

P4 English Language, Mathematics & Science Subject Information for Parents



SENGKANG GREEN
Primary School



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English Language Curriculum & Expectations

The **English Department** aims to develop *confident* and *proficient* users of the language who have strong foundation in *and love* for the English Language.

We look forward to working with you to develop your child's interest in learning English.

EL Syllabus 2020

Desired Learner Outcomes

Empathetic Communicator

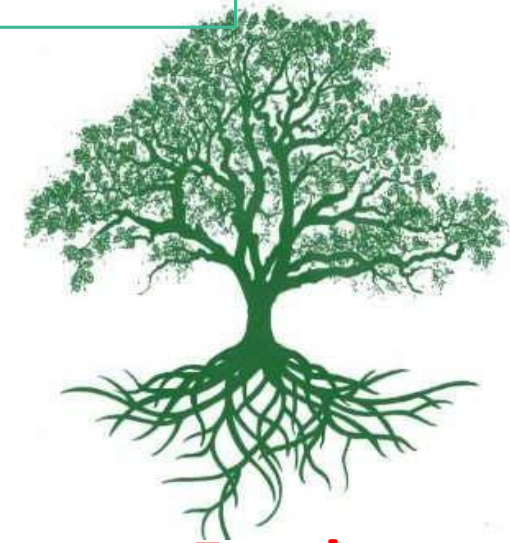
offer more opportunities for students to discuss issues, listen to different perspectives and develop their own opinions.

Creative Inquirer

encourage students to explore ideas, concepts and areas of interest and promote the joy of learning.

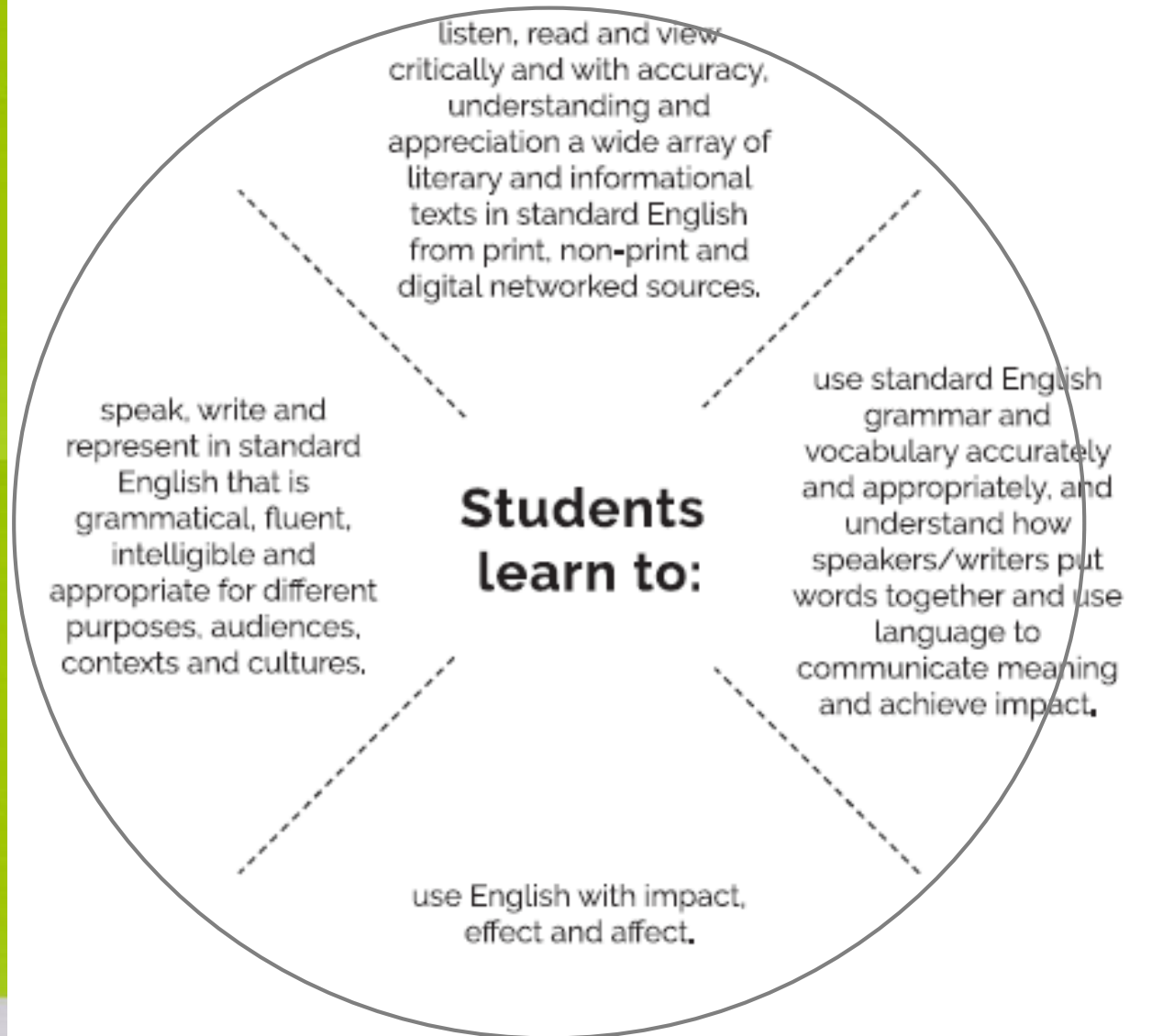
encourage students to read widely and process information critically so as to distinguish fact from falsehoods.

Discerning Reader

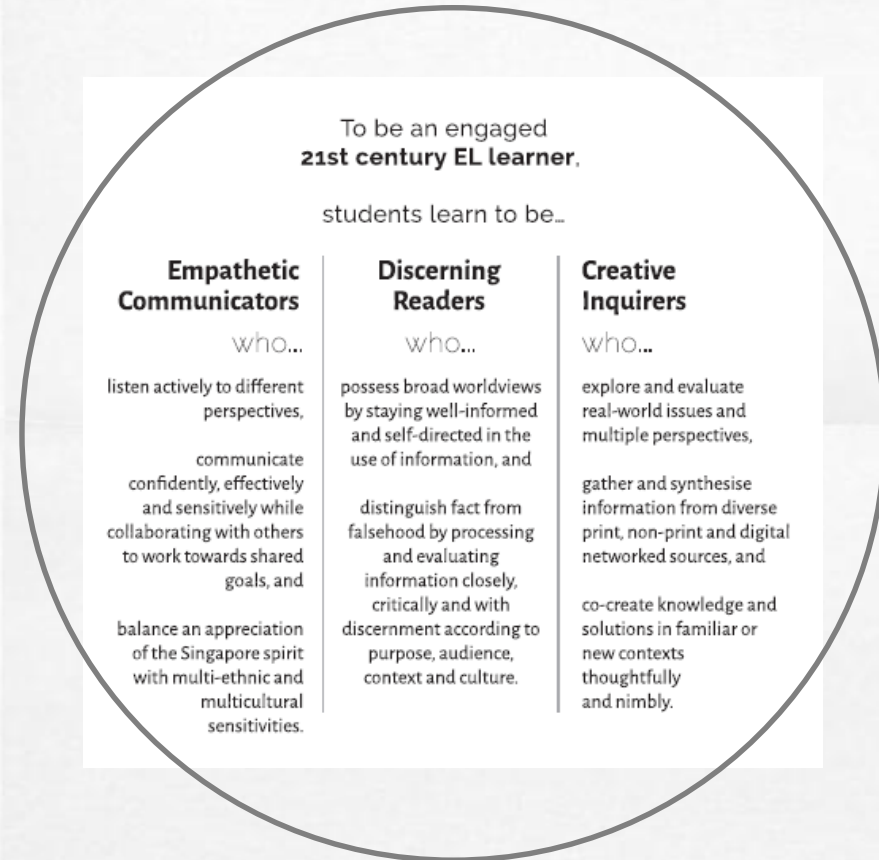
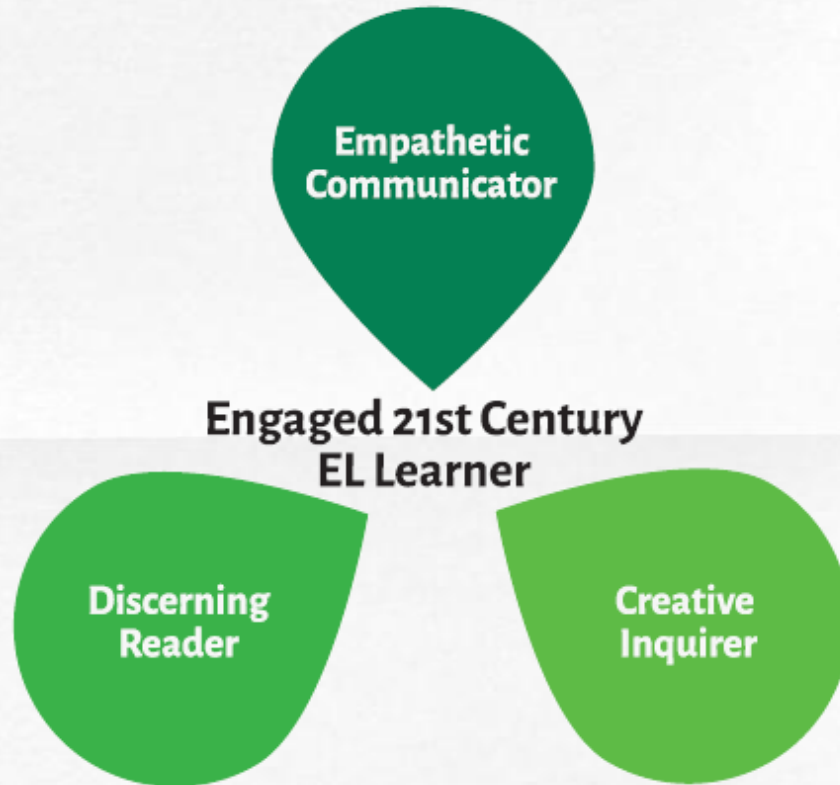


**Stronger Fundamentals
Future Learning**

Aims of English Learning



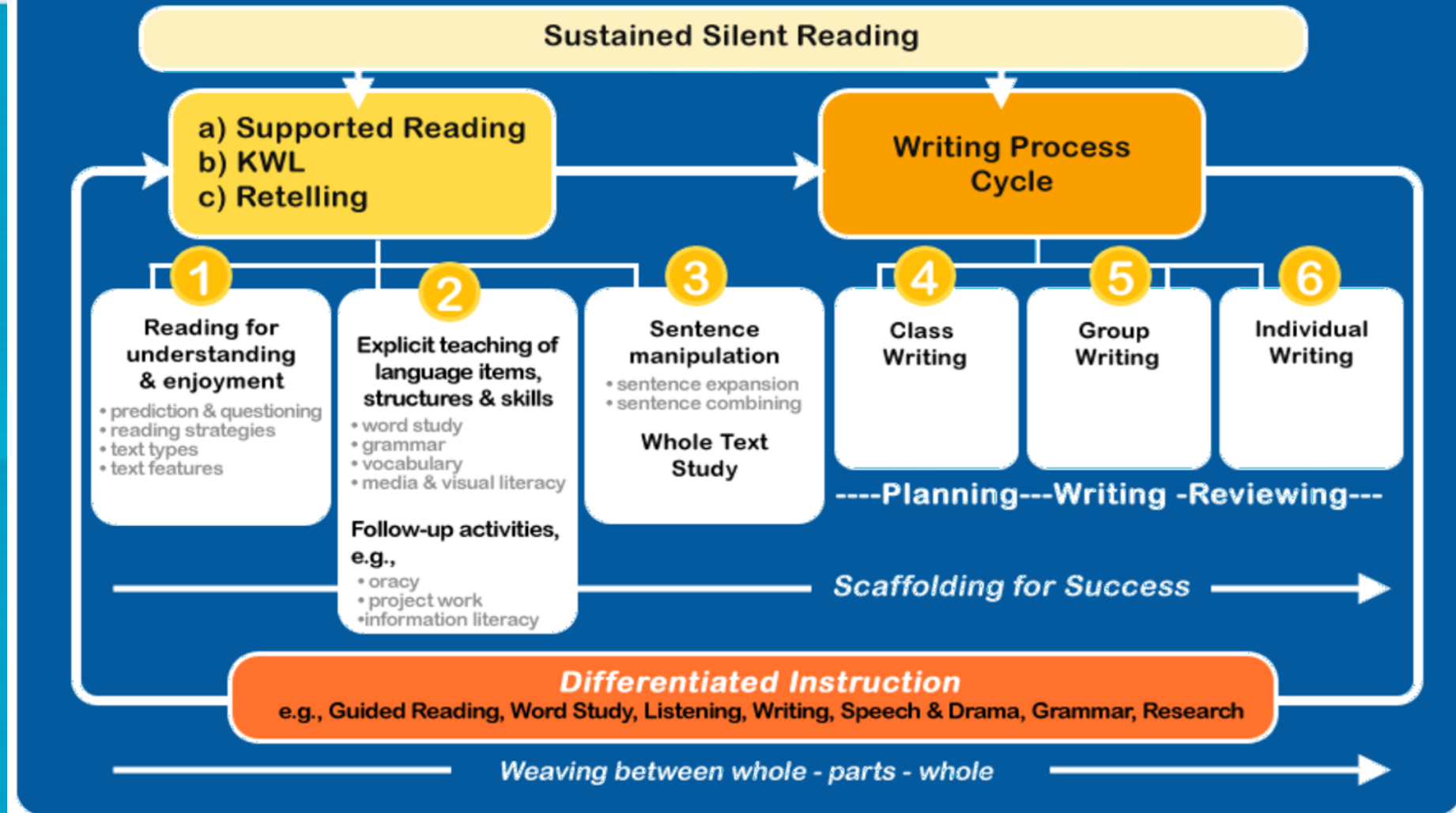
EL Learner Outcomes



P4 Level Focus

- ▨ Students engage with a variety of texts for enjoyment
- ▨ understand that texts have different structures depending on the purpose and context
- ▨ create well-structured texts to explain ideas for different audiences
- ▨ demonstrate understanding of grammar, select vocabulary from a range of resources and use accurate spelling and punctuation, rereading and editing their work to improve meaning
- ▨ collaborate, listen for key points in discussions and use the information to carry out tasks
- ▨ make presentations and contribute actively to class and group discussions, varying language according to context

STELLAR Pedagogic Framework (P3b to P6)



How We Teach English

How parents can help to support their children's learning of EL?

- ✓ Cultivate a reading habit
- ✓ Go to the library together.
- ✓ Place many books, magazines and newspapers visibly around your home.
- ✓ Share what you have read with your child verbally.
- ✓ Encourage your child to read in his/her mother tongue language.
- ✓ Talk to your child about what he/she is reading.



How parents can help to support their children's learning of EL?

- ✓ Revise together
Get him/her to “teach” you what he has learnt.

Note down important key points

- ✓ Every night before he/she sleeps, take out his/her notes and test himself/herself on the topics he/she has learnt for the day.



School-based Weighted Assessment

Term 1	Term 2	Term 3	Term 4
Test 1	SA1	Test 2	SA2
Other forms of assessment (Non-Weighted) Oral Presentation (EPW), Group Presentations			



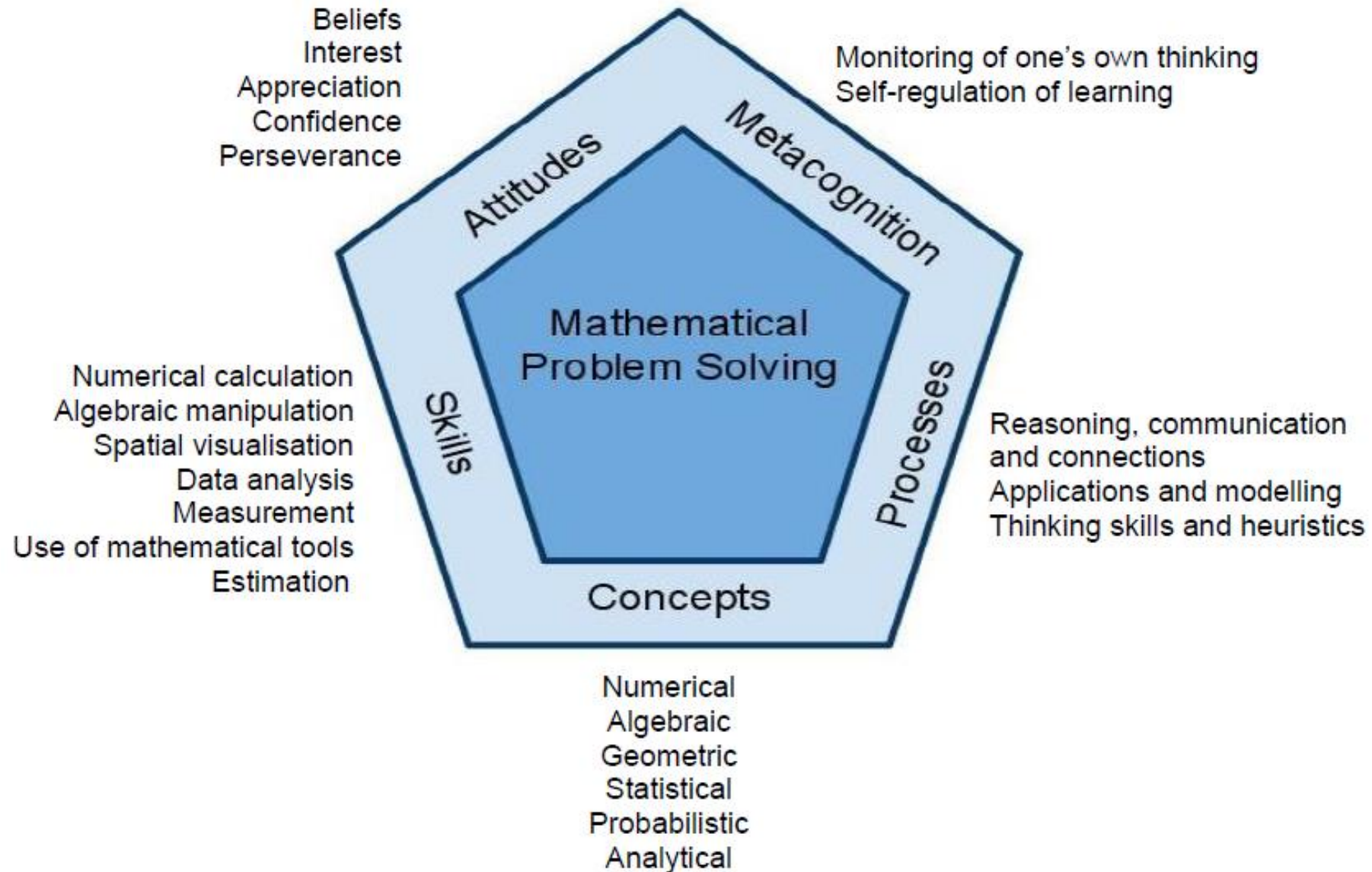
SENGKANG GREEN
Primary School

PRIMARY 4 MATHEMATICS

Vision

Every SKGian is a **Confident** and **Effective Problem Solver**

MOE Mathematics Curriculum Framework



Spiral Mathematics Curriculum

Primary 1	Primary 2 & 3	Primary 4	Primary 5	Primary 6
Whole Numbers	Whole Numbers	Whole Numbers	Whole Numbers	Whole Numbers
Measurement	Measurement	Measurement	Measurement	Measurement
Geometry	Geometry	Geometry	Geometry	Geometry
Data representation & interpretation	Data representation & interpretation	Data representation & interpretation	Data representation & interpretation	Data representation & interpretation
Money	Money	Decimal	Decimal	Decimal
	Fractions	Fractions	Fractions	Fractions
			Percentage	Percentage
			Ratio	Ratio
			Rate	Speed ¹⁵
				Algebra ¹⁵

Aims of Primary Mathematics Education

To enable students to:

- Acquire mathematical concepts and skills for everyday use and continuous learning in mathematics.
- Develop thinking, reasoning, communication, application and metacognitive skills through a mathematical approach to problem solving.
- Build confidence and foster interest in mathematics.

Content Strands in Mathematics Syllabus

Number & Algebra	Measurement & Geometry	Statistics
<ul style="list-style-type: none">• Whole Numbers• Fractions• Decimals• Percentage• Ratio• Rate and Speed• Algebra	<ul style="list-style-type: none">• Measurement<ul style="list-style-type: none">○ Length, Mass and Volume (of Liquid)○ Time• Area and Volume<ul style="list-style-type: none">○ Area and Perimeter○ Volume of Cube and Cuboid○ Circles• Geometry<ul style="list-style-type: none">○ Angles○ Triangles○ Quadrilaterals○ Nets	<ul style="list-style-type: none">• Data Representation and Interpretation<ul style="list-style-type: none">○ Tables, Bar Graphs and Line Graphs○ Pie Charts• Data Analysis<ul style="list-style-type: none">○ Average

P4 Mathematics Topics

4A Topics

Whole Numbers

- Numbers up to 100 000
- Factors and Multiples
- Four Operations

Fractions

- Mixed Numbers and Improper Fractions
- Fraction of a Set of Objects
- Addition and Subtraction

Geometry

- Angles
- Rectangle and Square

4B Topics

Decimals

- Decimals up to 3 Decimal Places
- Four Operations

Geometry

- Line Symmetry

Measurement

- Area and Perimeter
- Time

Data Representation and Interpretation

- Tables and Line Graphs

P4 Level Focus

Concepts	Develop a good understanding of factors and multiples Develop a good understanding of fraction and decimal concepts and their connections
Skills	Acquire procedural fluency for multiplication and division Acquire procedural fluency for addition and subtraction of fractions Acquire proficiency in use of protractor for measurement of angles
Processes	Apply mathematical reasoning and communication Acquire the proficiency in using model method for problem solving Develop a good understanding of using heuristics for problem solving [Systematic list / Tabulating, unitary, making an assumption]
Attitudes	Develop the confidence in solving 3-step problems
Metacognition	Develop from 'Aware' learners to ' Strategic ' learners <ul style="list-style-type: none">• 'Aware' learners know about some of the kinds of thinking that they do – generating ideas, finding evidence, etc. – but thinking is not necessarily deliberate or planned.• 'Strategic' learners organise their thinking by using problem solving, grouping and classifying, evidence seeking, decision making, etc. They know and apply the strategies that help them learn.

Teaching Approach



- Concrete-Pictorial-Abstract (CPA) approach
- Lessons involve **hands-on activities** with the **use of concrete manipulatives** and **pictorial representations** to help students create meaning of **abstract concepts**.

Resources

- Targeting Math Textbook and Workbook
- Math Worksheets
- Process Skills Booklet 1 and 2
- Math Notebook
- Math Black File
- Student Learning Space (SLS)

P4 School-Based Weighted Assessments (2020)

Term 1	Term 2	Term 3	Term 4
• Test 1	• Semestral Assessment	• Test 2	• Semestral Assessment
10%	20%	10%	60%

- To assess students' mastery of the concepts and skills that have been taught

SCHOOL EXAMINATION FORMAT

Component	Item Type	Total marks	Duration
Section A	Multiple-choice	100	1 h 45 min
Section B	Short-answer		
Section C	Long-answer		
Total		100	1 h 45 min

How do we support your child...

- Engage your child in meaningful activities to explore and learn mathematical concepts and skills, individually or in groups
- Practise past paper questions
- Teach application of various heuristics to solve problems
- Practise good time management and presentation of solutions
- Consolidate and revise concepts and key topics

Parents as partners-in-education

- Work and communicate closely with your child's Maths Teacher
- Inculcate positive work habits and attitudes, e.g. Practise daily. Remind your child to show proper and detailed working steps and to check for accuracy
- Develop your child's time management skills.
- Ensure that your child has the necessary writing and mathematical tools, e.g. 2B pencil, ruler, protractor and set square.
- Follow up on homework. If your child has difficulty with his/her homework, do not be too quick to provide the answers but guide him/her with questions and indicate on the homework 'assisted' or 'guided'.
- Get your child to explain certain concepts or how he/she is able to solve the problem. Articulating the strategy helps your child to develop clarity in his/her thinking.
- Revise previous years' topics to ensure that your child has a firm foundation as the P4 Maths learning builds on the concepts and skills learned in P1-P3.



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PRIMARY 4 SCIENCE

Learning **Science** in Primary School



The Primary Science Education aims to:

- Provide students with **experiences** which **build on their interest** in and **stimulate their curiosity** about their environment
- Provide students with **basic scientific terms and concepts** to help them understand themselves and the world around them
- Provide students with opportunities to **develop skills, habits and mind and attitudes** necessary for **scientific inquiry**
- Prepare students towards **using scientific knowledge and methods** in making **personal decisions**
- Help students **appreciate how science influences people and the environment**

Science Department aims to



- stimulate child's **curiosity** and **passion** for science through meaningful, authentic experiences
- nurture reflective thinkers who ask **scientific questions** and **appreciate how science affects their lives, the society and the environment**
- develop scientific literacy in learners to face challenges of the future



Science are expected to ..

The processes expected of the students are :

- ✓ **Investigation** – Devising fair methods (Fair Test) and carrying out the methods to find out answers
- ✓ Decision-Making – Process of applying criteria to select from alternatives
- ✓ Creative-Problem Solving – Process of analysing problem and choosing an innovative and relevant solution

Skills expected of the students are :

- ✓ **Observing and using apparatus**
- ✓ **Reasoning** and making meaning of information and evidence through – **comparing, classifying, inferring, analysing**, evaluating
- ✓ **COMMUNICATING** – presenting information in written, verbal, pictorial, tabular, graphical forms



How You can **Support** Your **Child**

- ✓ Get them to **talk and make connections** with every day phenomenon to ensure they are able to articulate their thoughts. **This helps them to remember these concepts better!**
- ✓ Quiz your child on **scientific facts and knowledge** from the textbook. Allow them to explain the concepts. They can also use **drawings and concept maps** to elaborate on their ideas.
- ✓ Encourage them to use the **Science Notebook!**
- ✓ Get them to **analyse every day phenomenon** and **interpret data and information.**
For example:
 - *Look around you and tell me what states of matter are they in. Why?*
 - *Why is this mug of hot milo hot? How is it that my hands feel hot?*



Primary **Science** Syllabus



	Life Science	Physical Science
Diversity	Diversity of Living Things and Non-Living Things	
Cycles	Life Cycles of Plants and Animals	-
Systems	Plant System Digestive System (Term 4)	Matter (Term 1)
Interactions	-	Magnets
Energy	-	Heat (Term 2) Light (Term 3)
P3 Topics P4 Topics		

Primary 4 Level Focus



Domains	Learning Outcomes
Knowledge Understanding Application	<p>To appreciate the links between different themes/topics and allow the integration of scientific ideas:</p> <ul style="list-style-type: none">• Understanding that energy will allow students to appreciate the importance and uses of energy and the need to conserve it
Skills and Processes	<p>To develop conceptual knowledge and integrate skills and processes to inquire things and phenomena:</p> <ul style="list-style-type: none">• Identifying the parts of objects, information or processes, and the patterns and relationships between these parts• Making a general explanation for a related set of observations or events• Knowing the functions and limitations of various apparatus
Ethics and Attitudes	<ul style="list-style-type: none">• To suggest innovative and relevant ways to solve problems• To seek data and information to validate observations and explanations objectively

School-Based Weighted Assessment



TERM 1	TERM 2	TERM 3	TERM 4
Performance Task 1	Semestral Assessment 1	Performance Task 2	Semestral Assessment 2
Other forms of assessment (Non-Weighted) Review Exercises, Drawings, Concept Mapping, Reflections			

How You can Support Your Child

4Es

Engage in discussion - TALK, WRITE

Encourage questioning and researching

Explore and Experiment

R

Revise previous P3 topics early



How You can Support Your Child

Encourage their interests in Science

Websites

- National Geographic Kids
(<https://kids.nationalgeographic.com/>)
- Bill Nye (<https://www.billnye.com/>)
- Kids Sites
(<http://www.kidsites.com/sites-edu/science.htm>)
- How Stuff Works (<https://www.howstuffworks.com/>)
- Science News for Students (<https://www.sciencenewsforstudents.org/>)

Enjoy the science learning journey with your child!



**The most important attitude
that can be formed is that
desire to go on learning
– John Dewey**



Thank you