

# Primary 3 Science





### An Overview: Big Ideas in the Primary Science Syllabus

Big Ideas (Themes)	Key Inquiry Questions
Diversity	<ul> <li>What is the environment made up of?</li> <li>Why is it important to maintain diversity?</li> <li>How do we go about understanding the diverse range of living and non-living things?</li> </ul>
Systems	<ul> <li>What are different parts of a system?</li> <li>How do parts of a system or different systems interact together to perform a function?</li> </ul>
Interactions	<ul><li>How does Man interact with the surroundings?</li><li>What are the consequences of Man's interactions with his surroundings?</li></ul>
Cycles	<ul><li>What are the cycles in our everyday life?</li><li>How are cycles important to life?</li></ul>
Energy	<ul><li>How does energy affect Man and his surroundings?</li><li>Why is it important to conserve energy?</li></ul>



## Primary 3 Science Syllabus

Themes	Lower Block (P3 & P4)	Upper Block (P5 & P6)
Diversity	<ul> <li>Diversity of living and non-living things (P3)</li> <li>Diversity of materials (P3)</li> </ul>	NIL
Cycles	<ul> <li>Cycles of Plants and Animals (Life Cycles)         (P3)     </li> <li>Cycles in matter and water (Matter)</li> </ul>	<ul><li>Cycles in plants and animals (Reproduction)</li><li>Cycles in matter and water (Water)</li></ul>
Systems	<ul> <li>Plant system (Plant parts and functions)</li> <li>Human system (Digestive system)</li> </ul>	<ul> <li>Plant /Human system (Respiratory and circulatory systems)</li> <li>Cell system</li> <li>Electrical system</li> </ul>
Interactions	• Interaction of forces (Magnets) (P3)	<ul> <li>Interaction of forces (Frictional, gravitational forces, force in springs)</li> <li>Interaction within the environment</li> </ul>
Energy	Energy forms and uses (light and heat)	<ul><li>Energy forms and uses (photosynthesis)</li><li>Energy conversion</li></ul>

CHIJ Our Lady of the Nativity
Simple in Virtue, Steadfast in Duty





## Components of lessons

- Theory: Acquisition of basic scientific terms and concepts
- Practical: Carry out experiments in the science laboratory
- Science Workbooks required at P3 (Diversity/Cycles/Interactions)
- Supplementary / Process Skills Worksheets
- Practice Papers
- Experiential Learning @OLN (e.g. Ecogarden/Outdoor Learning Space)
- E-learning : SLS lesson packages

NOTE: Files will be returned for parents' checking and signature upon completion.



## Outdoor Experiential Learning @ OLN

- Lessons are designed by teachers
  - to stimulate students' curiosity about their environment
  - connect Scientific facts with the real world

E.g.

- Observe the spores under a fern leaf
- Observe different types of plants and compare their leaves/flowers/stems





## Science Programme

## Roles play by Science

#### **Programme**

Science Week (Term 3)

Science in Daily Life

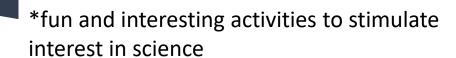
Using scientific skills in everyday life













## Science Programme

#### **Roles play by Science**

## Science and the environment

Learning Science through exploring the natural world

#### **Programme**

 Outdoor Experiential Learning 1 : Science Trail outside school (Pre-Covid)







Simple in Virtue, Steadfast in Duty

## Science Programme





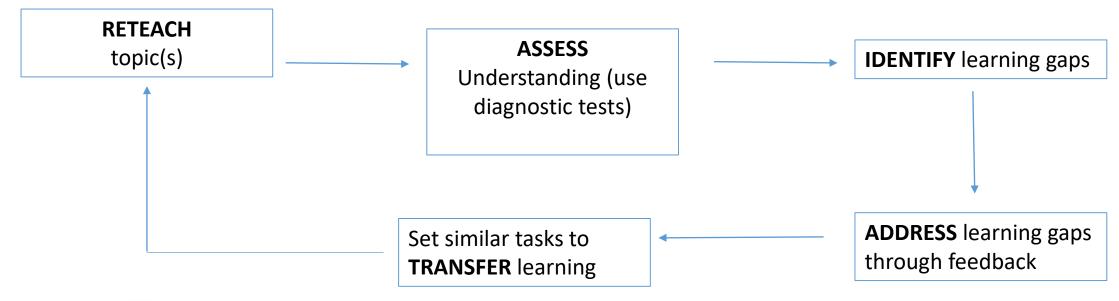
## Support Lesson

- Commence in Term 2
- Identification of pupils for support lesson is based on Weighted-Assessment 1.

- Focus:
- Reteach concepts taught in class.
- Use diagnostic approach to identify learning gaps.
- Practice papers focused on areas that pupils are weak at.



## Support Lesson Structure





## Assessment

Term	Type of Assessment
1	Process Skills Review 1
2	Process Skills Review 2
3	Performance Task
4	End-of-Year Exam





#### Format:

- <u>2</u> questions
- 5 marks each

#### Process Skills required:

- **Observation** use senses to gather information about objects / events
- Analysing identify parts of objects/information/ patterns, and relationship between them
- Comparing identify similarities and differences between objects/events
- Classifying group objects / events
- Using apparatus and equipment

#### How does it work?

- Pupils carry out 2 experiments.
- Step by step instructions to guide pupils.
- Answer questions based on observations.
- Provide reason(s) for their observation.
- To be carried out during lab lessons.

#### How do we prepare the pupils?

 One practice given to all classes before the performance task.





## Q & A Session

