



JUNYUAN PRIMARY SCHOOL

Future-Ready Learners . Leaders of Character

Primary 5 Science Curriculum and Assessment Briefing

(Standard & Foundation)

30 January 2026



Content

- A. Revised Science Curriculum Framework (wef 2023)
- B. Coverage of Topics and Concepts
- C. Assessment & Feedback
 - Knowledge-type and Application-type Questions
- D. Strategies to Support our Pupils

A. Revised Science Curriculum



JUNYUAN PRIMARY SCHOOL

Future-Ready Learners . Leaders of Character

Science education in Singapore provides students with a strong foundation in Science for life, learning, citizenry, and work.

Science for Life and Society in the centre circle captures the essence of the goals of Science education.



Figure 1: The Science Curriculum Framework

Demonstrating WOTD		
Investigating	Evaluating and Reasoning	Developing and Evaluating Solutions
Posing questions and defining problems	Communicating, evaluating and defending ideas with evidence	Using and developing models
Designing investigations	Making informed decisions and taking responsible actions	Constructing explanations and designing solutions
Conducting experiments and testing solutions		
Analysing and interpreting data		

Understanding NOS
Science is an evidence-based, model-building enterprise to understand the real world.
Science assumes natural causes, order and consistency in natural systems.
Scientific knowledge is generated through established procedures and critical debate.
Scientific knowledge is reliable, durable, open to change in light of new evidence.

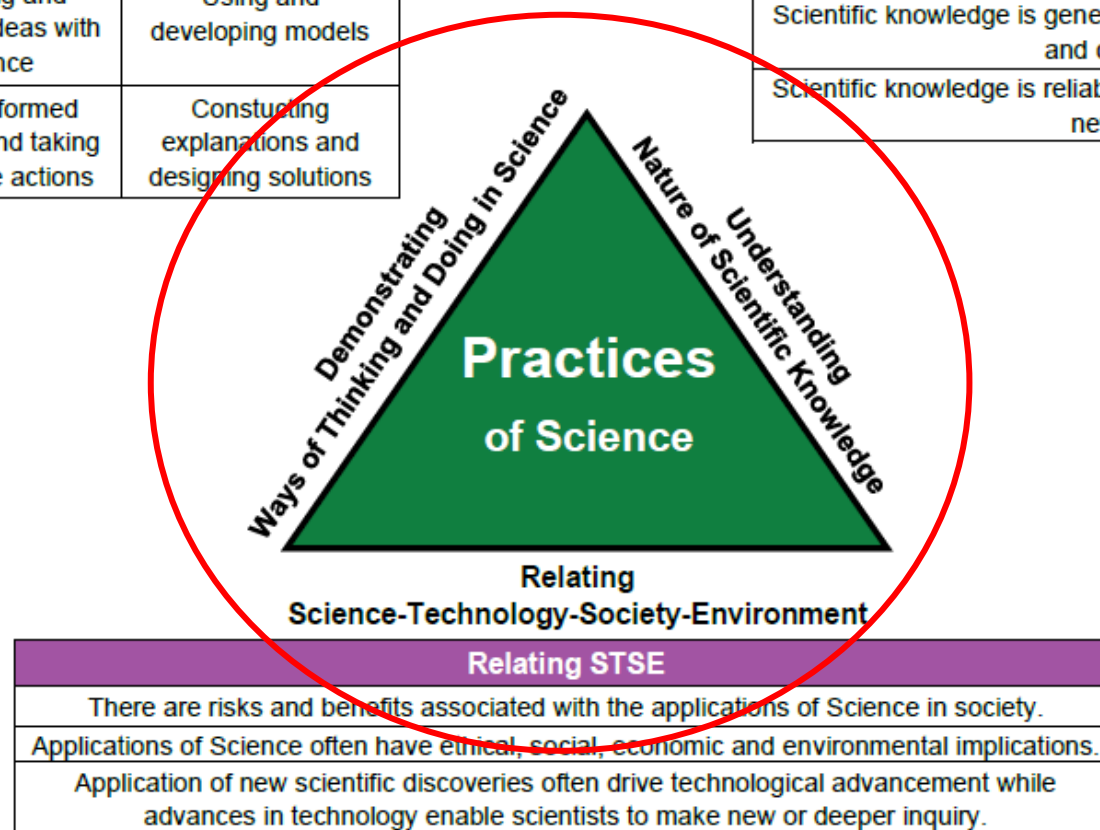


Figure 2: The Practices of Science



B. Topics and Concepts

Thematic Approach (Upper Block)

- 4 themes: **Cycles**, **Systems**, Energy and Interactions (over the span of 2 years)
- Appreciate the links between different themes / topics to allow the integration of scientific ideas.
- More advanced concepts and skills are built on basic ones learnt at the lower block.



2023 Revised Science (Primary) Syllabus

For more details, visit the link :

https://www.moe.gov.sg/api/media/ba3562d3-5b31-4459-8693-45cde7b97273/Primary-Science-Syllabus-2023_May24.pdf

SCIENCE

TEACHING & LEARNING SYLLABUS

**Primary Three to Six
Standard / Foundation**

Implementation starting with
2023 Primary Three Cohort

Updated Jan 2026

Implementation of 2023 Primary Science Syllabus

Content Update

Levels	P3	P4	P5	P6
Themes	Diversity . Cycles . Systems . Interactions . Energy			
Topics	- Diversity of living and non-living things (General characteristics and classification) - Diversity of materials - Cycles in plants and animals (Life cycles) - Interaction of forces (Magnets)	- Plant system (Plant parts and functions) - Human system (Digestive system) - Cycles in matter and water (Matter) - Energy forms and uses (Light) - Energy forms and uses (Heat)	- Cycles in plants and animals (Reproduction) - Cycles in matter and water (Water) - Plant system (Respiratory and circulatory systems) - Human system (Respiratory and circulatory systems) - Electrical system	- Energy forms and uses (Photosynthesis) <u>Energy conversion</u> - Interaction of forces (Frictional force, gravitational force, <u>elastic spring force</u>) - Interactions within the environment

Note: Underlined topics are not required in the Foundation Science Syllabus

RESTRICTED/NON-SENSITIVE





C. Assessment & Feedback

Purpose?

- Understanding of core concepts/key ideas
- Readiness of child
- Close learning gap

How?

Weighted Assessments

WA1: Pen and Paper (30 marks)

Booklet A: MCQ

Booklet B: (Short Response and) Structured Question

WA2: Pen and Paper (30 marks)

Booklet A: MCQ

Booklet B: (Short Response and) Structured Question

End of Year Assessment

Standard Science

Booklet A: 30 MCQ (60 marks)

Booklet B: Structured Questions (40 marks)

Foundation Science

Booklet A: 20 MCQ (40 marks)

Booklet B: Short Response and Structured Questions (30 marks)



Generalisation vs Conceptual Responses

Which is which?

Have young/offspring.

It will die.

The water gained heat and evaporated.

The material is hard/strong.

The cup will be cold.

The water will dry up.

Without air, food and water, the organism is not able to survive.

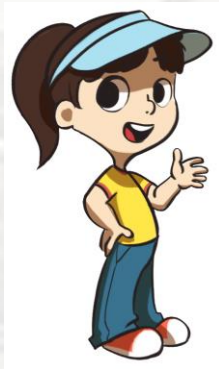
Female and male reproductive cells fuse together and eggs get fertilised.

Example P5 Topic: Water Cycle

Concept:
Evaporation

SCHOOL
s of Character

There are water droplets on the leaves in the morning.
They are not there after a while. Why?



Water has disappeared!



Water has evaporated.



Water didn't disappear. It evaporated.
Conceptually, it continues to exist, except in a different state.
'Water has disappeared' does not explain what happened to the water.
Evaporation happens when water changes from liquid to gas.

Example P5 Topic: Water Cycle

Applications in
daily life

SCHOOL

Values of Character

Evaporation is happening around us ...



Just like water from my clothes evaporated!



Putting little balls in reservoirs
can help to slow down
evaporation of water.



And water by the road evaporating!





Other key takeaways

- d) Suggest two ways to increase the number of water droplets formed in container A.

Spc

Add water with the temperature higher than usual and,

increase the amount of water

Action

How to?

Acronyms

WAVE
PFDG
WOW
LOB SOS
DOW

- d) Suggest two ways to increase the number of water droplets formed in container A.

Make water

put the water hotter to get more water droplets.

forming in the container (Heat up the water / us

**SOME USEFUL WORDS***

1	amphibian	39
2	attract	40
3	battery	41
4	blood	42
5	boil	43
6	breathe	44
7	bulb	45
8	carbon dioxide	46
9	circulation	47
10	condense / condensation	48
11	conductor	49
12	contract / contraction	50
13	deforestation	51
14	digestion	52
15	earth	53
16	electricity / electrical circuit	54
17	energy	55
18	evaporate / evaporation	56
19	expand / expansion	57
20	fertilise / fertilisation	58
21	flexible	59
22	float	60
23	food (chain)	61
24	force	62
25	freeze	63
26	friction	64
27	fungi	65
28	germinate / germination	66
29	global warming	67
30	gravity	68
31	gullet	69
32	heart	70
33	heat	71
34	insect	72
35	insulator	73
36	intestine	74
37	light	75

Son

1	amphibian
2	attract
3	battery
4	blood
5	boil
6	breathe
7	bulb
8	carbon dioxide
9	circulation
10	condense / condensation
11	conductor
12	contract / contraction
13	deforestation
14	digestion
15	earth
16	electricity / electrical circuit



- There are different question types:

Knowledge and Application Type Questions

Pupils will be able to **apply facts / concepts to new situations** and **use one or a combination of basic process skills.**

Familiarity with the terms used in the question stem will benefit pupils:

Spend less time writing unnecessary information (correct facts but not answering to the point, marks are not awarded)



Good practices to meet demand for the assessment

Apply strategies taught when answering

This benefits pupils as they approach the question systematically.

MCQ

Elimination method

Open-Ended (OE)

ETC3ER
(ETCCER)

CER



ETC Strategy in Answering Science Questions

Extract Information

**Circle key
information in
diagrams / text**

Topic Identification

**Use key
information in
the diagrams or
stem as clues to
identify topic
tested**

Concept Identification

**Identify concept
within topic**



ETC3ER Strategy

Extract	Topic	Concept	Compare	Claim	Evidence	Reason
Circle / highlight key information from text and diagrams	Use the key information to identify topic(s) related to question	Identify relevant concepts from the topic(s) identified	Check if answer requires a comparison. If yes, use comparatives (involve 2 objects) or superlatives (more than 2 objects)	State the choice to the question	State data or results from the question to support the claim	Use concepts to explain how the evidence supports the claim

Is there is a difference 'larger' and 'largest'?



D. Supporting our Pupils (Home-School Partnership)

- **Understanding of concepts is important**
 - MAKE CONNECTIONS between concepts learnt
 - APPLY concept(s) in new situations
 - EXPLAIN clearly, completely and accurately referencing to science concepts/ facts
- **Revision of concepts learnt from P3 and P4**
 - Home support from parents/ guardians is important.
 - All the Science materials should be kept till child sits for PSLE.
 - Textbooks, investigative activities from Workbook, Science Journal Book
- **Practice**
 - Important to practice an array of thinking skills (e.g. creative problem solving, decision making & investigation skills) that support scientific inquiry



Repository
for revision

SINGAPORE
STUDENT
LEARNING
SPACE

SINGAPORE
STUDENT
LEARNING SPACE
LEARN ANYTIME, ANYWHERE, AT ANY PACE
Username
Password
FORGOT PASSWORD
LOGIN

Support if child is keen on
investigative work



Revise!

Actively engaging the mind
***Educational approach
(Topic: Reproduction)***



SCIENCE
IT'S LIKE
MAGIC
BUT REAL



Sky Map

This one started out as a project at Google, and then became open source. If you don't know where to start, point it at the sky and have it direct you toward something cool.

ANDROID

Daily happenings around us

- Weather patterns
- Fungi growing along roadside
- Technology/research



Reading

Interest building – Some
apps online/mobile apps



JUNYUAN PRIMARY SCHOOL

Future-Ready Learners . Leaders of Character

Thank You