

SCIENCE



RESPECT

TEAMWORK

RESPONSIBILITY

LIFELONG LEARNING

**What does my child
learn in Science?**

**How does my child
learn Science?**

**Why does
my child
learn
Science?**

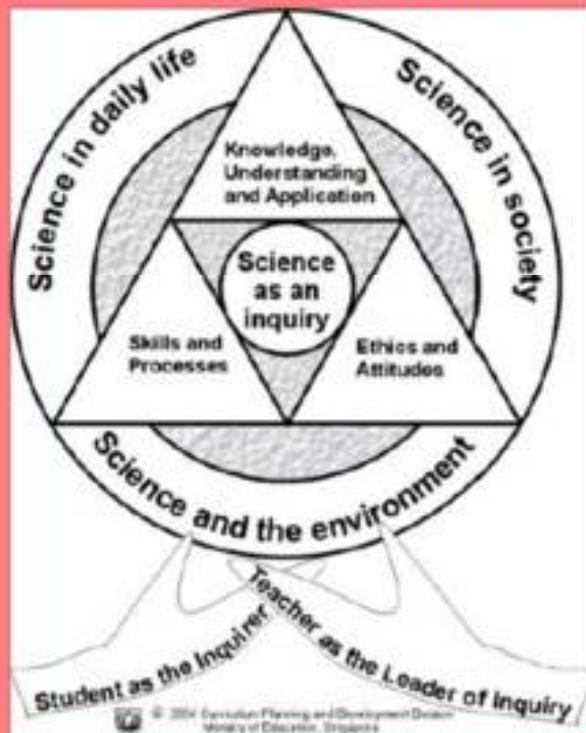
**How is my child
assessed in
Science?**

**How can I support
my child in learning
Science?**

2014 Primary Science Syllabus...

Primary Education Review & Implementation

Science Curriculum Framework



Balancing Knowledge with Skills and Values

Engaging pedagogy to teach skills and values
More holistic assessment to support learning

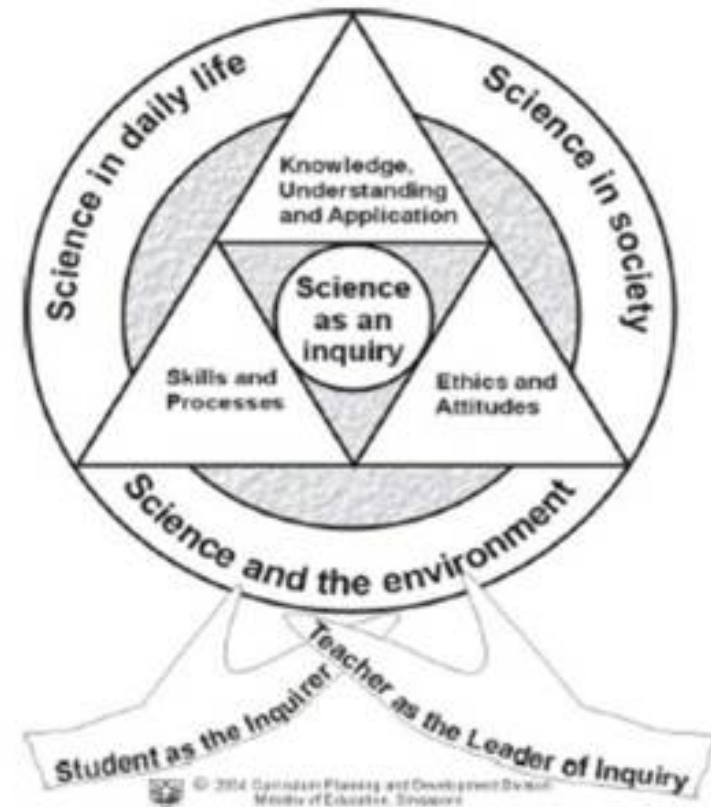
Investing in a Quality Teaching Force

Equipping teachers well through training and Professional development

21st Century Competencies Framework



The Science Curriculum Framework is derived from the **Policy Framework for the Teaching and Learning of Science**. It encapsulates the thrust of science education in Singapore to prepare our students to be sufficiently **adept as effective citizens, able to function in and contribute to an increasingly technologically-driven world.**



Skills and Processes	Engaging with an event, phenomenon or problem through:	Collecting and presenting evidence through:	Reasoning; making meaning of information and evidence through:
Skills	<ul style="list-style-type: none"> • Formulating hypothesis • Generating possibilities • Predicting 	<ul style="list-style-type: none"> • Observing • Using apparatus and equipment • 	<ul style="list-style-type: none"> • Comparing • Classifying • Inferring • Analysing • Evaluating
	Communicating		
Processes	Creative problem-solving, investigation and Decision-making		
Essential Features of Inquiry	Question	Evidence	Explain Connect
	Communication		



Syllabus Requirement		
Themes	* Lower Block (Primary 3 and 4)	**Upper Block (Primary 5 and 6)
Diversity	<ul style="list-style-type: none"> Diversity of living and non-living things (General characteristics and classification) BPPS P3 Diversity of materials 	
Cycles	<ul style="list-style-type: none"> Cycles in plants and animals (Life cycles) BPPS P4 Cycles in matter and water (Matter) 	<ul style="list-style-type: none"> Cycles in plants and animals (Reproduction) BPPS P5 Cycles in matter and water (Water)
Systems	<ul style="list-style-type: none"> Plant system (Plant parts and functions) Human system (Digestive system) BPPS P3 	<ul style="list-style-type: none"> Plant system (Respiratory and circulatory systems) Human system (Respiratory and circulatory systems) <u>Cell system</u> BPPS P5 Electrical system
Interactions	<ul style="list-style-type: none"> Interaction of forces (Magnets) BPPS P3 	<ul style="list-style-type: none"> Interaction of forces (Frictional force, gravitational force, <u>force in springs</u>) BPPS P6 Interaction within the environment
Energy	<ul style="list-style-type: none"> Energy forms and uses (Light and heat) BPPS P4 	<ul style="list-style-type: none"> Energy forms and uses (Photosynthesis) <u>Energy conversion</u> BPPS P6

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

2016 Primary 4 Assessment Plan

Subject	Term 1 (10%)	Term 2 (20%)	Term 3 (10%)	Term 4 (60%)
Science	<ul style="list-style-type: none"> ▪ Practical (10 marks) <ul style="list-style-type: none"> • Basic Process Skills • (Term 1 Week 6) ▪ CA1 (50 marks) 	<ul style="list-style-type: none"> ▪ Energy: Light - My Lantern ▪ SA1 (100 marks) 	<ul style="list-style-type: none"> ▪ Practical (10 marks) <ul style="list-style-type: none"> • Basic Process Skills ▪ CA2 (50 marks) 	<ul style="list-style-type: none"> ▪ Energy: Heat – The best insulator ▪ SA2 (100 marks)

P4 Science Continual Assessment in BPPS

Booklet	Type of questions	No. of questions	Number of Marks per Question	Weighting
A	Multiple-choice	15	2	30
B	Open-ended	7	2-5	20
			Subtotal	50
+ Practical (focussing on process skills)				10
TOTAL				60

1h {

P4 Science Semestral Assessment in BPPS

1h 45min

Booklet	Type of questions	No. of questions	Number of Marks per Question	Weighting
A	Multiple-choice	28	2	56
B	Open-ended	12 - 13	2-5	44
TOTAL				100

This is according to the new PSLE Science format to be implemented from 2017

Formative Assessment

Skills and Processes	Engaging with an event, phenomenon or problem through:	Collecting and presenting evidence through:	Reasoning; making meaning of information and evidence through:
Skills	<ul style="list-style-type: none"> Formulating hypothesis Generating possibilities Predicting 	<ul style="list-style-type: none"> Observing Using apparatus and equipment 	<ul style="list-style-type: none"> Comparing Classifying Inferring Analysing Evaluating
	Communicating		
Processes	Creative problem-solving, investigation and Decision-making		
Essential Features of Inquiry	Question	Evidence	Explain Connect
	Communication		



Formative Assessment Task 1 – My Lantern

Topic – Light

Assessment Indicator:

- Demonstrate and explain how **shadows are formed using the lantern**
- Demonstrate how different materials are used in the lantern to show **the amount of light passing through a material can vary**



Formative Assessment Task 2 – The best insulator

Topic – Heat

Assessment Indicator:

- State that materials differ in their ability to conduct heat.
- Show an understanding that rate of heat gain and heat loss of an object is affected by how well it conducts heat.



What tips can I use to help my child?

- Be positive about Science!
- Try to avoid saying "I was never good at Science" or "I never liked Science".
- Let your child know that everyone can learn Science and Science is around us.
- Use **household items** to reinforce Science concepts.
- Let your child know that you think Science is important and **fun**.
- Carry out **Science activities** with your child.
- Ask your child **questions** and encourage your child to ask **questions**.
- Encourage him/her to find out more on his/her own.
- Be positive about your own Science knowledge.
- Learn, and discover together.

Features of Inquiry

Question Evidence Explain
Connect Communicate

***Your presence and
involvement in your
child's learning will
make a difference.***



Thank You

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