

PRIMARY 6
(Standard & Foundation)
SCIENCE
CURRICULUM MATTERS

Objectives

- To provide students with experiences to build on their interest and to stimulate their curiosity about their environment.
- To help students deepen conceptual understanding acquired in middle primary and to acquire new concepts which will help them understand the world (Application).
- To help deepen the acquisition of scientific skills and attitudes.
- To demonstrate the transferability of skills and attitudes in authentic contexts.

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-Data

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	P3 and P4	P5 and P6
Diversity	<ul style="list-style-type: none"> Diversity of living and non-living things (General characteristics and classification) Diversity of materials 	
Cycle	<ul style="list-style-type: none"> Cycles in plants and animals (Life cycles) Cycles in matter and water (Matter) 	<ul style="list-style-type: none"> Cycles in plants and animals (Reproduction) Cycles in matter and water (Water)
Systems	<ul style="list-style-type: none"> Plant system (Plant parts and functions) Human system (Digestive system) 	<ul style="list-style-type: none"> Plant system (Respiratory and circulatory systems) Human system (Respiratory and circulatory systems) <u>Cell system</u> Electrical system
Interactions	<ul style="list-style-type: none"> Interaction of forces (Magnets) 	<ul style="list-style-type: none"> Interaction of forces (Frictional force, gravitational force, <u>force in springs</u>) Interaction within the environment
Energy	<ul style="list-style-type: none"> Energy forms and uses (Light and heat) 	<ul style="list-style-type: none"> Energy forms and uses (Photosynthesis) <u>Energy conversion</u>

Topics which are underlined are not required for students taking Foundation Science.

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 :
 - A) Observing
 - B) Generating Possibilities
 - C) Data Collection
 - D) Data Analysis
 - E) Investigative

Assessment Plan for Primary 6

	TERM 1	TERM 2	TERM 3	Term 4
	Non-Weighted Formative Assessment 0%	Semestral Assessment 1 100%	Prelims 100%	PSLE
P6 Standard	Topical Test MCQ & OE	MCQ 56 marks OE 44 marks Total 100 marks	MCQ 56 marks OE 44 marks Total 100 marks	PSLE
P6 Foundation	Topical Test MCQ & OE	MCQ 36 marks OE 34 marks Total 70 marks	MCQ 56 marks OE 44 marks Total 100 marks	PSLE

MCQ: Multiple Choice Questions

OE: open Ended Questions

How can YOU (Parents) support?

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

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