

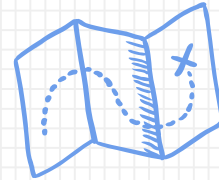
SCIENCE @ RMPS

2019



Vision

An inquirer with a passion for Science.

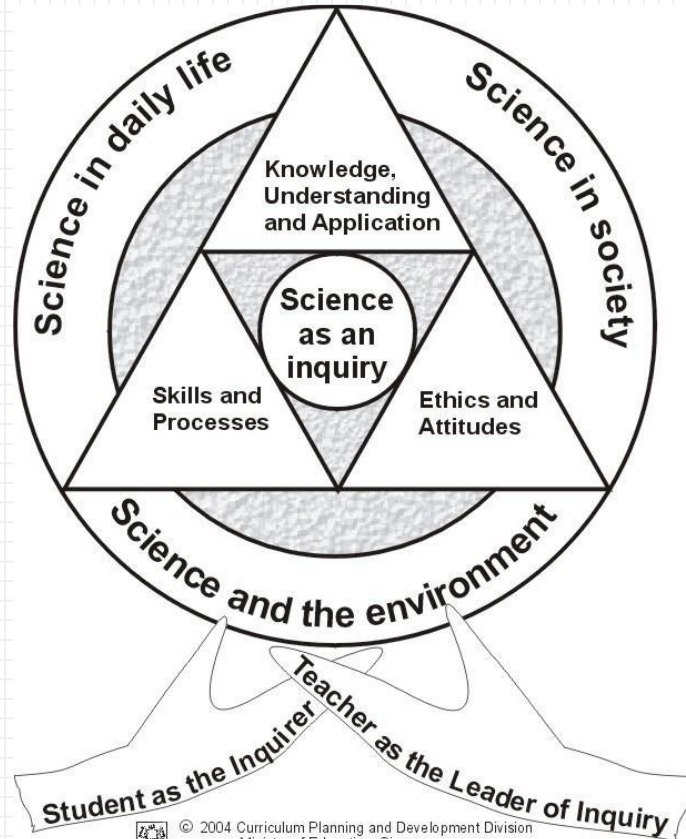


Mission

- To develop students with an inquiring mind.
- To equip students with scientific knowledge and skills.
- To make the learning of Science fun, meaningful and relevant.



Science Curriculum Framework



Inquiry-based Learning

Inquiry-based learning starts by posing questions, problems or scenarios rather than simply presenting established facts or portraying a smooth path to knowledge. The process is facilitated by the teacher.



Content

- Scientific phenomena, facts, concepts and principles
- Scientific vocabulary, terminology and conventions
- Scientific instruments and apparatus including techniques and aspects of safety
- Scientific and technological applications

Ethics & Attitudes

Curiosity, Creativity, Integrity, Objectivity, Open-mindedness, Perseverance, Responsibility

Skills & Processes

Observing, Comparing, Classifying, Using Apparatus & Equipment, Communicating, Inferring, Formulating hypothesis, Predicting, Analysing, Generating possibilities, Evaluating

- While there are certain scientific terms and concepts taught, pupils can demonstrate their understanding by using their own words.
- The focus of learning science is **not** on giving “standard answers” or keywords, but on **developing students’ ability to inquire, understand and explain scientific phenomena.**

- The learning of science **does require a certain level of clarity though**, in the way concepts are explained, given the **context of the question**.
- Otherwise, **we may end up endorsing misconceptions** in students or rewarding them for ambiguous responses.



Strategies

- **Read the questions carefully.**
- Identify key phrases and words in the question stem before attempting to answer.
- **Identify the concept** tested.
- **Model** answering techniques.
- Reinforce use of **Concept – Apply – Link (CAL)** answering technique.

Primary Science Syllabus Overview

Themes	Lower Block (P3 & P4)
Diversity	<ul style="list-style-type: none">• Diversity of living and non-living things• Diversity of materials
Cycles	<ul style="list-style-type: none">• Cycles of plants and animals (Life cycles)• Cycles in matter and water (Matter)
Systems	<ul style="list-style-type: none">• Plant system (Plant parts and functions)• Human system (Digestive system)
Interactions	<ul style="list-style-type: none">• Interaction of forces (Magnets)
Energy	<ul style="list-style-type: none">• Energy forms and uses (Light)• Energy forms and uses (Heat)

Primary Science Syllabus Overview

Themes	Upper Block (P5 & P6)
Cycles	<ul style="list-style-type: none">• Cycles in plants and animals (Reproduction)• Cycles in matter and water
Systems	<ul style="list-style-type: none">• Plant System• Human System• Cell System• Electrical System
Interactions	<ul style="list-style-type: none">• Interaction of forces• Interaction within the Environment
Energy	<ul style="list-style-type: none">• Energy forms and uses (Photosynthesis)• Energy Conversion



Assessment

- Paper format

<u>Multiple Choice</u>	<u>Open-Ended</u>
28 questions	12-13 questions
56 marks	44 marks



Assessment

<u>SA1 Topics</u>	<u>Preliminary Examination</u>
<ul style="list-style-type: none">• All P3, P4, P5 topics• Energy• Energy Conversion• Forces• Interactions within the Environment	<ul style="list-style-type: none">• All P3-P6 topics

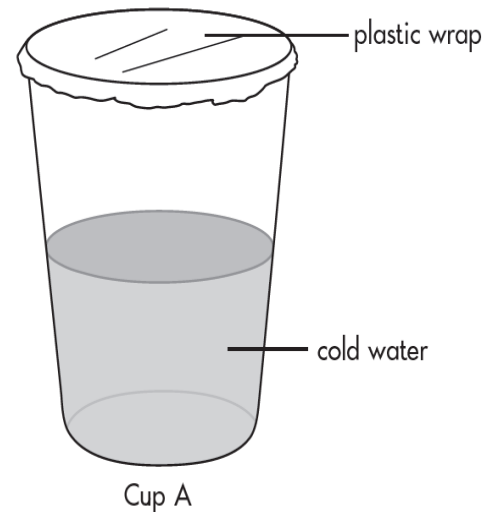
Speaking



Language used in Science is very often different from our day-to-day language.

Why does the cup feel wet?

- The water came from the fridge.
- The coldness of the cold water can be felt.
- The cold water came out of the cup.



Doing – E.g. growing green beans

- Plants need sunlight to make their own food.
- Plants can reproduce from seeds.
- How to conduct a fair test?
- And more ...

Observing, Comparing, Classifying, Using apparatus and equipment, Communicating, Predicting, Formulating Hypothesis



Visiting

- Singapore Zoo / Night Safari / River Safari
- Jurong Bird Park
- S.E.A. Aquarium, Sentosa
- Marina Barrage
- Artscience Museum
- Kranji Farms
- Parks (E.g. Hortpark)
- Gardens by the Bay
- Sungei Buloh Wetland Reserve
- Singapore Science Centre
- **Everywhere and Anywhere!**



Reading

- Science Books
- Newspapers
- Magazines
- Youtube channel:

<https://www.youtube.com/user/1veritasium>

- MythBusters:

<http://dsc.discovery.com/tv-shows/mythbusters>

SPH Websites ▾

THE STRAITS TIMES

St SINGAPORE POLITICS ASIA WORLD VIDEOS MULTIMEDIA LIFESTYLE FOOD FORUM

ENVIRONMENTAL ISSUES

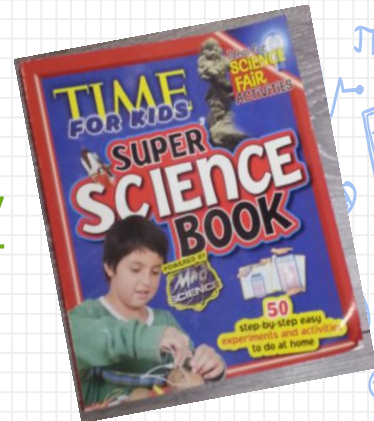


100% Pure? New Zealand's deteriorating water raises a stink

6 hours ago



How to save the planet: Eat less meat, more greens, nuts



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Thank you.