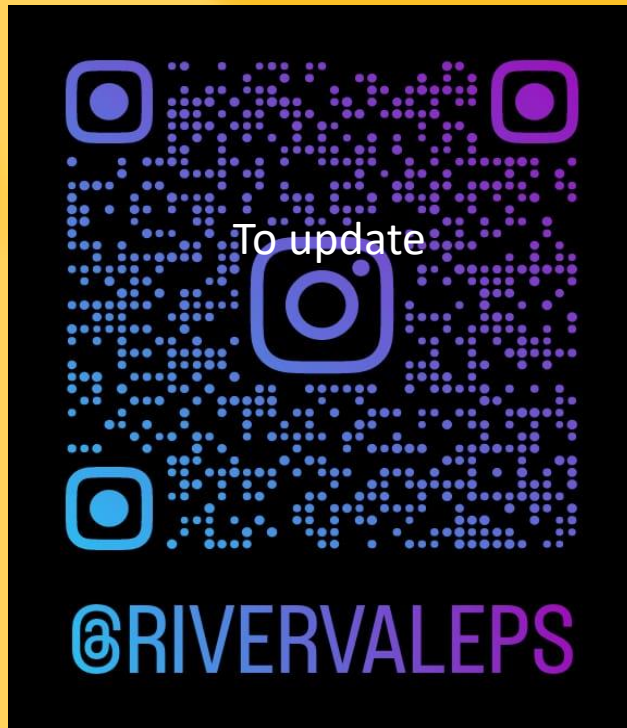


# Science Sharing for Primary 3 and Primary 4 Parents

22 January 2024

Follow us on Instagram!



We will be starting the session shortly.

We seek your cooperation on the following:



**No videography**  
**No photography**



All slides will be made available on the school website at a later time.



At any time during the sharing, you can type your question using the chat function.

Rivervale Primary

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Succeed & Excel



# Coverage of Webinar

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



# MOE 2023 Science Syllabus - current P3 - P4



**SCAN ME**

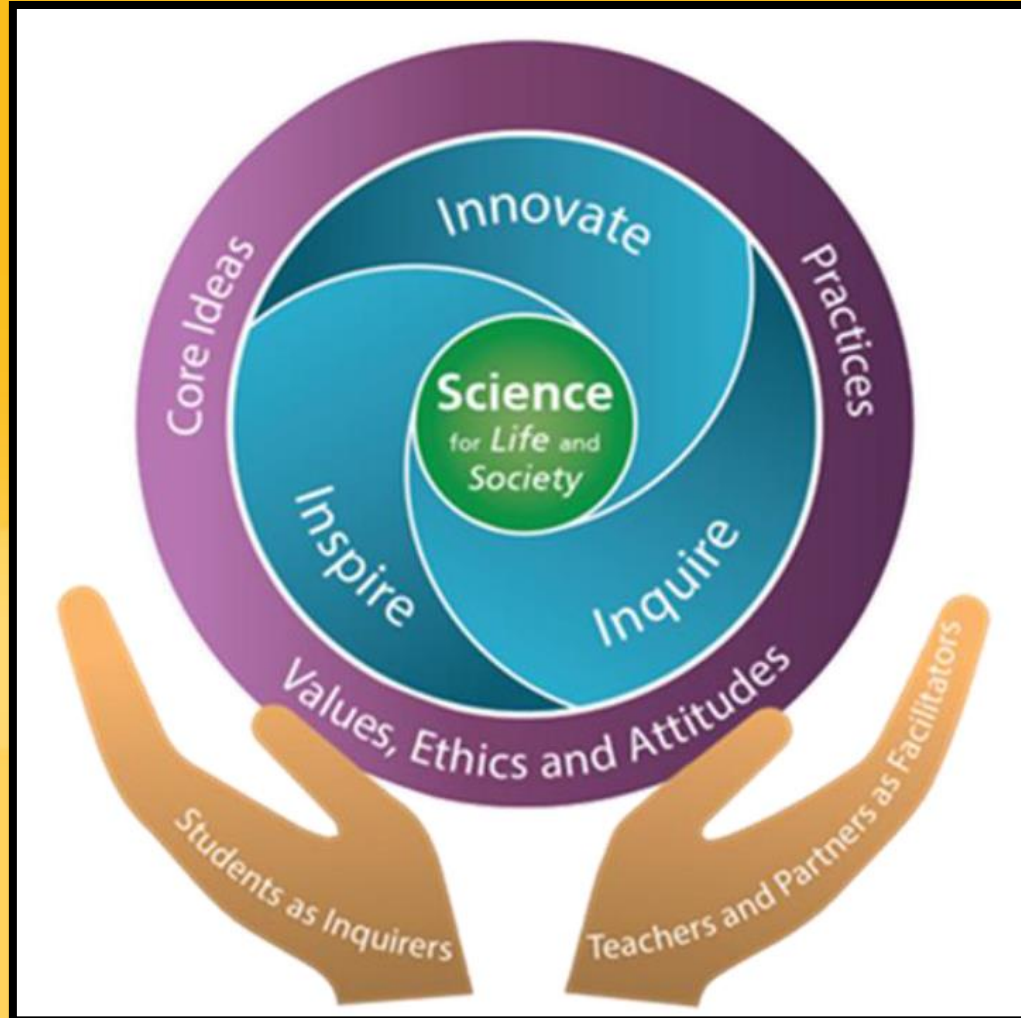
## **SCIENCE** **TEACHING & LEARNING SYLLABUS** Primary Three to Six Standard / Foundation

Implementation starting with  
2023 Primary Three Cohort

*Updated October 2022*



# Science Curriculum Framework





# Primary 3 Syllabus

- Diversity

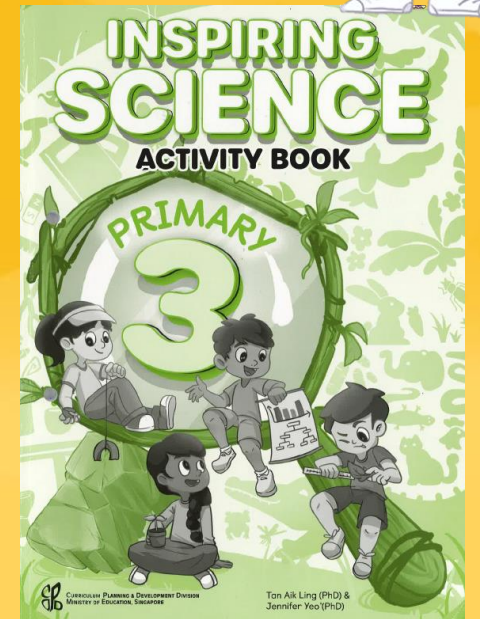
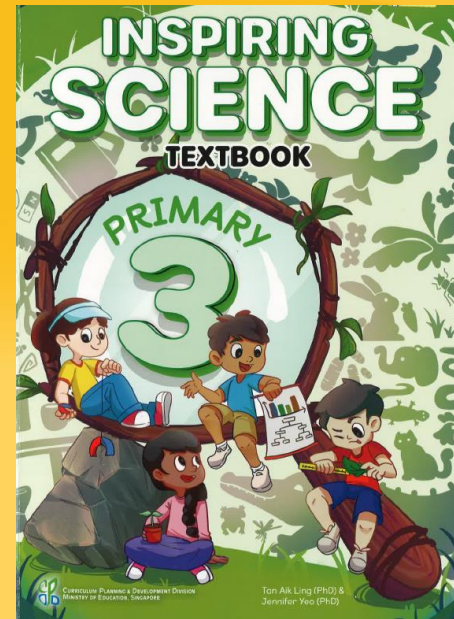
1. Diversity of Living and Non-Living Things
2. Classification of Living Things
3. Diversity of Materials

- Cycles

4. Life Cycles of Plants
5. Life Cycles of Animals

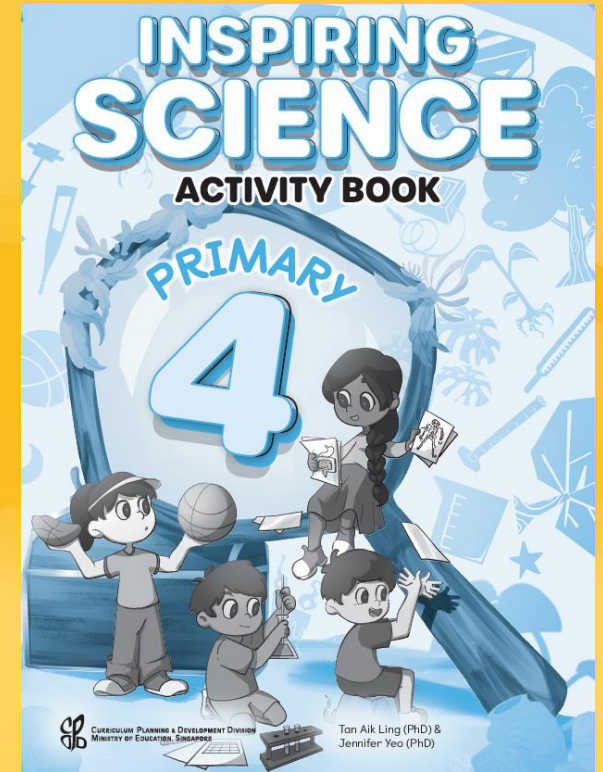
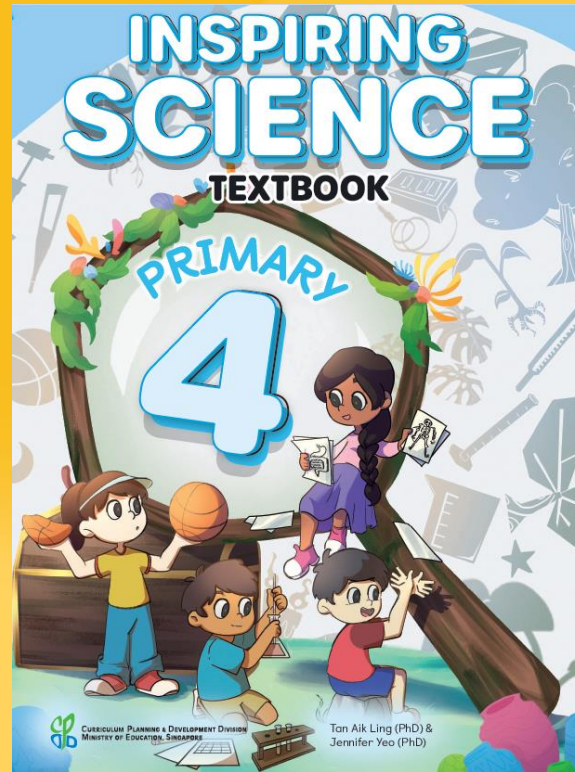
- Interactions

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

	P3/P4
Term 1	WA
Term 2	WA
Term 3	WA
Term 4	EYE





# P3 End Year Examination Format

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

**Duration : 1 h 30 min**



# P4 End Year Examination Format

Booklet	No. of Questions	Marks
A Multiple Choice Questions	28	56
B Open-ended Questions	12 - 14	44

**Duration : 1 h 45 min**



# Coverage of Webinar

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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

whysospec






# 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	





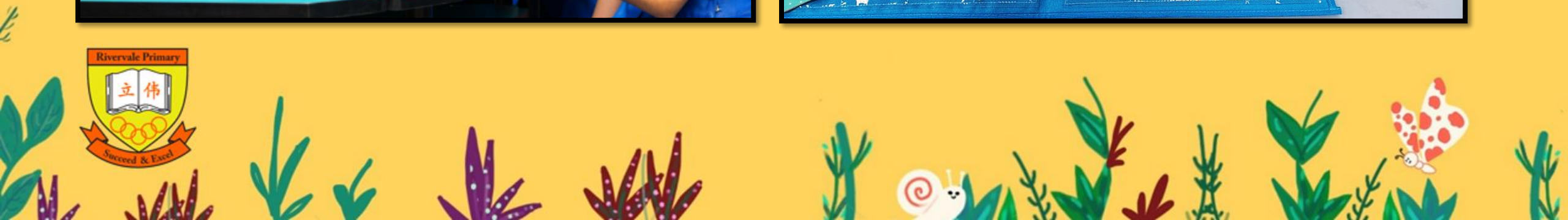
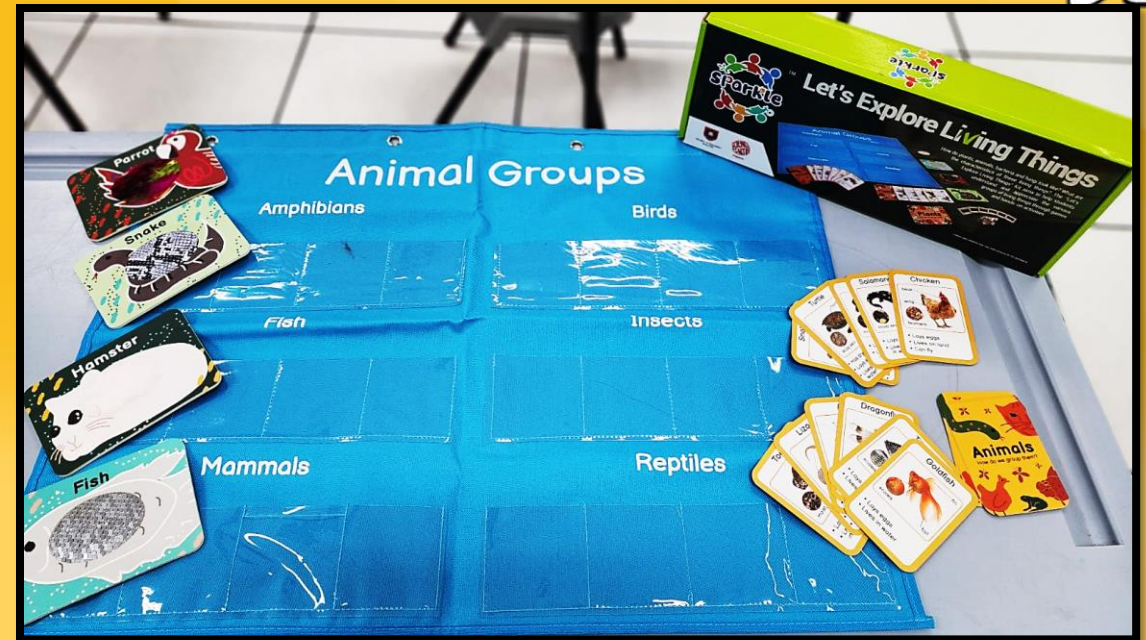
# Learning Science in Rivervale



Science Lab



Sparkle Kit

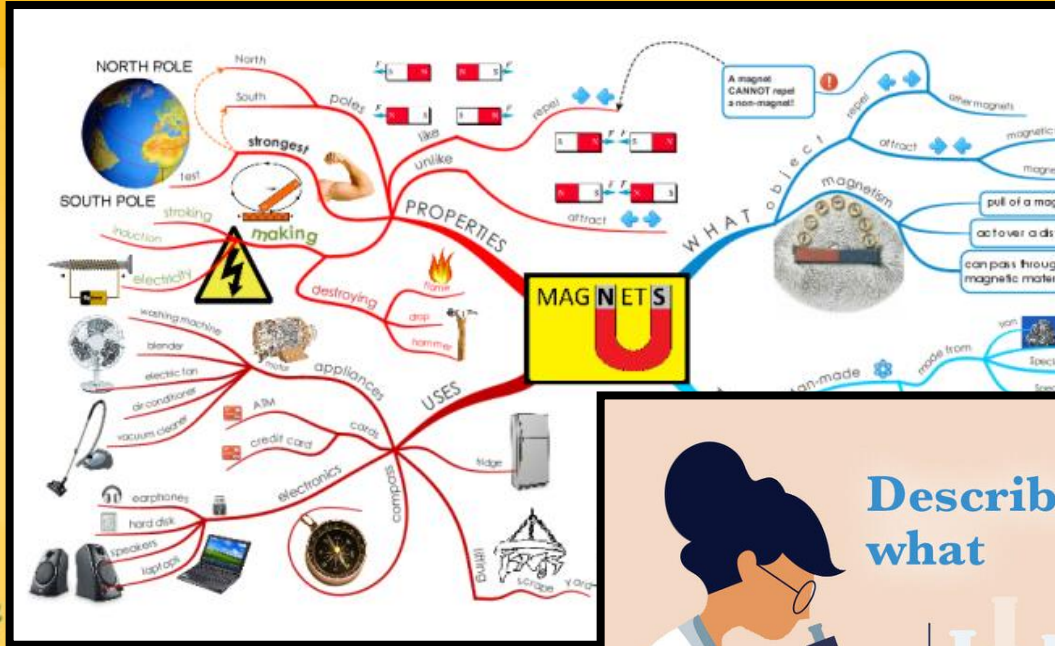




# Learning Science in Rivervale



## 3. Consolidate learning



Which of the animals below is a mammal?

12

Robin

Shark

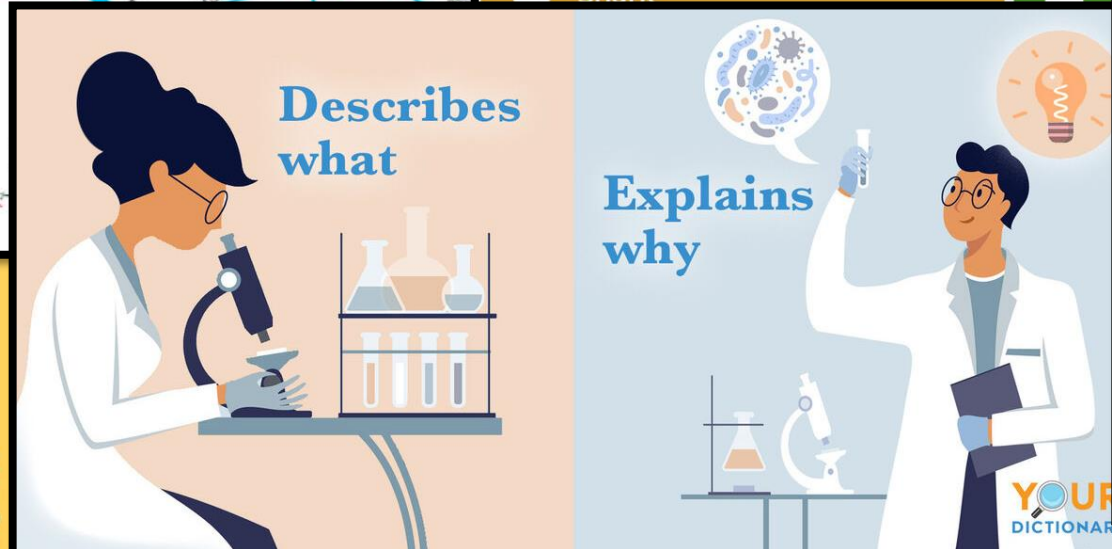
Skip

### Exit Ticket

3 Things I learned today

2 Things I want to learn more

1 Question I have



YOUR DICTIONARY

# Coverage of Webinar

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





# 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.





# Science Programmes: Earth Hour & Environment Week





# Science Programmes: Learning Journey



P3 Learning Journey to Singapore Zoo



# Coverage of Webinar

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# Science Answering Strategies:

## OIC

### O – Observation

- What is seen or predicted to happen / what needs to be done to a particular experimental set-up to achieve its objective

### I – Interpretation

- Tying in of concepts and how it relates to phenomenon

### C – Conclusion

- Explaining or predicting what will happen

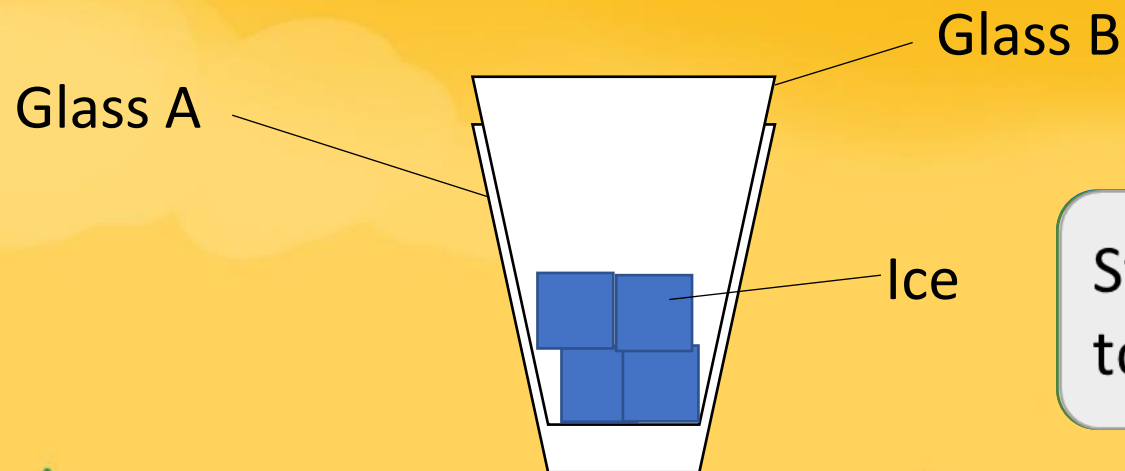




# Science Answering Strategies: Applying OIC

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

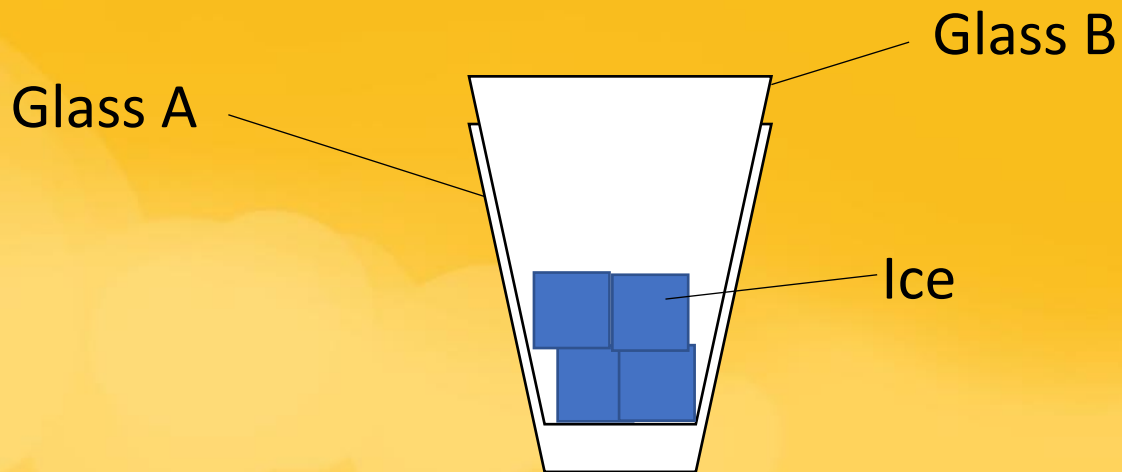
Concept:  
Heat transfers from hotter to colder region.  
When objects lose heat, they contract.

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.

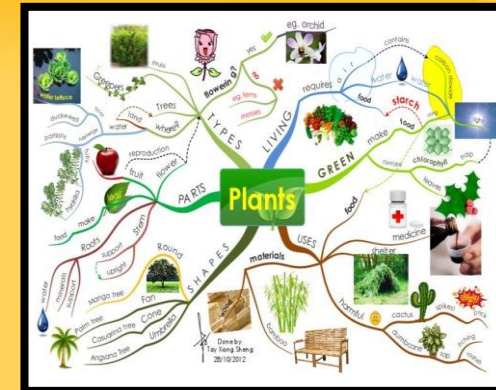
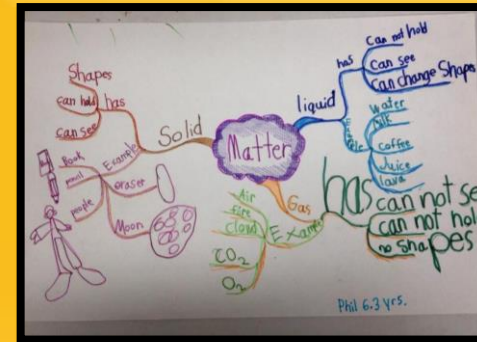
### Student B's Answer

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

My	MERCURY
VERY	VENUS
EDUCATED	EARTH
MOTHER	MARS
JUST	JUPITER
SERVED	SATURN
US	URANUS
NOODLES	NEPTUNE





# 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



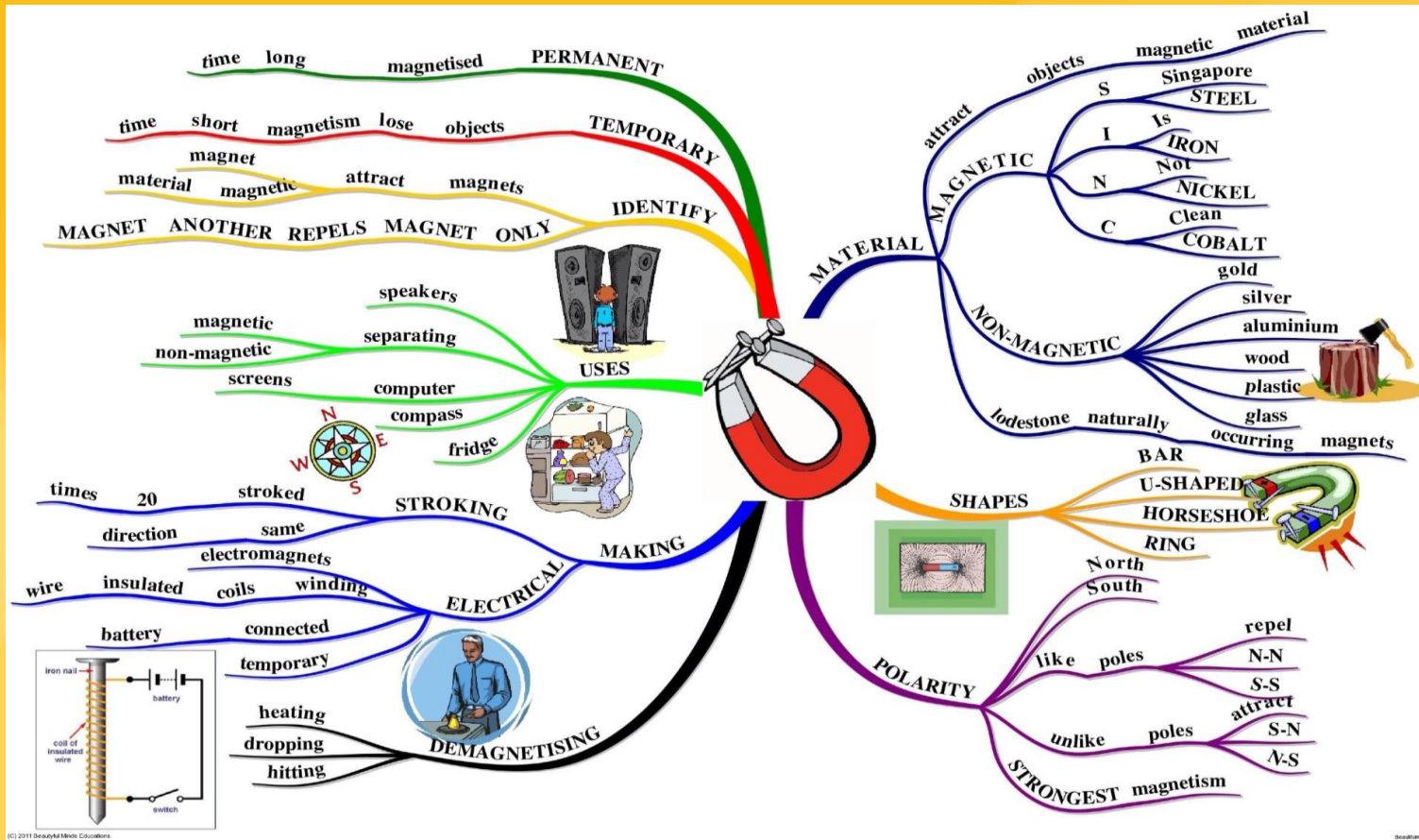
# Science Learning Strategies:

## 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





# Coverage of Webinar

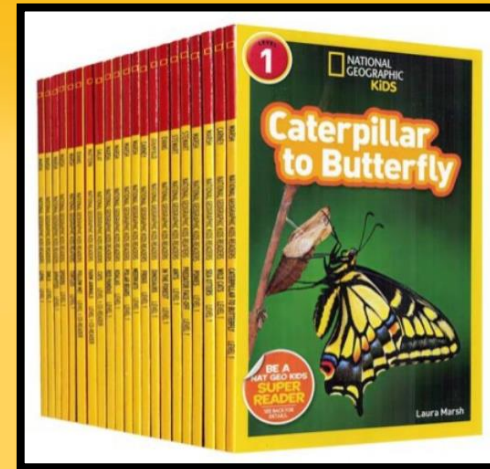
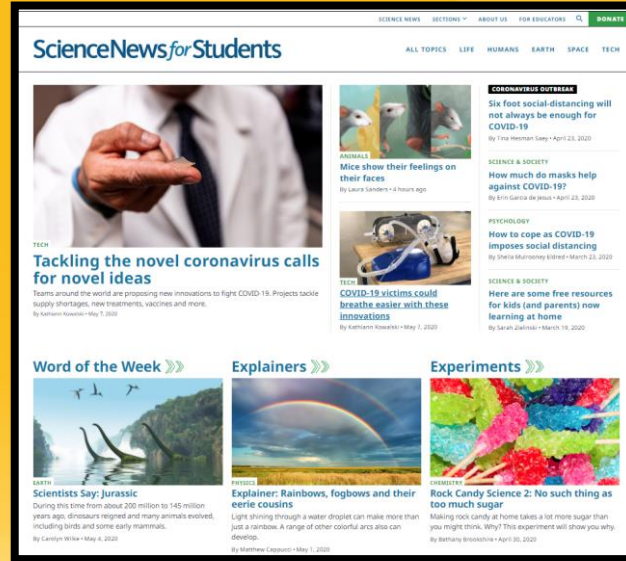
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# Exploring Science



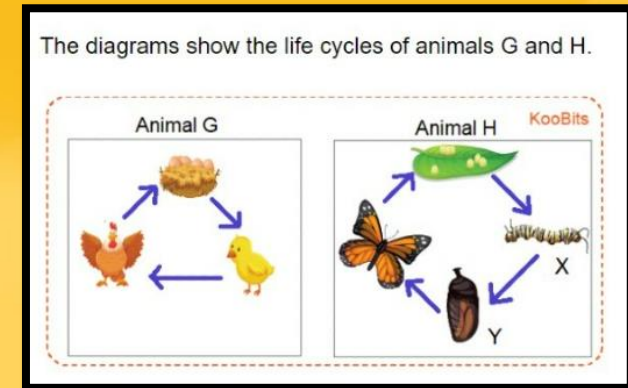
- Newspapers
- National Geographic
- Animal Planet
- Discovery Channel





# Exploring Science

- Young Scientist Magazines
- Simple experiments at home





# Exploring Science

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



# School Science Website



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







# Thank You!



FOR YOUR SUPPORT

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