



Science Curriculum Presentation

Parent Teacher Meeting

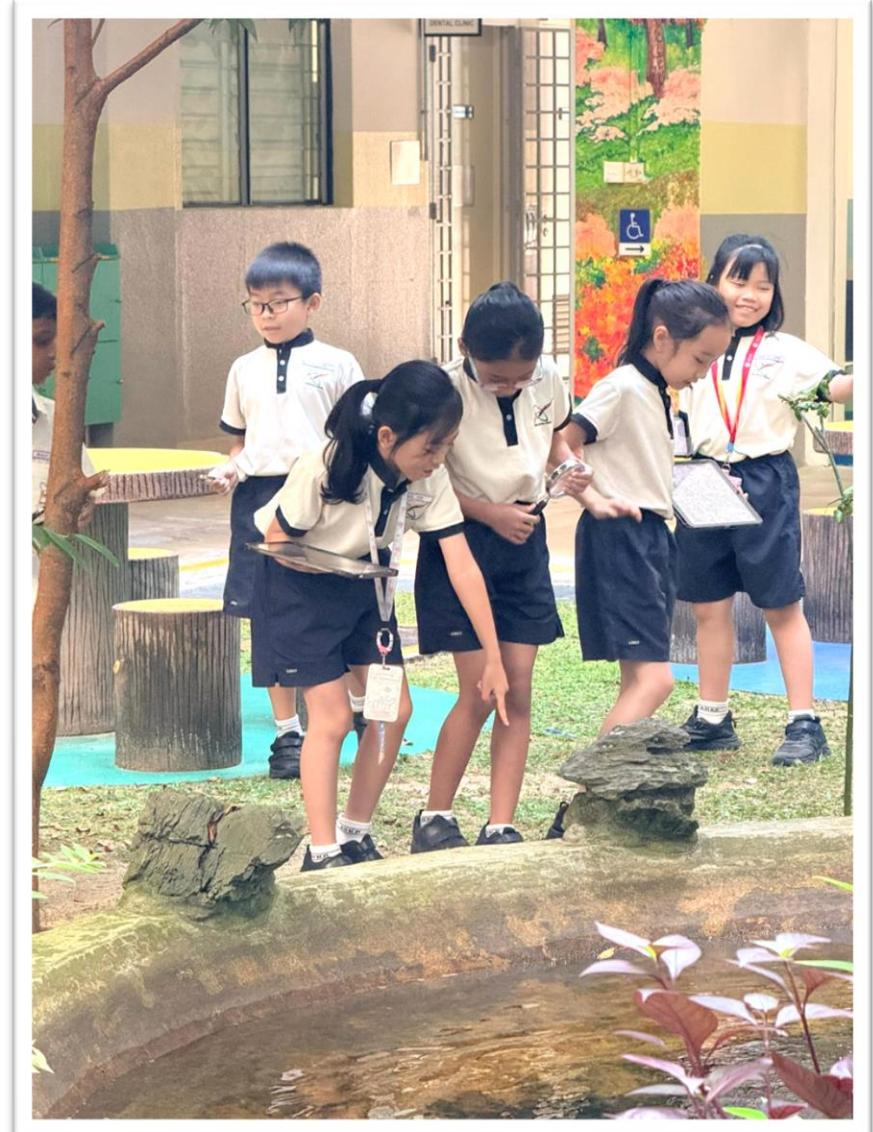
22 January 2026

Primary Three



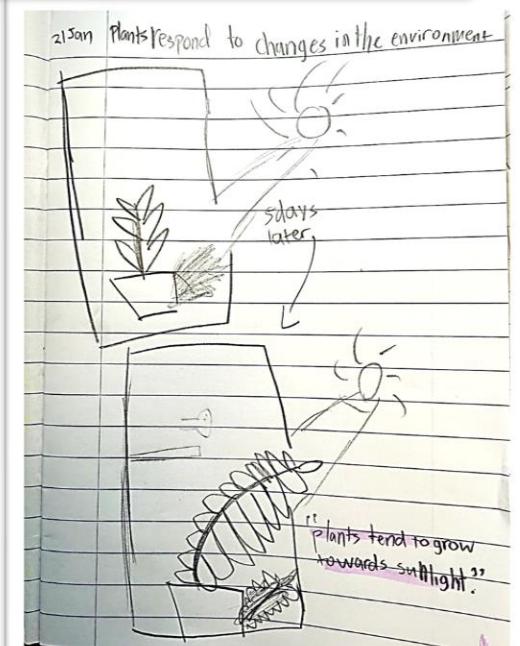
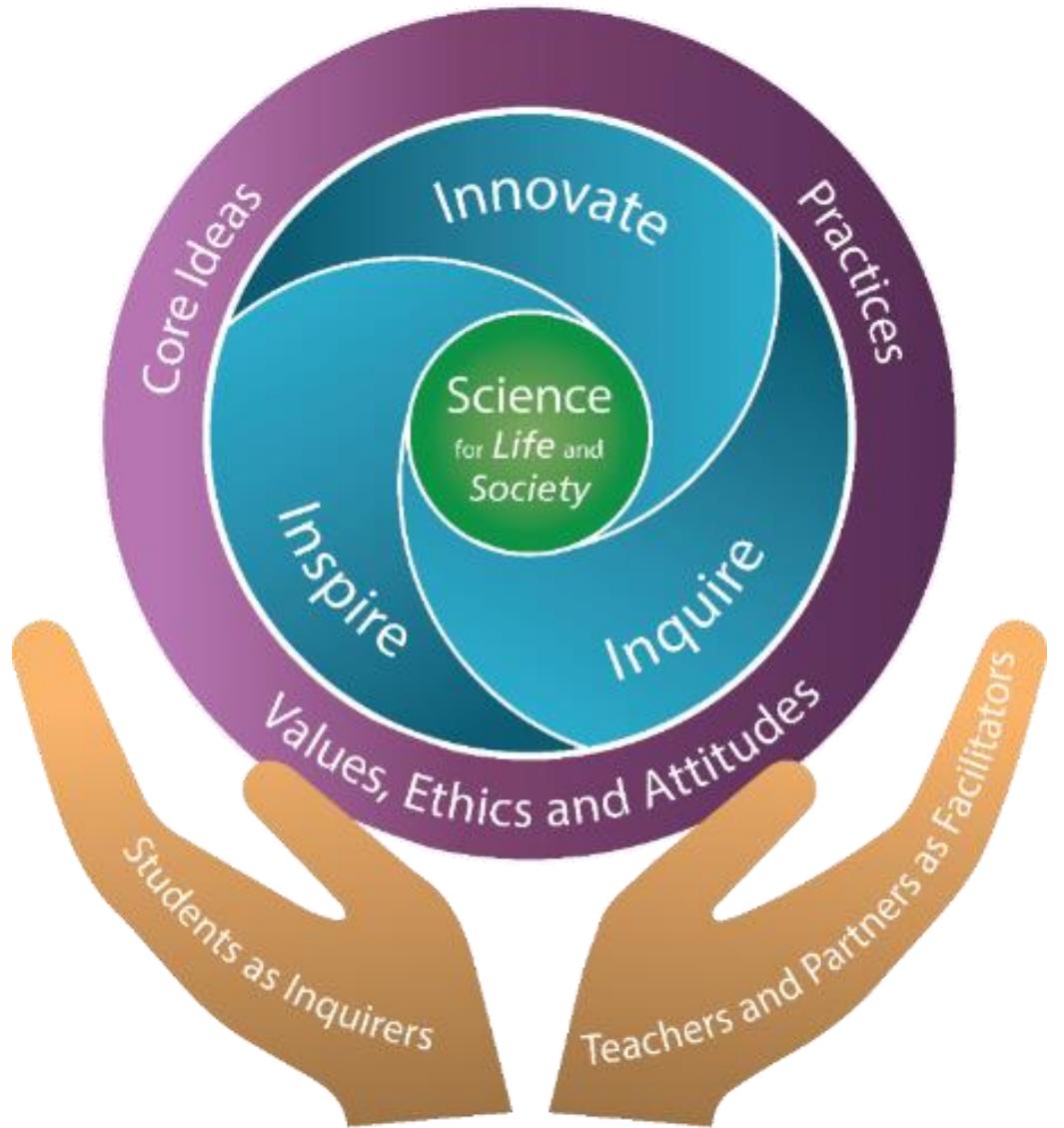
ANG MO KIO PRIMARY SCHOOL

Levels	Focus	Objective
Middle Primary (P3-4)	Wonders of Science	Enthuse children about science and sharpen their senses of science around us and in our everyday lives
Upper Primary (P5-6)	Mastery of Science	Live the science processes and endeavour to explain clearly and scientifically various phenomenon



Curriculum and Assessment

Science Curriculum Framework



Syllabus Organisation

Diversity . Cycles . Systems . Interactions . Energy

P3 4 topics	P4 5 topics	P5 5 topics	P6 4 topics
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- Core Ideas are organised as
 - 5 themes
 - 18 topics across P3 to P6 levels
- Levels of development provide greater support to learners to gradually develop and progress across levels

Syllabus Organisation

Levels	P3	P4	P5	P6
Themes	Diversity . Cycles . Systems . Interactions . Energy			
Topics	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> Cycles in matter and water (Matter) Human system (Digestive system) Plant system (Plant parts and functions) Energy forms and uses (Light) Energy forms and uses (Heat) 	<ul style="list-style-type: none"> Cycles in matter and water (Water) Cycles in plants and animals (Reproduction) Plant system (Respiratory and circulatory systems) Human system (Respiratory and circulatory systems) Electrical system 	<ul style="list-style-type: none"> 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 <p><u>Underlined</u> topics: not in foundation science</p>

P3 Science

Term 1

Theme: Diversity

1. Diversity of Living and Non-living Things
2. Classification of Living Things

Term 2

Theme: Diversity

1. Diversity of Materials

Term 3

Theme: Cycles

1. Life Cycles of Plants
2. Life Cycles of Animals

Term 4

Theme: Interactions

1. Properties of Magnets
2. Making and Using Magnets



Syllabus Content (Practices)

Practices of Science

Ways of Thinking and Doing (WOTD) supports students in learning science as inquirers and involves various skills and processes.

Demonstrating WOTD (Science Process Skills)		
Investigating	Evaluating and Reasoning	Developing Explanations and 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		



Ang Mo Kio Primary Science Process Skills “Syllabus”

Process Skills		P3	P4	P5	P6
•Observing		E	A	A	A
•Classifying		E	A	A	A
•Comparing		E	A	A	A
•Communicating	<ul style="list-style-type: none"> • Written, pictorial 	E	E		A
•Communicating	<ul style="list-style-type: none"> • Graphical 		E	E	A
•Generating possibilities	<ul style="list-style-type: none"> • Suggest ideas with some details • Make predictions 	E	E		A
•Draw conclusion from observations (inductive reasoning)		E	E		A
•Inferring				E	A
•Analysing			E	E	A
•Variables that affect investigation (IV, DV, CV, fair test)	<ul style="list-style-type: none"> • Parts of a systems, its functions and relationships • Patterns and trends 				
•Analysing	<ul style="list-style-type: none"> • Relationships between variables 			E	A
•Generating possibilities	<ul style="list-style-type: none"> •Give reasonable explanations based on evidence (CER) 	I	E	E	A
•Evaluating				E	A
Designing experiments		P3	P4	P5	P6
•Hypothesis		I	E	E	E
•Aim					
•Drawing Conclusion					
•Types of set-ups(Control set-up, Experimental Set-up)				E	E
•Reliability, Accuracy, Validity					



Learning of Science Process Skills

- **Spiral Approach**
- classroom, laboratories, eco-garden
- eco-learning journeys, recess activities

Legend

- A: Application
 E: Explicit Direct Instruction
 I: Introduction of term

Ang Mo Kio Primary

Ignite Curiosity
Nurture Scientific Thinkers

Environment as the third teacher!
Students making observation at
our eco-garden



Competitive tasks to nurture
joy of learning



Group work to apply problem solving skills



Eco-Learning Journey to Sungei
Buloh Wetland Reserve for
authentic learning experiences



Learning sustainability
practices on food scarcity
through hydroponics project



ICT tool to collect digital data to
process and make sense

Ignite Curiosity Nurture Scientific Thinkers

Jason and Cheryl observed the heights of two items, A and B, over a period of four weeks and recorded their findings below.



	Height of Item A	Height of Item B
Week 1	5 cm	8 cm
Week 2	8 cm	8 cm
Week 3	11 cm	8 cm
Week 4	14 cm	8 cm

They made some remarks about items A and B.

Jason: Item A is a living thing.

Cheryl: Item B is a living thing.



Who do you think was **wrong**? Explain your answer.

Ignite Curiosity Nurture Scientific Thinkers

Jason and Cheryl observed the heights of two items, A and B, over a period of four weeks and recorded their findings below.

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Jason: Item A is a living thing.

Cheryl: Item B is a living thing.

Who do you think was **wrong**? Explain your answer.



Claim	Write a word / sentence that answers the question. Cheryl was wrong. Item B was not a living thing.
Evidence	What was <u>observed</u> from the question? (Look at the diagram or table) What other information is given in the question? Is there an (increase/ decrease/ remains the same) in the amount or number of items in the table. The height of item B remained the same at 8 cm during the four weeks.
Reasoning	State and link the science concept and the evidence or other information eg tables to help explain your answer. Living things grow and change (science concept). Since item B was not growing (evidence), it was not a living thing.

Assessments

OBJECTIVES

The objectives describe the **skills and abilities** which candidates are expected to demonstrate.

For Primary 3, difficulty level is adjusted through age-appropriate language, relatable contexts (scenarios) and process skills level attained at end of the year.

I. Knowledge with Understanding

Candidates should be able to demonstrate knowledge and understanding of scientific facts, concepts and principles.

II. Application of Knowledge and Scientific Inquiry

Candidates should be able to (in words, or by using diagrams, tables and graphs):

- (a) apply scientific facts, concepts and principles (**science literacy – content and concepts**)
- (b) apply scientific inquiry which includes (**scientific literacy – process skills**)

- making predictions and formulating hypotheses
- interpreting and analysing information
- evaluating observations, information and methods
- communicating explanations with reasoning.

Assessment School Based – Primary Three

Spaced throughout the year, beginning with small weighted assessments and culminating with the end

	Term 1	Term 2	Term 3	Term 4
Name		Weighted Assessment 2 (WA2) [15%]	Weighted Assessment 3 (WA3) [15%]	End of Year Examination (EYE) [70%]
Format		MCQ, SQ 25 marks 40 minutes	MCQ, SQ 25 marks 40 minutes	50 marks, 1 hour
Topics		1. Diversity of Living and Non-living Things 2. Diversity of Materials	1. Classification of Living Things 2. Life Cycles of Plants 3. Life Cycles of Animals	P3 (all topics)

End of Primary Four

Subject – Based Banding:

- Results for the whole year will be considered in the school's recommendation for your child' subject combination in Primary Five (e.g: Standard Science or Foundation Science).
- Primary Four Science End of Year Examination covers two years: ie Exam includes Primary Three content and skills

Supporting Students with Diverse Learning Needs

Ang Mo Kio Primary

Segmenting Students for Targeted Support

Different students receive customised support and learning strategies to fulfil their learning potential

- address different learning needs
- support students with higher needs
- Stretching students with aptitude and interest

	RISE / Foundation Classes (support children with higher needs)	Stretch Classes (deeper concepts and skills)
Middle Primary	RISE (P4)	P4 Science E2K*
Upper Primary	RISE and Foundation	P5 Science E2K* P5 Science Olympiad P5 IvP (Innovation Program)*

*HQ-supported programmes



making connections through graphic organisers



making sense of experiment design through teaching aids

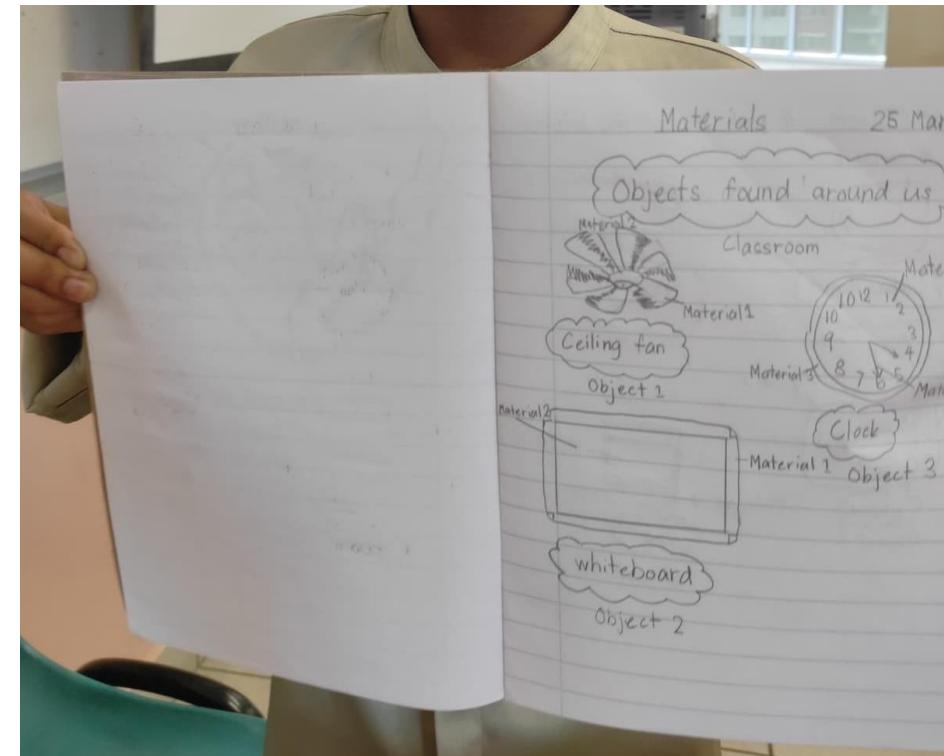
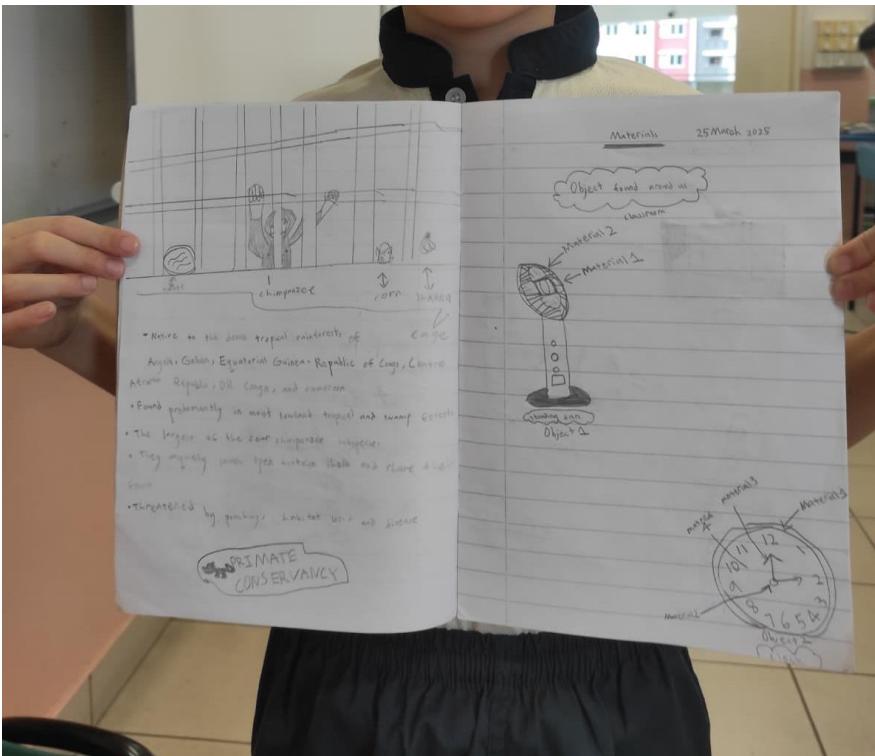


understanding new concepts (beyond primary syllabus) through exploration and discovery

Notebooking

Students document observations, experiments and reflections in journals, developing critical thinking and scientific communication skills.

It's an interim step to develop language confidence (spoken and written) gradually in our children from Primary 3.



Partnership with Stakeholders

Eco-Learning Journeys – as Parent Volunteers



Children learning through observation and comparison about properties of materials to make an enclosure during a visit to a animal habitat at the Singapore Zoo

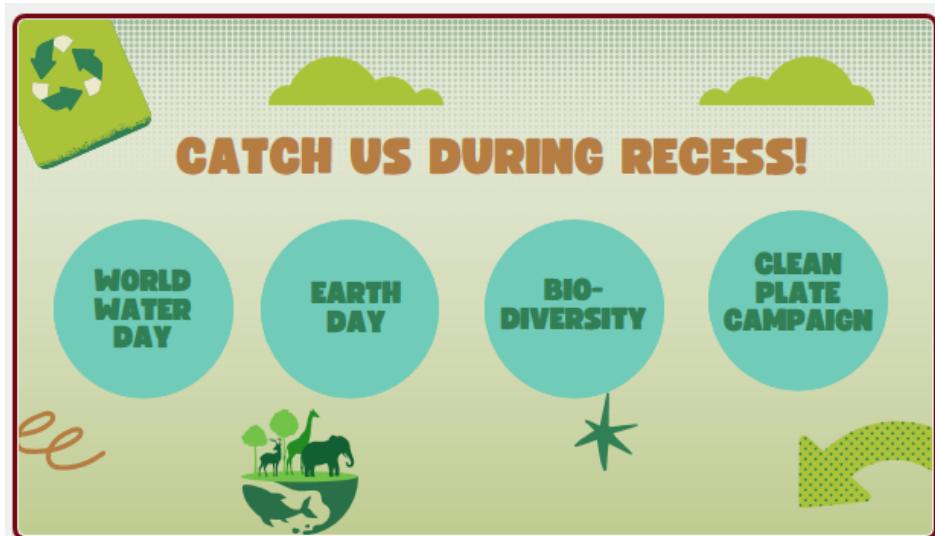


Children learning through touch about animals' outer covering during a workshop at the Singapore Zoo

Science Carnival – as Station Masters



Green Education Advocacy – as Station ICs





ANG MO KIO
PRIMARY SCHOOL



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Nurture Scientific Thinkers**

THANK YOU