PRIMARY 5
(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	• 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)	• **Cycles in plants and animals (Reproduction)** • **Cycles in matter and water (Water)**
Systems	• Plant system (Plant parts and functions) • Human system (Digestive system)	• **Plant system (Respiratory and circulatory systems)** • **Human system (Respiratory and circulatory systems)** • **Cell system** • **Electrical system**
Interactions	• Interaction of forces (Magnets)	• **Interaction of forces (Frictional force, gravitational force, force in springs)** • **Interaction within the environment**
Energy	• Energy forms and uses (Light and heat)	• **Energy forms and uses (Photosynthesis)** • **Energy conversion**

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 5

	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%**
P5 Standard	Topical Test	MCQ 56 marks OE 44 marks Total 100 marks	Practical Test	MCQ 56 marks OE 44 marks Total 100 marks
P5 Foundation	Topical Test	MCQ 36 marks OE 34 marks Total 70 marks	Practical Test	MCQ 36 marks OE 34 marks Total 70 marks

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

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