PRIMARY 3 & 4
SCIENCE
CURRICULUM MATTERS

AIMS of the Science Curriculum

- To spark student's interest and to stimulate their curiosity about their environment.
- To help students acquire enduring conceptual understanding to help them understand the world.
- To equip students with basic scientific skills and attitudes.

MFPS Approach to Teaching and Learning

I) Pedagogical Approach: Structured Inquiry Based Learning

- Emphasis on the acquisition of knowledge and understanding of natural and physical environment through **investigations, application of skills and processes.**
- Emphasis on students as active learners who are co-constructors of knowledge.
- Students are actively engaged in the collection and use of evidence, formulate and communicate explanations.

II) Hands-on Approach

- Emphasis on acquisition of conceptual understanding through **hands-on experiences**

MFPS Approach to Teaching and Learning

III) Explicit teaching of Scientific Process Skills

- Emphasis on **explicit teaching** of these skills when students are engaged in investigations and through the use of **acronyms** where appropriate.

E.g. of acronyms

CD: Choice-Date

DOOBC: Do-Observe-Conclude

CAL: Concept-Application-Link

The Curriculum

- Content-based (Topical)
- Concept-based (Topical and Cross-cutting)
- Skill and Processes based (Cross-cutting and spiral)
- Answering Technique
- Attitude and Ethics

The Curriculum – Content and topical based concepts

Syllabus Requirement	
Themes	**Lower Block (P3 and P4)**
Diversity	• Diversity of living and non-living things (General characteristics and classification) • Diversity of materials
Cycle	• Cycles in plants and animals (Life cycles) • Cycles in matter and water (Matter)
Systems	• Plant system (Plant parts and functions) • Human system (Digestive system)
Interactions	• Interaction of forces (Magnets)
Energy	• Energy forms and uses (Light and heat)

The Curriculum- Skill and Processes based

Classified into BIG Skill set with sub-skills taught from Primary 3- 6 using the spiral approach. All skills and processes prescribed by the primary Science syllabus will be subsumed into these:

A) Observing

B) Generating Possibilities

C) Data Collection

D) Data Analysis

E) Investigative

Assessment Plan

	TERM 1	TERM 2	TERM 3	Term 4
	Non-Weighted Formative Assessment 0%	**Semestral Assessment 1 30％**	**Non-Weighted Formative Assessment 0%**	**Semestral Assessment 2 70%**
P3	Topical Test	50 marks: MCQ: 30 m OE: 20 m	Project Work with individual assessment	80 marks MCQ: 50 m OE: 30 m
P4	Topical Test	100 marks: MCQ: 56 m OE : 44 m	Practical Test	100 marks MCQ: 56 m OE : 44 m

MCQ: Multiple Choice Questions
OE: open Ended Questions

How can YOU help?

Useful Resources for conceptual understanding and making connections:

Bill Nye the Science Guy
https://www.youtube.com/user/TheRealBillNye/videos

EUREKA
https://www.youtube.com/playlist?list=PL07249EFA9038FDC1

Brainpop
https://www.brainpop.com

Magic School Bus
https://www.youtube.com/playlist?list=PLWEVvZtBqsJ_fBp_Eok9r-Mm6UBOGq2zp

Thank You

For any clarifications or queries contact Mrs Foo – Lee Huay Meng, Head of Department of Science: lee_huay_meng_carol@moe.edu.sg