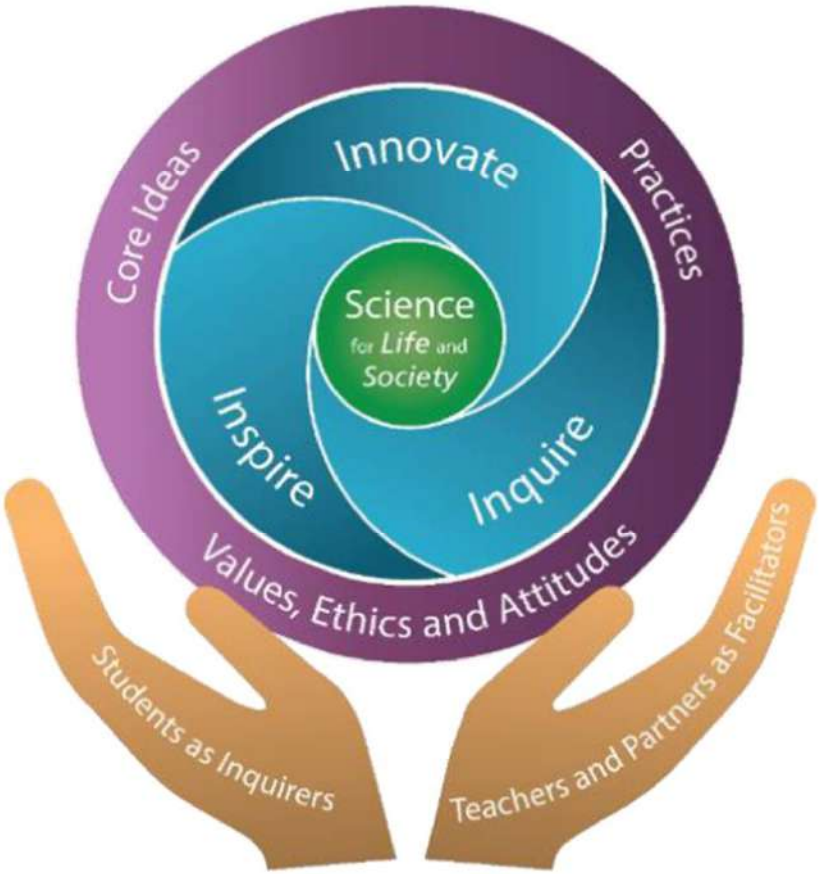
# SCIENCE SHARING

## 2026

## Primary 3 Meet-and-Greet

# Science Curriculum Framework and 2023 Primary Science Syllabus




**Goals**
Science for Life and Society

**Vision - 3INs**
**In**spire
**In**quire
**In**novate

**Three Domains**
Core Ideas
Practices
Values, Ethics and Attitudes

**Stakeholders**
Students as Inquirers
Teachers & Partners as Facilitators

## Science Curriculum Framework and 2023 Primary Science Syllabus

Curiosity

Open-mindedness

Creativity

Resilience

Integrity

Responsibility

Objectivity

Healthy scepticism

# Science Curriculum Framework and 2023 Primary Science Syllabus

Core Ideas are organised as **Themes** in Primary Science

**Diversity . Cycles . Systems . Interactions . Energy**

| P3 | P4 | P5 | P6 |
|---|---|---|---|
| 4 topics | 5 topics | 5 topics | 4 topics |

Only in P3

| P3 | P4 | P5 | P6 |
|---|---|---|---|
| • Diversity of living and non-living things / Classification of living things<br>• Diversity of materials<br>• Properties of magnets / Making and Using magnets<br>• Life cycles of plants & animals | • Plant System<br>• Human Systems<br>• Matter<br>• Light / Shadows<br>• Heat / Effects of Heat | • Plant transport system<br>• The Human Respiratory & Circulatory System<br>• Electrical System / Simple Series & Parallel Electric circuits<br>• Cycles in water<br>• Reproduction in animal and plants | • Photosynthesis<br>• Energy Conversation<br>• Interaction of Forces<br>• Interactions with the environment / Surviving in the Environment |

# 3C Pedagogical Framework

3C pedagogical framework helps to design the students' learning experience for each key idea

| Stages | What | How |
|---|---|---|
| **Capture** ideas and interest | What are some of your student's prior knowledge?<br><br>What is the next concept that students are learning? | How can we elicit students' prior knowledge?<br><br>How can we generate students' interest for learning the next concept? |
| **Construct** understanding | What concepts do students have to learn?<br><br>Are there content gaps we have to bridge? | How can we teach the concepts?<br><br>How can we bridge the content gaps? |
| **Consolidate** learning | What is the key idea in this lesson? | How can we help students apply what they have learnt? |

# Science Curriculum Framework and 2023 Primary Science Syllabus

| Practices - Ways of thinking and doing | | By the end of Primary 4, students should be able to: | By the end of Primary 6, students should be able to: |
|---|---|---|---|
| **Posing questions and defining problems** | This involves asking questions to make sense of the world (themselves and the environment) around them. | • Ask questions out of curiosity or to deepen understanding.<br>• Ask questions which can be investigated. | |
| **Designing investigations** | This involves formulating questions or hypotheses and designing fair tests to find out answers to the questions or to verify the hypotheses. | • Recognise a fair test (changed/unchanged variables). | • Design a fair test (changed/unchanged variables). |
| **Conducting investigations and testing solutions** | This involves conducting investigations to gather data through making observations using our senses or instruments. This also involves knowing the functions and limitations of various apparatus, developing the ability to select and handle them appropriately for various tasks. | • Use senses, apparatus and equipment to gather data.<br>• Investigate to find out answers to questions (guided investigations).<br>• Record and/or compare observations/data with suggested scaffolding. | • Use senses and select appropriate apparatus and equipment to gather data.<br>• Investigate to find out answers to questions (guided and open investigations).<br>• Record and/or compare observations/data using a variety of forms e.g., notes, drawings and charts. |
| **Analysing and interpreting data** | This involves identifying and explaining the parts of objects, information (presented in different forms), as well as the patterns and relationships between these parts. | • Simple analysis of data and information in representations (e.g., tables, bar and line graphs, charts and diagrams) to infer patterns and relationships or explain findings. | • Analysis of data and information in representations (e.g., tables, bar and line graphs, charts and diagrams) to infer patterns and relationships or explain findings. |

# Science Curriculum Framework and 2023 Primary Science Syllabus

| Practices - Ways of thinking and doing | | By the end of Primary 4, students should be able to: | By the end of Primary 6, students should be able to: |
|---|---|---|---|
| **Communicating, evaluating and defending ideas with evidence** | This involves receiving and presenting information and ideas in various forms. This also involves assessing the reasonableness, accuracy and quality of information and ideas. | • Communicate (e.g., written, verbal, pictorial, tabular or graphical) clear explanation and reasoning.<br>• Seek clarification to deepen understanding. | |
| **Making informed decisions and taking responsible actions** | This involves establishing and applying criteria to select from among seemingly equal alternatives. The process of establishing criteria involves consideration of the consequences and values. | • State or select options based on appropriate criteria with reasons. | |
| **Using and developing models** | This involves using multiple representations to describe, explain and predict phenomena. | • Use multiple representations (e.g., pictures, charts, diagrams, tables, graphs) to explain concepts, describe and predict phenomena. | |
| **Constructing explanations and designing solutions** | This involves generating ideas and justifying them to remedy or alter a problem situation. | • Construct possible explanations and generate ideas. | |

# Number of Science Periods Per Week

| P3 and P4 Science | P5 and P6 Foundation Science | P5 and P6 Science |
|---|---|---|
| 5 | 5 | 6 |

Three days of Science Per Week

SLS Science Assignments

# Inspiring Science Textbook and Activity Book


## Science File

- School Notes
- Worksheets
- Topical WS,
- Process Skills
- Concept Map
- Term Review

## Nature Study

# Weighted Assessment (WA)

- To assess students' understanding of science concepts, inquiry skills, and use of evidence to explain observations and draw conclusions.

| WA1 | WA2 | WA3 | EYE |
|---|---|---|---|
| 40 marks | Practical<br>20 marks | 40 marks | 80 marks |

# Claim, Evidence, Reasoning (CER)

**Why CER?**

In Science, children do not just *give answers* — they learn to **think like young scientists** by:

- making a **Claim** (what they think),
- using **Evidence** (what they observe or find out),
- explaining their **Reasoning** (why the evidence supports the claim).

# How You Can Support Your Child in Learning Science at Home Using Claim – Evidence – Reasoning (CER)

## 1. Support Your Child to Make a Claim

**What you can do:**

- Encourage your child to **say what they think will happen** or **what they think is true**.
- Accept ideas even if they are not fully correct yet.

**Parent prompts:**

- "What do you think will happen?"
- "Which one do you think is correct?"
- "What is your answer?"

You can support this thinking **without needing to know all the science content**.

# How You Can Support Your Child in Learning Science at Home Using Claim – Evidence – Reasoning (CER)

## 2. Help Your Child Find Evidence

### What you can do:

- Ask your child to **observe carefully** during simple activities.
- Encourage them to refer to:
  - what they saw,
  - what they measured,
  - what they read in their textbook or worksheet.

### Parent prompts:

- "What did you observe?"
- "What did you notice when you tried it?"
- "What does your worksheet or textbook say?"
- "What makes you say that?"

# How You Can Support Your Child in Learning Science at Home Using Claim – Evidence – Reasoning (CER)

## 3. Guide Your Child to Explain Their Reasoning

**What you can do:**

- Encourage your child to **connect the evidence to the claim**.
- Focus on explanation, not scientific terms.

- **Parent prompts:**
- "Why does that happen?"
- "How does your observation support your answer?"
- "Can you explain it in your own words?"

By supporting **Claim, Evidence and Reasoning**, you help your children:

- think critically,
- explain their ideas clearly,
- build confidence in Science.

# Use Everyday Situations to Practise CER

| Everyday Situation | Possible Claim | Evidence | Reasoning |
|---|---|---|---|
| Melting ice | Ice melts faster outside | Ice outside melted first | It is warmer outside |
| Cooking | Food cooks faster with a lid | Water boiled faster | Heat is trapped |

# What You Do NOT Need to Do

- You do not need to give the correct answer immediately
- You do not need scientific vocabulary
- You do not need to correct every mistake

## Instead:

- listen,
- ask guiding questions,
- praise effort and thinking.

**“When parents ask good questions, children learn to think like scientists.”**

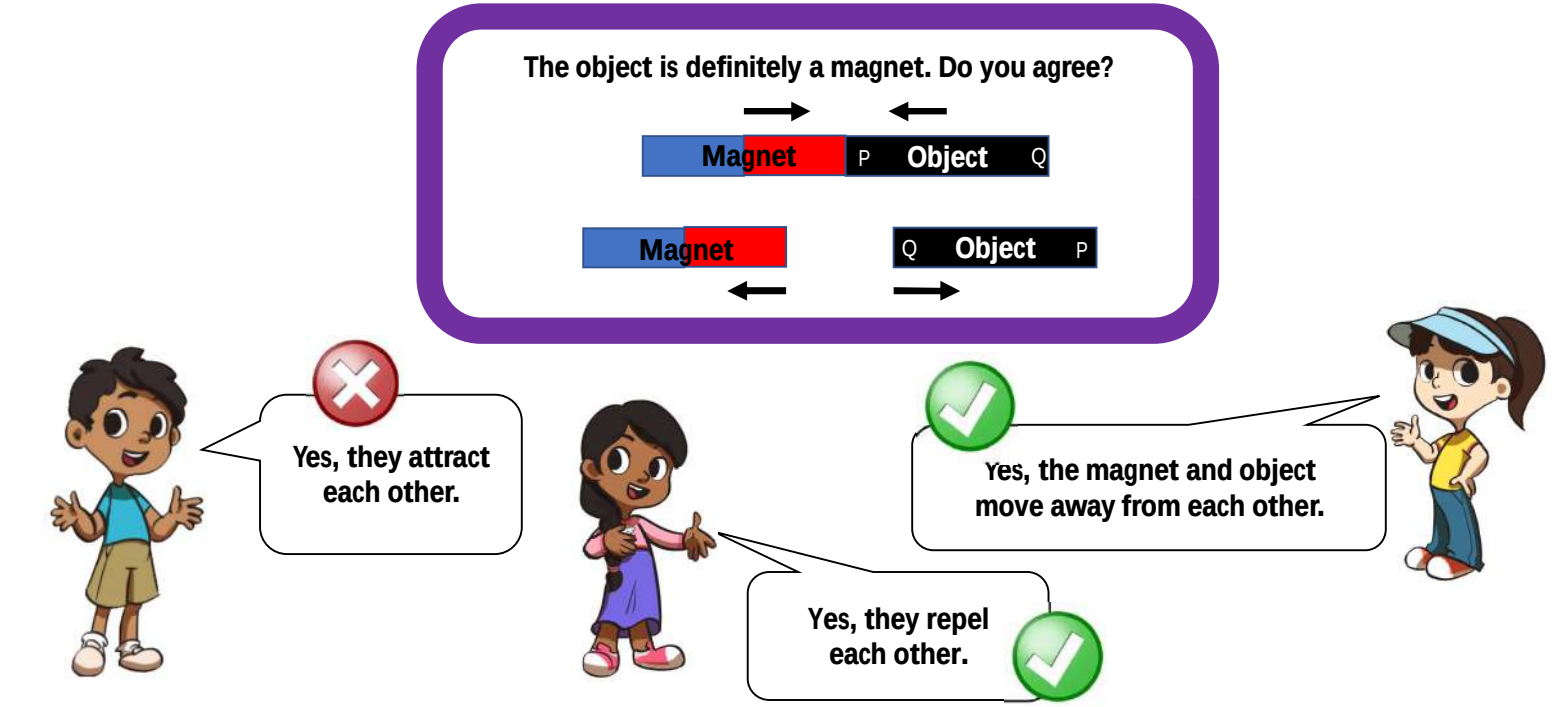
# Conceptual Understanding in Primary Science: Examples and Applications

# Conceptual Understanding in Primary Science:

- Students learn Science through understanding and applying concepts and skills in different contexts in an age-appropriate manner.
- The focus of learning Science is not on giving "standard answers" or keywords. Students can show their understanding by using their own words to explain clearly in the context of the question.
- Science is alive and its applications are all around us.

# Example 1: Magnets

Concept:
Magnetic Repulsion




**If the object is only attracted by a magnet, it may just be a magnetic material. There is insufficient evidence to conclude that the object is a magnet. The object is definitely a magnet only if it repels a magnet.**

# Example 1: Magnets

Applications in daily life

**Magnets help us in our everyday life!**

**There are magnets in my toy!**

**Magnets help us to separate the magnetic materials in our rubbish too.**

**Yes, they are even used in Maglev trains!**

# Example 2: Heat

Concept:
Heat Conduction

Air slows down heat flow.

This jacket keeps us warm because ...


Air prevents coldness from reaching us.

Air is a poor conductor of heat.

**The description of coldness being transferred is conceptually incorrect.**
**Heat is transferred from a warmer region to a colder region.**
**The air in jacket slows down heat flow away from the body rather than prevents coldness from reaching us.**

# Example 2: Heat

Applications in daily life

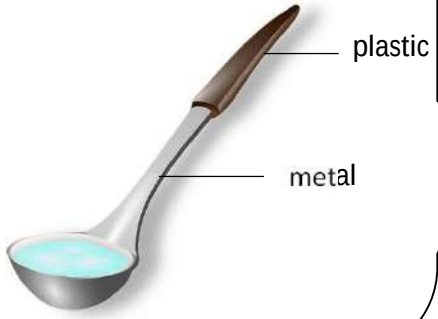
Some objects are better conductors of heat so they allow heat to flow through faster than others. What are some examples of heat flow in our everyday life?

Heat flows through the metal pot quickly to cook our food.

Heat flows through the cardboard slowly so that I can hold my hot drink.

Some objects are made of both good and poor conductors of heat, such as the soup ladle.

I can hold the plastic handle safely when getting my hot soup.




# Primary 3 Science Teachers

| Class | Science Teacher | Class | Science Teacher |
|---|---|---|---|
| **Compassion 1** | Ms Aleefa | **Compassion 4** | Mdm Lalitha |
| **Compassion 2** | Mr Darius Kwan | **Compassion 5** | Mrs Phyllis Lim |
| **Compassion 3** | Ms Chan Meng Yin | **Compassion 6** | Ms Foong Kah Yin |

# Thank you