

Science Sharing for Primary 3 and Primary 4 Parents

13 February 2025



We will be starting the session shortly.

Coverage of Webinar

- ✓ Syllabus & Assessment
- ✓ Learning Science in Rivervale
- ✓ Science Programmes
- ✓ Science Answering & Learning Strategies
- ✓ Exploring Science



MOE 2023 Science Syllabus - current P3 - P4



SCIENCE
TEACHING & LEARNING SYLLABUS
Primary Three to Six
Standard / Foundation

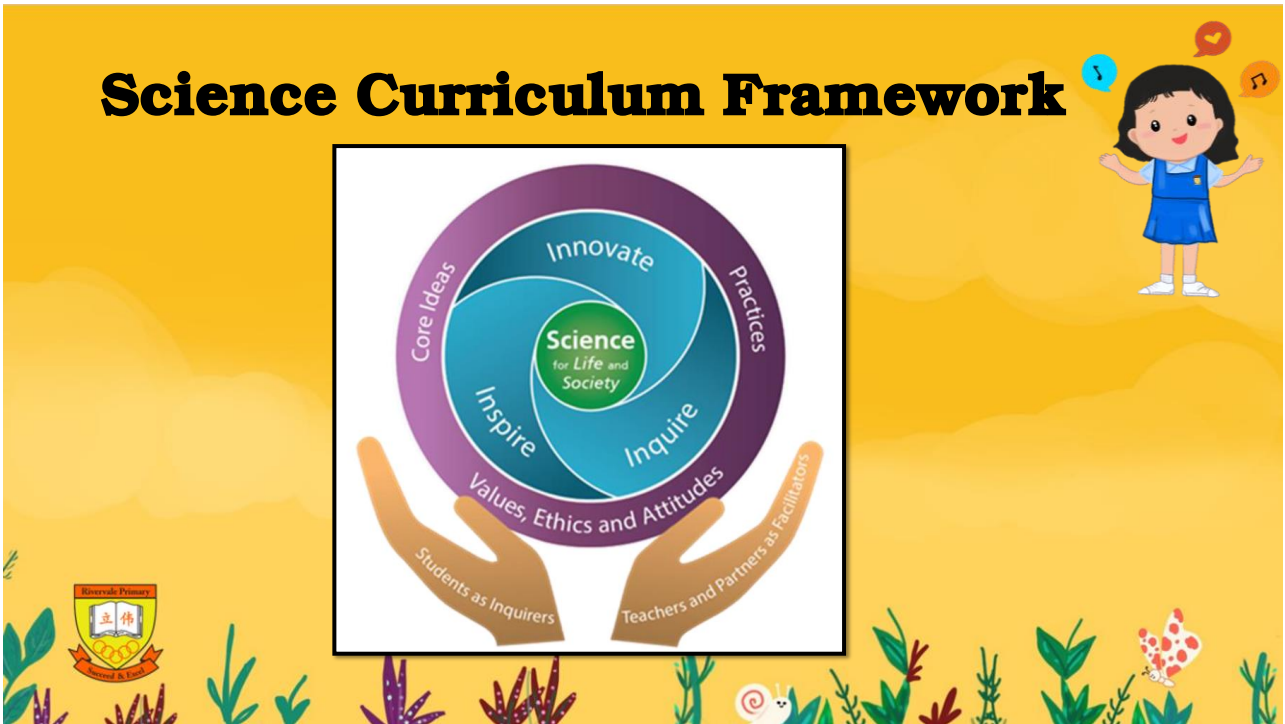
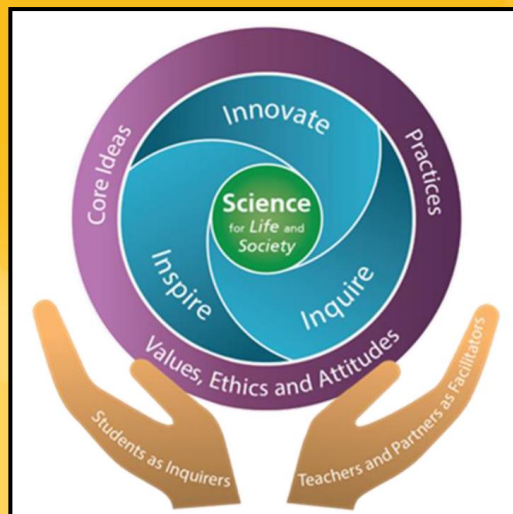
Implementation starting with
2023 Primary Three Cohort

Updated October 2022

https://www.moe.gov.sg/-/media/files/primary/syllabus/primary-science-syllabus-2023_may24.pdf

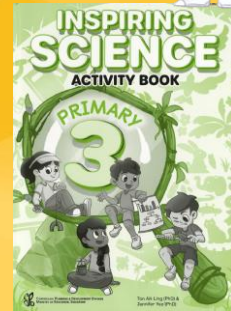
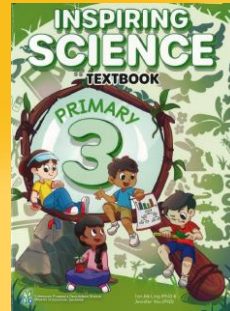


Science Curriculum Framework



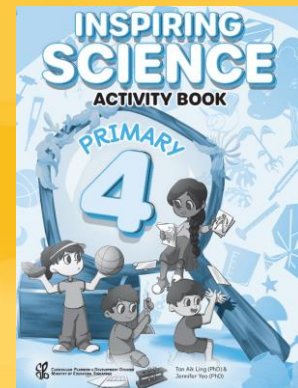
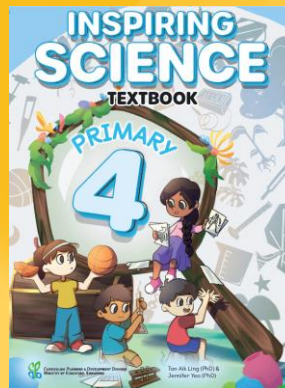
Primary 3 Syllabus

- Diversity
 1. Diversity of Living and Non-Living Things
 2. Classification of Living Things
 3. Diversity of Materials
- Cycles
 4. Life Cycles of Plants
 5. Life Cycles of Animals
- Interactions
 6. Properties of Magnets
 7. Making and Using Magnets



Primary 4 Syllabus

- Systems
 1. Plant System
 2. Human Systems
 3. Matter
- Energy
 4. Light
 5. Shadows
 6. Heat
 7. Effects of Heat



Assessment Format

Level	P3/P4
Term 1	Weighted Assessment (WA)
Term 2	Weighted Assessment (WA)
Term 3	Weighted Assessment (WA)
Term 4	End Year Examination (EYE)



P3 End Year Examination (EYE) Format

Booklet	No. of Questions	Marks
A Multiple Choice Questions (MCQ)	25	50
B Open-ended Questions	8 - 10	30

Duration : 1 h 30 min



P4 End Year Examination (EYE) Format

Booklet	No. of Questions	Marks
A Multiple Choice Questions (MCQ)	30	60
B Open-ended Questions	12 - 14	40

Duration : 1 h 45 min



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Learning Science in Rivervale



• The **3C** Pedagogical Framework

1. **Capture** ideas and interest
2. **Construct** understanding
3. **Consolidate** learning



Learning Science in Rivervale



1. **CAPTURE** ideas and interest

K-W-L Chart		
Topic: _____		
What I Know	What I Want to Know	What I Learned



Learning Science in Rivervale



2. CONSTRUCT understanding

Diversity
PowerPoint Slides
Lesson Notes
Activity Book

Textbook Page 7
Pair/Group Work

- Look at the objects. Classify them into groups.
- Explain to your classmates how you have grouped the objects

Mobile phone	Toy car	Colour pencils	Wireless computer mouse	Paper clips	Book
Alarm clock	Digital watch	File	Laptop	Table lamp	



Learning Science in Rivervale



Science Lab



Sparkle Kit



Learning Science in Rivervale

Q2
The pictures below show 2 objects that are made from metal.

padlock **nail**

Why is metal used to make the above objects?
: Metal is strong.
Metal sinks in water.
Metal is not flexible.

Animals with Four Stages in Their Life Cycles
Watch the videos below to find out more about animals with four stages in their life cycles. As you watch these videos, think of the following questions:
1. What are the different stages in the life cycles?
2. How are the life cycles similar?
3. How are the life cycles different?
Life cycle of a butterfly

Human Systems
INSTRUCTIONS
Match the empty boxes in the image with the options below by selecting the empty box and the correct option.

The pictures below show the different human systems. Drag and drop the correct labels into the boxes below.

Learning Science in Rivervale

3. CONSOLIDATE learning

Which of the animals below is a mammal?

12

Robin

Shark

Exit Ticket

3 Things I learned today

2 Things I want to learn more

1 Question I have

MAGNETS

Describes what

Explains why

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Science Programmes: **Science Alive!**

- With the aim to spark curiosity and interest in students, students get to be involved in activities that engage them hands-on.
- Students explore fields of Science that are beyond the textbooks!



Science Programmes: Recycling

- Our students learn how to recycle correctly and to manage plastic and waste.



Earth Hour & Environment Week

Learning Journey - P3 Zoo



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Science Answering Strategies: OIC

O – Observation

- What can be seen in the question / What prediction can happen/ What needs to be done to a particular experimental set-up to achieve the objective (*Gathering data or information*)

I – Interpretation

- Linking the science topics or concepts and how it relates to phenomenon (*Analysing the data and making meaning*)

C – Conclusion

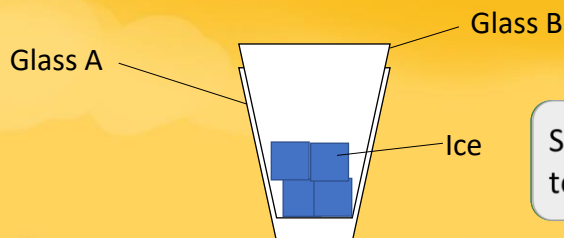
- Explaining or predicting what will happen (*Answering the question*)

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Science Answering Strategies: Applying OIC

Glass A and Glass B are stuck together as shown below.
Sandra added ice into Glass B to help separate the 2 glasses.

Explain how the glasses are able to separate when she added the ice into the cup.



Topic: Heat

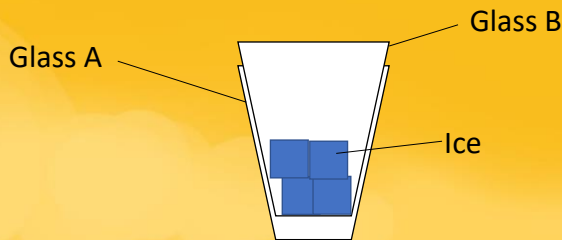
Concept:
Heat transfers from hotter to colder region.
When objects lose heat, they contract.

Step 3: Analyse. Link concept to situation. Use OIC Model



Science Answering Strategies: Applying OIC

Explain how the glasses are able to separate when she added the ice into the cup.



Observe (O) : For the cup to be separate, **Glass B needs to contract**.

Interpret (I) : Since the Glass B is hotter than the ice, **Glass B would lose heat to the ice** and the **glass would contract**.

Conclusion (C) : The glasses could be separated as Glass B contracts and becomes smaller.



Student A's Answer

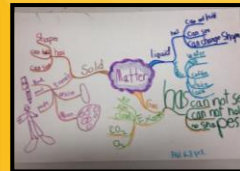
Glass B becomes smaller so it can be separated.

Student B's Answer

Glass B loses heat to the ice, contracts and becomes smaller. Thus, it can be separated from glass A. ✓

Science Learning Strategies:

- To recall key concepts / ideas
 - Mnemonics
 - Mind maps
 - Flash cards
 - Science notes



Science Learning Strategies: Mnemonics examples

Seeds need

- W** Warmth
- O** Oxygen / Air
- W** Water

to germinate

Plants need

- S** Sunlight
- A** Air
- W** Water

to make food

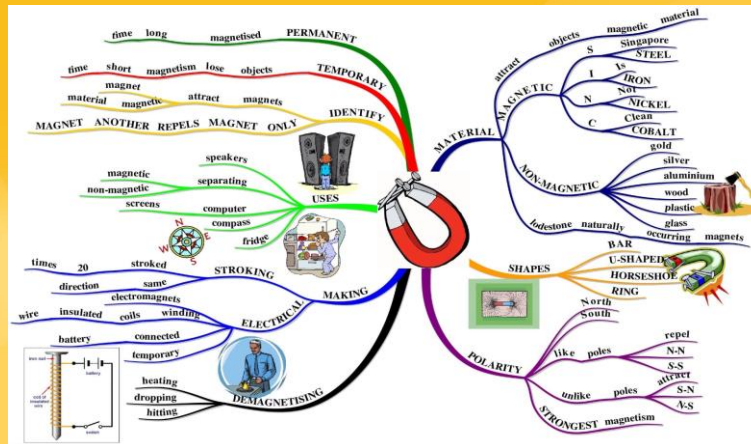


Science Learning Strategies: Mindmap

- Help students **recall** previous knowledge and **identify areas with misconceptions** or that have been forgotten
- Help students to **understand and retain** latest knowledge
- **Connect** prior knowledge with new knowledge
- Identify things that students have forgotten or has not been able to make connections



Science Learning Strategies: Mindmap



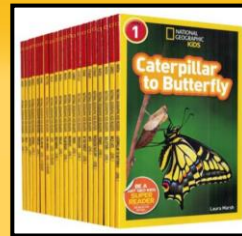
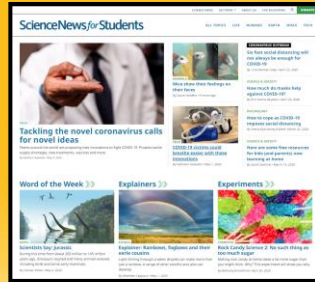
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Exploring Science

- Newspapers
- National Geographic
- Animal Planet
- Discovery Channel

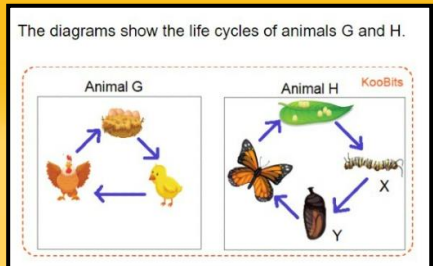


Exploring Science

- Young Scientist Magazines
- Simple experiments at home



<p>Kids STEM Science... \$2.17 Shopee</p>	<p>4M Steam Powered Ki... \$34.93 Amazon.sg</p>	<p>Gravity Maze Game \$36.75 Amazon.sg</p>	<p>Einstein Box Science... \$27.00 \$39 Amazon.sg Free delivery</p>	<p>100 Science Experiments \$27.00 Amazon.sg Free delivery</p>
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Exploring Science

- P3 – Every Child a Seed, Magnetic Kit
- P4 – Light Kit



School Science Website

- <https://rivervalescience.wixsite.com/2020>





Thank You!

Please scan the QR Code for your feedback.
Thank you.

FOR YOUR SUPPORT

