

# THE LEARNING LAB



## CORE PROGRAMMES

PRIMARY 3 & 4

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Please email [enrollment@thelearninglab.com.sg](mailto:enrollment@thelearninglab.com.sg)  
or contact our service hotline at 6733 8711

# Dear Parent,

Over the past 20 years, our goal at The Learning Lab has always been to not only nurture the love of learning, but to also help your child achieve academic success in school and beyond.

We are here to lend our support and guidance at every stage of your child's learning journey, helping him or her to develop the knowledge, skills and dispositions needed to tackle challenges faced both in school and in life.

With dedicated curriculum experts and highly trained teachers, we help your child build a strong foundation in reading, writing and communicating, in strategic thinking and problem-solving, as well as essential techniques and skills to achieve success at key examination milestones. We are also committed to helping your child develop positive learning attitudes and habits.

With the ever-evolving education landscape, we continuously strive to make advancements to our programmes to ensure that our lessons are engaging and effective in meeting your child's learning needs.

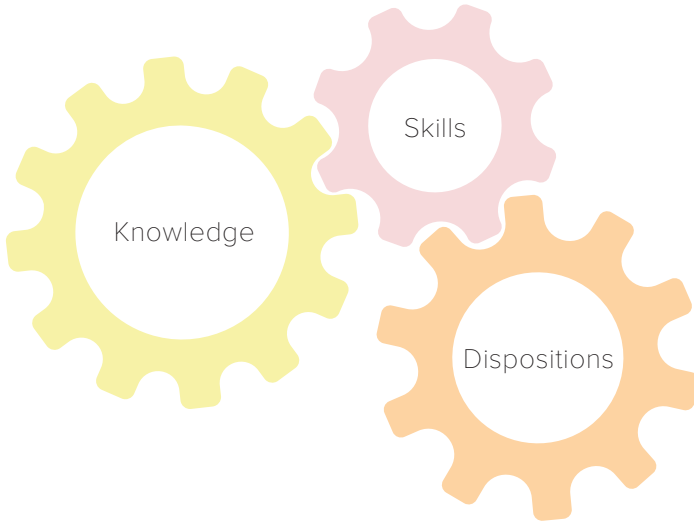
As you explore this programme booklet, discover the breadth and depth of a curriculum that does not just make learning engaging, but also enables your child to demonstrate progress and growth while attaining academic excellence.

We look forward to being part of your child's learning journey.

Welcome to The Learning Lab.

# A Teaching and Learning Model that Puts Your Child First

Your child's rich and meaningful learning journey begins with us. In our classrooms, we create learning experiences that empower and motivate. We believe that academic growth and success in school, and beyond, are built on a strong foundation of knowledge, skills and dispositions.



## Knowledge

To help your child achieve each milestone in his or her learning journey, we equip your child with the concepts and knowledge needed to tackle tasks and exams in school with confidence. Besides building a strong foundation in content mastery, we further stimulate your child's intellectual curiosity by drawing connections with what is learnt in school to real-world phenomena.



## Skills

With The Learning Lab's teaching methodology and curriculum, your child will develop the necessary skills such as critical thinking, analytical and evaluative skills, to help him or her successfully address all types of academic challenges at school. A strong focus on task and error analysis, problem-solving strategies as well as communication skills means that your child will become a more confident, engaged and articulate thinker — a learner who is able to present what he or she knows and strive for improvement.

## Dispositions

Your child's education at TLL is about nurturing his or her whole person. Our programmes recognise the importance of helping your child develop positive attitudes, habits and mindsets towards learning as a journey, whether in the classroom or beyond. He or she will develop self-awareness and a growth mindset — understanding his or her strengths and weaknesses, seeing mistakes or setbacks as opportunities for progress, and planning the next stage of success with an open mind.

# Our Curriculum and Teaching Team

Our dedicated curriculum team of over 40 specialists and teachers help forge meaningful learning journeys for your child through the creation of bespoke lesson materials that are designed to motivate and enthuse your child. We believe learning is optimal when children are motivated and engaged. Our lesson materials excite and inspire, and are designed to build the knowledge and skills necessary for school success.

Our TLL teachers are also the best that your child can have. They are caring and passionate individuals who always strive to give their very best in class. As knowledgeable experts that focus on deep subject knowledge and pedagogical know-how, TLL teachers guide your child through the intricacies of the required exam syllabus using our renowned in-house tailor-made curriculum.



# Our Promise

Our materials are prepared with your child's best interests in mind. We provide your child with lessons that not only help your child become invested in his or her learning journey, but also encourage him or her to take charge of it.



## Nurturing the Love of Learning

These two elements run through all our lesson materials:

- Sparking interest even when the topics are abstract or studying has elements of drill and practice
- Making connections with the real world so that our students can see the relevance of what they are learning



## Attaining Academic Excellence

Our students achieve academic excellence through our teaching methods and curriculum which focus on nurturing:

- deep understanding of the topics
- strong analytical and problem-solving skills that help students in answering any question in tests and exams



## Achieving Student Progress and Growth

At The Learning Lab, every child's growth and progress is important to us:

- Our curriculum introduces topics and skills progressively, revisiting and weaving deep threads of learning.
- Our teachers check on your child's progress throughout the term through in-class activities, end-of-lesson exit tickets as well as more rigorous mock tests.
- Personalised feedback is provided to parents about their child, identifying key challenges and strengths.

# Our Three Learning Goals for Your Child's Success

Helping your child to find success in learning stems from giving him or her the confidence to enjoy the learning journey and to face challenges with the right skills and attitudes.



## Grow What You Know

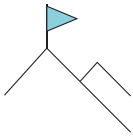
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### **Developing Knowledge for the Classroom and Beyond**

Learning is not only about getting your child school and exam-ready but it is also about preparing for what lies beyond the classroom.

Our curriculum has the breadth and depth to help your child achieve this — with comprehensive lesson materials such as notes, practice papers and interactive games that strengthen areas requiring attention while exposing them to real-world contexts.





## Show What You Know

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### Applying the Knowledge and Skills Learnt

When your child is aware of their thought processes, he or she is able to refine their thinking and problem-solving skills to overcome problems in class or in life.

By equipping your child with a wide range of problem-solving strategies and techniques, he or she learns how to analyse questions, understand the success criteria and know which methods to use to solve the different problems they will be dealt with.



## Present What You Know

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### Be Your Best Self

We teach our students how to master answering techniques that allow them to address questions accurately. Using the right phrasing and terminology, they learn how to craft precise and coherent answers.

Our teachers continually reinforce good habits and techniques of answering questions accurately and comprehensively so that your child grows in confidence and realises his or her personal best, again and again.



# English

At Primary 3 and 4, our programmes focus on consolidating students' knowledge and skills in reading comprehension, writing and oral communication. These programmes aim to help prepare students for the PSLE through a sound grounding in the various language components and an awareness of exam success criteria.

Students are introduced to materials across a wide range of themes, enabling them to discuss issues, articulate thoughts, build social awareness and develop a curiosity to learn. They also develop positive learning attitudes, including being self-aware of their strengths and weaknesses, learning to understand task requirements, managing their learning and reflecting on their mistakes.

# Primary 3 and 4 Curriculum

Students hone their writing skills by learning to plan and construct narratives according to a story curve. They also learn to vary sentence structures using grammatical devices and literary techniques such as slow-motion description and simple characterisation.

Additionally, learners sharpen their reading comprehension skills by developing question analysis, clue sourcing and inferential skills.

## Writing

- Excel in writing skills through:
  - the use of TLL’s writing framework to understand the different elements that contribute to writing success
  - frequent writing practices that focus on the learning and application of literary techniques such as characterisation
  - analysis of scaffolded responses to learn from models of good writing, evaluating errors and making edits for improvement
  - exposure to different literary genres such as journalling and reviews

## Reading

- Develop critical thinking and comprehension skills through:
  - TLL’s reading framework that teaches reading comprehension skills

This framework develops students’ critical reading skills to:

- i) identify character traits and motivations
  - ii) apply inferential skills to understand concepts, themes and suggest meanings
  - iii) analyse questions
  - iv) demonstrate logical reasoning
  - v) distinguish between relevant and irrelevant information in the passage
  - vi) phrase their answers accurately to address examination requirements
- modules and practices which explore trending themes featured in reading passages

- Develop an interest in reading through:
  - access to an online curated book collection including genres like Fantasy and Mystery
  - exposure to extracts and passages that serve as excellent models of writing and storytelling

## Oral Communication

- Develop public speaking skills and experience through:
  - individual presentation lessons
  - teacher and peer evaluation
- Develop oral communication skills through:
  - oral conversation practices
  - individualised teacher feedback

**Grammar**

- Consolidate grammar through:
  - explicit instructional modules on grammar concepts, synthesis and transformation
  - intensive revision practices and online activities

**Vocabulary**

- Build up an extensive vocabulary through:
  - exposure to curated reading materials and licensed content from premier journalism sites and world-renowned publications
  - word games and interactive online activities

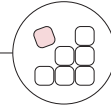
Key features of our Primary 3 and 4 English programmes

## Exposure: Grow What You Know



### Specially Curated Materials

- Passages crafted from world-renowned journalistic publications such as *The New York Times* and *The Washington Post*
- Comprehensive in-house notes teaching specific skills and the relevant steps to take for key examinable components



### Active Learning

- Questioning techniques to help students engage in and explore topics
- Interactive online games and quizzes that help students check on understanding and reinforce learning



### Applied Learning

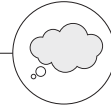
- Introduction of exciting topics to students, like developments around the world, so that they are more engaged and are able to develop content knowledge
- Creation of a wide range of questions, following national examination formats

# Analysis and Strategy: Show What You Know



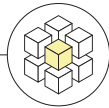
## Question Analysis

- Methods to systematically analyse and annotate question requirements
- Analysis of visual texts to answer comprehension questions



## Memory Techniques

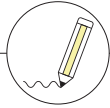
- Mnemonics to recall steps and skills taught, like SETS — Subject + Evidence + Tense + Sentence Structure for Reading Comprehension answers



## Problem-Solving Strategies

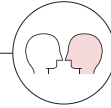
- Teaching of brainstorming techniques to select and develop unique and engaging storylines
- Posing of questions on current topics to address real-world problems in order to better relate to Reading Comprehension passages and Oral topics

# Answering Technique: Present What You Know



## Answering Techniques

- Scaffolded sample answers that are analysed to help students with precision and clarity of answers



## Metacognition

- Error analysis of answers to reinforce expectations of good answers
- Feedback and discussion on common mistakes so that similar pitfalls can be identified and avoided
- Inktrailing as a way to analyse questions and make learning more effective



## Exam Excellence

- Formative assessment through low-stakes testing using topical tests to provide ongoing feedback
- Practice tests to simulate exam conditions to prepare for examinations



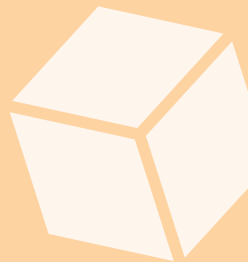


# Mathematics

Our Primary 3 and 4 programmes focus on bridging the gap between lower primary and upper primary levels.

Students will move from learning concepts through concrete manipulatives or pictorial aids to more abstract representations such as forming equations. Quizzes, games and real-world projects make the learning of Maths interactive, fun and real for our students.

A key feature of our programmes is the explicit teaching of heuristics in problem-solving. Rather than teach the mechanical application of formulae, our programmes emphasise deep conceptual understanding so that students are able to identify concepts, select and apply the correct methods to successfully solve all types of questions, including non-routine and higher-order-thinking ones.



# Primary 3 Curriculum

In Primary 3, students will master new topics including Area and Perimeter, Angles, Parallel and Perpendicular Lines and Bar Graphs. Students will also hone their problem-solving skills by applying heuristics including advanced model drawing, making a supposition and restating the problem. In addition, they will learn to use specific tools, including the set-square and a ruler to draw parallel and perpendicular lines.

## Whole Numbers up to 10 000 000

Mastering:

- number notation and place values
- comparing and ordering numbers
- forming numbers
- number patterns

## Addition and Subtraction

Mastering:

- addition and subtraction within 10 000
- mental addition and subtraction of 2-digit numbers
- sum and difference
- word problems

## Multiplication and Division

Mastering:

- multiplication and division within the tables of 6, 7, 8 and 9
- multiplication and division up to 3 digits by 1 digit
- grouping and product
- quotient and remainder
- word problems

**Money**

Mastering:

- counting on to make \$1, \$10 or \$100
- addition and subtraction of money
- equivalent amount of money
- word problems

**Fractions**

Mastering:

- notation and representations of fractions
- equivalent fractions
- simplifying fractions
- comparing and ordering fractions
- addition and subtraction of fractions within one whole
- word problems

**Length**

- Measuring and comparing length in compound units (km and m / m and cm)
- Estimating length of real-life objects (km, m and cm)
- Converting length in compound units to the smaller unit and vice versa (km and m / m and cm)
- Solving word problems

**Mass**

- Measuring and comparing mass in compound units (kg and g)
- Estimating mass of real-life objects (kg and g)
- Converting mass in compound units to the smaller unit and vice versa (kg and g)
- Solving word problems

**Volume**

- Measuring and comparing volume of liquid in compound units (mℓ and ℓ)
- Converting volume in compound units to the smaller unit and vice versa (mℓ and ℓ)
- Solving word problems

**Time**

- Measuring time in seconds
- Telling time in 24-hour clock
- Converting time from 12-hour clock to 24-hour clock and vice versa
- Finding the starting time, finishing time or duration given the other two quantities
- Solving word problems

**Bar Graphs**

- Reading and interpreting data from bar graphs and composite bar graphs
- Solving problems using data from bar graphs

**Geometry**

Mastering:

- right angles, acute angles and obtuse angles
- parallel and perpendicular lines

**Area and Perimeter**

Mastering:

- area and perimeter of squares, rectangles and composite figures
- word problems on area and perimeter given other dimensions
- area involving folding problems or shaded parts

# Primary 4 Curriculum

In Primary 4, students will master new topics such as Decimals and Symmetry. Students will also hone their problem-solving skills by applying heuristics including advanced model drawing, branching and unitary method. In addition, they will learn to use specific tools to measure and construct angles.

## Whole Numbers up to 100 000

Mastering:

- number notation and place values
- rounding off numbers
- number formation
- four operations
- word problems

## Fractions

Mastering:

- conversion between improper fractions and mixed numbers
- ordering fractions
- addition and subtraction of improper fractions and mixed numbers
- fraction of a set
- multiplication of fractions
- word problems

## Decimals

Mastering:

- number notation and place values
- ordering decimals
- conversion between decimals and fractions
- addition and subtraction of decimals
- multiplication and division of decimals
- rounding off decimals
- word problems

## Multiplication and Division

Mastering:

- multiplying and dividing by a 1-digit number
- multiplying by a 2-digit number
- grouping numbers

## Area and Perimeter

Mastering:

- area and perimeter of composite figures
- area and perimeter involving borders, overlaps, optimisation and folding
- area and perimeter involving cut & paste and proportion\*

## Factors and Multiples

Mastering:

- listing factors
- listing multiples
- prime numbers\*
- prime factorisation and factor tree\*

## Number Sequences\*

- Linear sequences
- Gauss summation
- Square patterns
- Cubic numbers

## Geometry

Mastering:

- right angles, acute angles and obtuse angles
- measuring and constructing angles using a protractor
- angles in squares and rectangles
- angles in triangles and quadrilaterals (rhombus, parallelogram, trapezium)\*
- cardinal directions
- parallel and perpendicular lines\*

## Symmetry

- Identifying symmetric figures and lines of symmetry
- Completing symmetric figures

## Tables and Graphs

- Reading and interpreting data from tables, bar graphs and line graphs
- Solving word problems

## Average\*

Mastering:

- mean, median and mode
- change in average

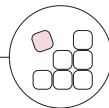
Key features of our Primary 3 and 4 Maths programmes

## Exposure: Grow What You Know



### Specially Curated Materials

- Weekly worksheets that are developed in-house and contain essential notes and examples to explain key concepts and show how to solve different question types
- Exposure to a wide range of problem types including maths vocabulary/explanation and higher-order thinking problems
- Exposure to questions/components of the GEP screening/selection test through GEP modules (For P3 only)



### Active Learning

- Learning of Maths through stories, interactive activities, quizzes and puzzles
- Use of manipulatives to deepen understanding of mathematical concepts



### Applied Learning

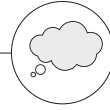
- Exposure to real-world context and learning how to apply maths to solve problems through projects and infographics

# Analysis and Strategy: Show What You Know



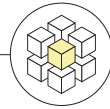
## Question Analysis

- Methods to analyse questions systematically
  - study and highlight keywords in the question
  - draw visual diagrams to represent the problems
  - identify topics and concepts tested



## Memory Techniques

- Fun mnemonics and stories to better remember rules and concepts

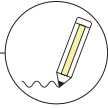


## Problem-Solving Strategies

- Develop mastery of strategies for optimal problem-solving under time constraints

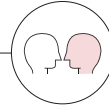


# Answering Technique: Present What You Know



## Answering Techniques

- Presentation of accurate steps with clear labels
- Identification of key marking criteria and common pitfalls to develop answer precision



## Metacognition

- Error analysis handouts to apply systematic checking techniques to spot errors and learn how to correct them
- Inktrailing as a way to analyse questions and make learning more effective



## Exam Excellence

- Formative assessment through low-stakes testing using topical revision handouts to provide ongoing feedback
- Practice tests simulate exam conditions to prepare for examinations



# Science

Our Science curriculum for Primary 3 and 4 is designed to spark students' interest by introducing new topics in an engaging and fun manner, learning through experiments, hands-on activities and interactive games. Real-world situations related to the topics are woven into the lessons for students to deepen their topical knowledge and develop an understanding of how science concepts are applied.

Comprehensive notes offer guidance to students for understanding concepts in real-world contexts, while tutorials allow students to apply their knowledge for various question types and promote critical thinking.

Beyond developing a strong foundation of science concepts, students also focus on applying strategies to analyse information given and identify important clues in questions. Students will also learn answering techniques to structure a complete and concise answer while avoiding common pitfalls.

## Primary 3 Curriculum

In Primary 3, students will be introduced to Diversity, Life Cycles and Magnets. They will explore the key characteristics of animals, plants, fungi and bacteria, uncover the intriguing properties of materials, and delve into the world of life cycles and magnets through engaging experiments, hands-on activities, and interactive games.

Students will learn how to analyse questions and construct coherent answers to open-ended questions. They will develop science process skills such as classifying, comparing and analysing data presented in tables, charts and bar graphs. They will also learn to analyse an experiment to identify its variables, aim and conclusion.

Our meticulously designed and comprehensive curriculum lays a strong foundation for students to excel in the subject and nurtures a lifelong passion for science.

## Diversity

### Classifying Things

- Methods of classification

### Diversity of Living and Non-living things

- Characteristics of living things

### Diversity of Materials

- Properties of materials

### Classification of Living Things

- Characteristics of plants and plant parts
- Characteristics of mammals, birds, insects, fish, reptiles and amphibians
- Characteristics of fungi and bacteria

## Cycles

### Life Cycles of Plants

- Stages in the life cycle of plants
- Conditions for germination
- Parts and functions of seeds and seedlings

### Life Cycles of Animals

- Comparing life cycles
- Three-staged and four-staged life cycles
- Characteristics of stages in a life cycle

## Interactions

### Properties of Magnets

- Properties of magnets
- Comparing magnetic strength

### Making and Using Magnets

- Temporary magnets
- Losing magnetic strength
- Uses of magnets

## Primary 4 Curriculum

In Primary 4, students will be introduced to Systems, Matter, Light and Heat. They will learn about the key functions of the various human systems and plant parts. They will also master the abstract concepts of matter, light and heat while observing displacement of matter, identifying properties of light and observing the effects of heat through engaging experiments, in-class demonstrations and interactive games.

Students will learn how to analyse questions with unfamiliar context and experiments, and construct coherent answers to open-ended questions. They will also learn how to identify the relevant properties demonstrated in the experiment set-ups and hone experimental skills, and analyse data presented in tables, bar graphs and line graphs.

Additionally, students will revise topics such as Diversity, Life Cycles and Magnets at a greater depth and be exposed to higher-order thinking questions.

## Systems

### Human Systems

- Parts and functions of the circulatory, respiratory, skeletal and muscular systems
- Parts and functions of the digestive system

### Plant System

- Parts and functions of plants

## Cycles

### Matter

- Properties of matter
- States of matter and their properties
- Displacement of matter

## Energy

### Light

- Sources of light
- Properties of light
- Transmission of light
- Shadow formation
- Factors affecting shadows

### Heat

- Sources of heat
- Transfer of heat
- Conduction of light
- Effects of heat
- Heat energy

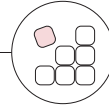
Key features of our Primary 3 and 4 Science programmes

# Exposure: Grow What You Know



## Specially Curated Materials

- Comprehensive notes introduce key concepts, common experiments and common graphs
- Tutorials provide exposure to a wide range of commonly-tested questions including fundamental questions, experiment-based questions and application questions



## Active Learning

- Physical/virtual experiments, hands-on activities and in-class demonstrations are carried out to aid in visualisation of abstract concepts
- Interactive games and exit quizzes help to assess conceptual understanding and consolidate learning



## Applied Learning

- Application questions provide exposure to real-world contexts and help students develop an understanding of how scientific concepts are applied
- Handouts which go beyond the curriculum introduce cutting-edge scientific news and how they relate to concepts learnt in school
- A spiral approach to learning helps students build upon their fundamentals through revisiting the concepts they have learnt and applying them to increasingly complex questions

# Analysis and Strategy: Show What You Know



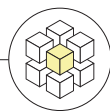
## Question Analysis

- Question analysis handouts demonstrate the application of a three-step methodical approach to aid in understanding of questions:
  - Highlight clues in the question that help identify the topic(s) and concept(s) tested
  - Identify the command words/restrictors and determine if any comparisons are needed
  - Analyse and annotate on any diagrams/tables/graphs provided and pick out relevant information to be included in the answer



## Memory Techniques

- Fun mnemonics are introduced to facilitate easy recall of scientific concepts and keywords required in answers for commonly tested open-ended/free response questions

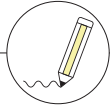


## Problem-Solving Strategies

- Questions that highlight concepts in action in various real-life scenarios build flexibility in applying concepts to unfamiliar situations
- Experiment-focused handouts stimulate critical thinking about how to design a fair experiment to achieve an aim

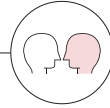


# Answering Technique: Present What You Know



## Answering Techniques

- Introduction to various answering techniques such as the 'information – concept – conclusion' technique helps students craft complete but succinct answers in a structured manner



## Metacognition

- Question analysis handouts and experiment analysis handouts refine thinking processes and analytical skills
- Error analysis handouts introduce common mistakes so that similar pitfalls can be identified and avoided
- Inktrailing as a way to analyse questions and make learning more effective



## Exam Excellence

- Formative assessment through topical tests provides ongoing feedback for students, allowing them to identify their strengths and weaknesses and target areas of improvement
- Rigorous practice tests simulate exam conditions to prepare students for actual assessments in school

To sign up for our Primary Core Programmes:  
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or contact our service hotline at 6733 8711


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## OPENING HOURS & LOCATIONS


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