

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

*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
	<b>Non-Weighted Formative Assessment 0%</b>	<b>Semestral Assessment 1 30%</b>	<b>Non-Weighted Formative Assessment 0%</b>	<b>Semestral Assessment 2 70%</b>
<b>P5 Standard</b>	Topical Test	MCQ 56 marks OE 44 marks Total 100 marks	Practical Test	MCQ 56 marks OE 44 marks Total 100 marks
<b>P5 Foundation</b>	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](https://www.youtube.com/playlist?list=PLWEVvZtBqsJ_fBp_Eok9r-Mm6UBOGq2zp)

# Thank You

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