks)

Section C: 6 - 8 Open-ended Questions (24 marks)

Each question carries 2 - 4 marks

## SA2: Section A

The diagram shows Animal Y feeding on plants.

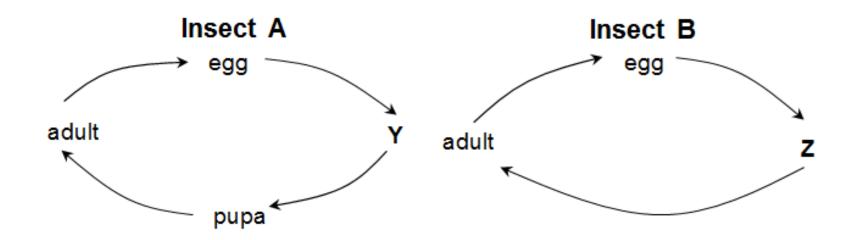


Which characteristic of living things can be observed from the diagram above?

- Living things grow.
- (2) Living things need food.
- Living things reproduce.
- (4) Living things move from place to place.

## **Section B**

The diagrams below show the life cycles of two insects, A and B.



Name stages Y and Z in the life cycles above.

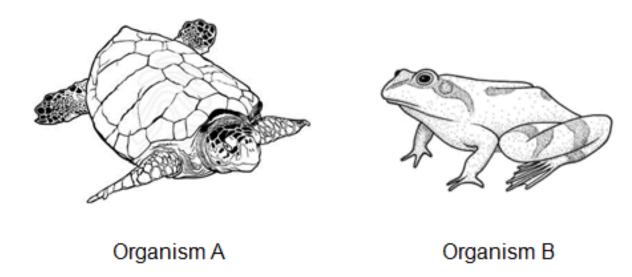
[2m]

**Y**: \_\_\_\_\_

Z:

## **Section C**

The pictures below show organisms A and B.



These two organisms reproduce in a similar way.

State this **similarity**. [1m]

#### Mark Scheme

- Broad and Flexible
- Includes expected correct answers
- Student's responses that are different from the mark scheme are carefully evaluated and included as acceptable answers if they are conceptually correct.
- Responses that show evidence of <u>understanding</u> of relevant concepts and <u>mastery of skills</u> will be awarded **due credit**.
- > Marks are **not** awarded for stating 'correct' key words
- Exemplars will be given to students.

## **Implications**

- Good Understanding of key concepts is important
  - Make Connections between concepts learnt
  - Apply concepts in new situations

- Revision of concepts learnt
  - Important to keep all Science materials for PSLE revision

## **Implications**

 Practice & Application of Process Skills to authentic tasks

- active participant in activities
- e.g. Fun with Variables, YI Project, Outdoor Learning etc.

#### Guide to Answering Questions

1. Answer <u>in context</u> to question - <u>Never</u> memorize answers, without understanding

2. Be <u>specific</u> e.g. "Plants are different in their leaves" without stating specifically <u>how</u> - e.g. <u>shape</u>, <u>colour</u>, or <u>texture</u>

#### Guide to Answering Questions

3. Identify <u>objective</u> of question - asking about aim / procedure / pattern

4. Look for useful information in the question or diagram to identify the topic or key concept that is tested.

#### Expectations & Support @ Home

- 1. Review key concepts learnt
- 2. Link ideas across topics: Materials & Magnets
- 3. Learn concept words & link them to everyday life experiences
- 4. Engage children with authentic tasks such as simple cooking, household chores, gardening, etc.

#### Support in School

We provide our students ample opportunities for experiential learning in our Science Curriculum:

- Outdoor Learning
- Learning Journeys
- Hands-on Activities
- Fun with Variables
- Every Child A Seed Programme
- ICT Infusion (SLS)
- HPPS Library for reading materials
- Green Events



# Thank you

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