Learning Journey for the Year

Dear teachers, the table below summarises the learning journey you will cover with your students this year.

BOY	Beginning of Year assessment to help you identify learning gaps.
Bridge Course	Supports you in reteaching and recapping critical pre-requisite skills.
Biology **Term 1** Chapter 1 Chapter 2 Unit ASM 1 SE 1	The following 2 chapters of Biology are to be covered in 20 days. Components of Food (11 days) Plants: Structure and Function (9 days) This unit assessment will assess concepts learned in Chapters 1 and 2. SE 1 will be based on the concepts of Chapter 1.
Chemistry **Term 1** Chapter 1 Chapter 2 Chapter 3 Unit ASM 2 SE 2	3 chapters of Chemistry are to be covered in 27 days. Classifying Matter (9 days) Separation of Mixtures (10 days) Changes in Matter (8 days) This unit assessment will assess concepts learned in Chapters 1, 2, and 3. SE 2 will be based on the concepts of Chapter 2.
Physics **Term 1** Chapter 1 Chapter 2	2 chapters of Physics are to be covered in 18 days. Measurement (8 days) Light — Shadows, Reflection, and Refraction (10 days)

Learning Journey for the Year

Physics

- Unit ASM 3
- SE 3

- This unit assessment will assess concepts learned in Chapters 1 and 2.
- SE 3 will be based on the concepts of Chapter 2.

Biology – Term 1

- Chapter 3
- Unit ASM 4
- SE 4

The following chapter of Biology is to be covered in 11 days.

- Body Movements (11 days)
- This unit assessment will assess concepts learned in Chapter 3.
- SE 4 will be based on the concepts of Chapter 3.

MOY

5 days of Term 1 Revision plan, followed by Middle of Year Assessment

Biology – Term 2

- Chapter 4
- Chapter 5
- Unit ASM 5
- SE 5

2 chapters of Biology are to be covered in 16 days.

- The Living Organisms and their Characteristics (10 days)
- Habitats and Adaptations (9 days)
- This unit assessment will assess concepts learned in Chapters 4 and 5.
- SE 5 will be based on the concepts of Chapter 5.

Chemistry – Term 2

- Chapter 4

1 chapter of Chemistry is to be covered in 7 days.

- Air (7 days)

Learning Journey for the Year

Chemistry

- Unit ASM 6
- SE 6

This unit assessment will assess concepts learned in Chapter 4.

SE 6 will be based on the concepts of Chapter 4.

Physics

Term 2

- Chapter 3
- Chapter 4
- Chapter 5
- Unit ASM 7
- SE 7

3 chapters of Physics are to be covered in 29 days.

- Motion and Speed (7 days)
- Electric Circuits (12 days)
- Magnetism (10 days)

This unit assessment will assess concepts learned in Chapters 4, 5, and 6.

SE 7 will be based on the concepts of Chapter 4.

EOY

5 days of Term 2 revision plan followed by End of Year Assessment

Note: All subject enrichment (SE) activities are optional. However, It is recommended that students perform them in class in order to strengthen their conceptual understanding.

Life Skills - The important skills that students will develop this year are:

THINK

1. Solving real-world problems
2. Creating new ideas
3. Being curious
4. Reflecting on your learning
5. Learning from mistakes

COMMUNICATE

1. Communicating effectively
2. Presenting ideas
3. Using information
4. Using different media

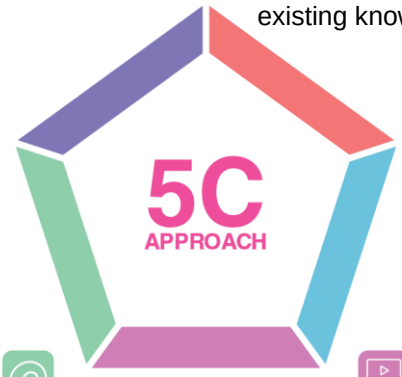
COLLABORATE

1. Working with others
2. Appreciating others' ideas
3. Resolving conflicts
4. Connecting yourself to your community
5. Connecting yourself to the nation

The LEAD Method

The LEAD Method includes unique pedagogical approaches you will use to help your students develop a deep understanding of concepts. These are integrated into the lesson plans.

1. 5Cs Approach: Every concept is taught through the 5Cs approach



Connected to Previous Learning
Students will build new knowledge on their existing knowledge.

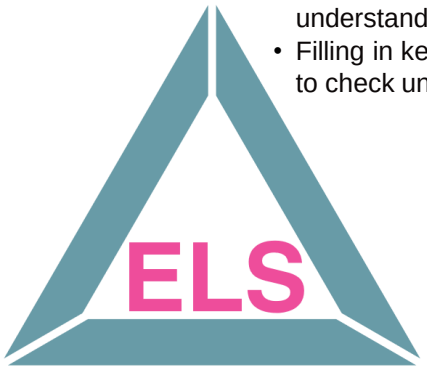
Contextual
All concepts are taught using language, pictures, and examples that are relevant to students.

Connected to Life
Students will be able to connect and apply their knowledge to life.

Concentric
All learning moves from teacher-led to student-led.

Caters to All Learners
Students have multiple pathways to learn all concepts — videos, activities, and projects.

2. ELS: English Language Strategies



Reading

- Annotation to read with understanding
- Filling in keywords after reading to check understanding

Writing

- Writing tips to help students organize their answers
- Filling in the blanks to help students write answers in the correct format.

Vocabulary

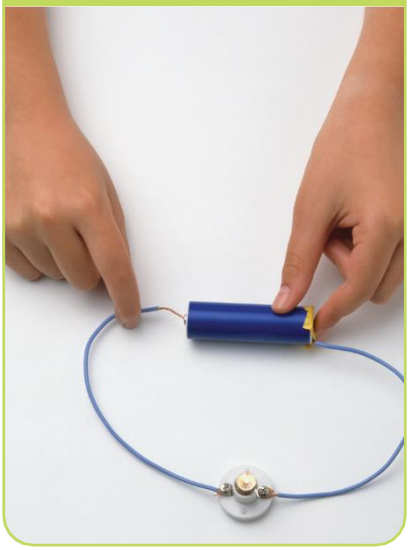
- Keywords with meanings for easy understanding
- Labelled diagrams for picture-word association
- Definitions highlighted for easy revision

The LEAD Method

LBD — Learning by Doing

Learning by Doing is followed in various ways:

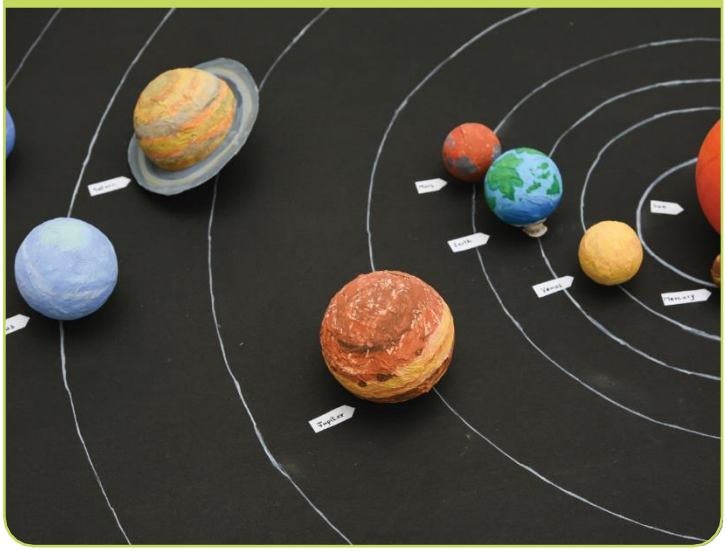
In-Class Activities



Laboratory Experiments

Videos and Demonstrations

Making Models



Community Projects

Important Icons and Features

Icons and Features of the Books

CONNECT TO LIFE
Provide activities and questions that help students apply new concepts to their life.

THINK
Provide opportunities for building thinking skills.

ACTIVITY
Help students understand concepts and apply their learnings.

COLLABORATE
Provide opportunities for building collaboration skills.

KEYWORDS
Provide meanings of difficult words as they read.

COMMUNICATE
Provide opportunities for building communication skills.

Scan here to know more.

Students can access important resources at home by scanning these codes using the LEAD Student App.

Icons and Features in the Lesson Plans


Think


Observe


Read


Turn and Talk


Turn-Write-Pair-Share

Ensure that you use the routines and structures as mentioned in the plans to achieve excellence in each unit.

Resources called LCRs will help you understand these in detail. The LCR for each routine or structure will be mentioned under 'Preparation Needed' the first few times that routine is used.

Assessment Structure for the Year

The objective of assessments is to check if all students have understood the concept and can apply their learning. Based on assessment data, it is very important to do strong remedials using LEAD remedial recommendation before progressing forward. LEAD prescribes the following assessments:

BOY

1 written assessment
Max marks – 30 Duration – 60 minutes

Bridge Course

1 written assessment
Max marks – 20 Duration – 20 minutes

Biology
Term 1
Unit ASM 1
(Chapters 1 & 2)
SE 1

Chemistry
Term 1
Unit ASM 2
(Chapters 1, 2 & 3)
SE 2

Physics
Term 1
Unit ASM 3
(Chapters 1 & 2)
SE 3

Biology
Term 1
Unit ASM 4
(Chapter 3)
SE 4

Four unit assessments will be conducted in Term 1 for Biology, Chemistry, and Physics with the following structure.

- **Each written assessment**
  Max marks – 20 Duration – 40 minutes
- **Each subject enrichment**
  Max marks – 10 Graded as per Rubric

Note: While we have provided assessment for all subject enrichment (SE) activities, we recommend that you do at least one assessment in a term.

Assessment Structure for the Year

MOY

1 written assessment
Max marks – 80 Duration – 180 minutes

Biology

Term 2

Unit ASM 5
(Chapters 4 & 5)

SE 5

Chemistry

Term 2

Unit ASM 6
(Chapter 4)

SE 6

Physics

Term 2

Unit ASM 7
(Chapters 3, 4 & 5)

SE 7

Three unit assessments will be conducted in Term 2 for Biology, Chemistry, and Physics with the following structure.

- **Each written assessment**
  Max marks – 20 Duration – 40 minutes
- **Each subject enrichment**
  Max marks – 10 Graded as per Rubric

Note: While we have provided assessment for all subject enrichment (SE) activities, we recommend that you do at least one assessment in a term.

EOY

1 written assessment
Max marks – 80 Duration – 180 minutes

Assessment Framework

Unit Assessments

The written unit assessments have the following structure.

Types of Question	Marks	Questions	Total Marks
Multiple Choice Questions	1	4	4
Fill in the Blanks	4	1	4
Short Answer Questions	2	4	8
Long Answer Questions	4	1	4
		10 questions	**20 marks**

MOY & EOY Assessments

MOY and EOY assessments will have the following structure.

Types of Question	Marks	Questions	Total Marks
Multiple Choice Questions	1	12	12
Fill in the blanks	6	2	12
Short Answer Questions	2	16	32
Long Answer Questions	4	6	24
		36 questions	**80 marks**

Assessment Framework

Spiraling in Assessments

- In MOY – 100% questions will be from Term 1 Units.
- In EOY – 75% questions will be from Term 2 Units, and 25% will be from Term 1 Units.
- In Unit Assessments – For every group subject, the unit assessment will cover 85%-90% marks from that unit and 10-15% marks from the previous units. This is to help students practice concepts and be better prepared for MOY and EOY.
- The exact syllabus is provided in the Important Notes of the respective assessment day.

Difficulty level of Questions

Difficulty level of questions in the assessments are based on Board guidelines. All questions are categorised as per the table below:

	LOTS (Lower Order Thinking Skills)	MOTS (Middle Order Thinking Skills)	HOTS (Higher Order Thinking Skills)
Definition	Questions based on recalling knowledge	Questions based on applying skills in familiar scenarios	Questions based on applying skills in unfamiliar scenarios, analyzing situations and building on top of what was taught in class.
Bloom's Level	Remember	Understand Application (simple)	Application (complex) Evaluate Analyse Create

In line with Board guidelines, LEAD assessments follow the structure explained below

Unit ASM 1 - 50% LOTS : 40% MOTS : 10% HOTS
Unit ASM 2 - 50% LOTS : 40% MOTS : 10% HOTS
Unit ASM 3 - 40% LOTS : 50% MOTS : 10% HOTS
Unit ASM 4 - 30% LOTS : 50% MOTS : 20% HOTS
MOY - 30% LOTS : 50% MOTS : 20% HOTS
Unit ASM 5, 6, 7 - 30% LOTS : 50% MOTS : 20% HOTS
EOY – 30% LOTS : 50% MOTS : 20% HOTS

We increase the level of difficulty for students slowly in Term 1.

Materials Required

You will need the following materials for the various activities and experiments that will be conducted in Term 1.

Term 1 – List of Materials

Biology

Chapter 1: Components of Food

- A small piece of butter — 1
- The white portion of a boiled egg or gram flour
- Caustic soda (sodium hydroxide) — 25 mL
- Copper sulphate solution — 25 mL
- Test tubes — 2
- A spirit or alcohol for the lamp
- Petri dishes — 2
- Iodine solution — 25 mL
- Droppers — 2
- A test tube stand — 1
- A test tube holder — 1
- A spirit lamp or Bunsen burner — 1

Chapter 2: Plants: Structure and Function

- Grass plants with roots — 1 plant per group
- Coriander plants with roots — 1 plant per group
- A small potted plant— 1

Chemistry

Chapter 1: Classifying Matter

- A torch — 1
- A glass slab — 1
- Thumb pins — 3
- A 9V battery or 2 AA batteries
- A battery cap — 1
- An adhesive tape
- Connecting wires
- A bulb with a bulb holder or an LED — 1
- A key or a switch — 1
- A glass rod — 1
- A magnet — 1
- Iron filings — 10 g

Continued…

Materials Required

You will need the following materials for the various activities and experiments that will be conducted in Term 1.

Term 1 – List of Materials

Chemistry

Chapter 2: Separation of Mixtures

- Iron filings — 10 g
- A spoonful of camphor powder
- A china dish — 1
- A magnet — 1
- A glass funnel — 1
- A wire gauze — 1
- A tripod stand — 1
- A Bunsen/alcohol burner — 1
- 250 mL beakers — 3
- Filter papers — 2
- A 100 mL beaker — 1
- A funnel — 1
- Filter papers — 2
- Pair of tongs — 1

Chapter 3: Changes in Matter

- A transparent glass tumbler — 1
- A steel spoon — 1
- An inflated balloon — 1
- A pin — 1
- Copper sulphate powder — 10 g
- A spatula — 1
- Dilute sulphuric acid — 10 mL
- A china dish — 1
- A 50 mL beaker — 2
- A retort stand — 1
- A glass rod — 1
- A tripod stand — 1
- A wire gauze — 1
- Filter papers — 2
- A funnel — 1
- A dropper — 1
- Petri dishes/watch glasses — 2

Continued…

Materials Required

You will need the following materials for the various activities and experiments that will be conducted in Term 1.

Term 1 – List of Materials

Physics	**Chapter 1: Measurement** • A measuring tape — 1 • A ruler — 1 • A padlock — 1
	Chapter 2: Light — Shadows, Reflection, and Refraction • A glass slab — 1 • A T-shirt — 1 • A4 sheet of paper — 1 • A ceramic plate — 1 • A metal plate — 1 • Mirrors — 5 • Mirror stands — 5

You will need the following materials for the various activities and experiments that will be conducted in Term 2.

Term 2 – List of Materials

Biology	**Chapter 4: Living Organisms and Their Characteristics** • A sieve — 1 • A glass bowl — 1 • A big bowl or mug — 1 • Calcium hydroxide • A test tube — 1 • A straw — 1
	Chapter 5: Habitats and Adaptations • A potted cactus plant — 1 • A potted leafy plant — 1

Continued . . .

Materials Required

You will need the following materials for the various activities and experiments that will be conducted in Term 2.

Term 2 – List of Materials

Chemistry

Chapter 4: Air

- An empty plastic bottle
- A retort stand — 1
- 5 mL lime water
- Two balloons of the same size
- A 40 cm cardboard strip
- A safety pin — 1
- A candle — 1
- A glass tumbler — 1
- A 250 mL container or beaker — 1

Physics

Chapter 4: Electric Circuits

- AA dry cells — 3
- AAA dry cells — 2
- Button cells — 2
- Mini incandescent screw bulbs — 10
- D-type cells — 10-15
- Connecting wires with stripped ends — 30-40
- Metal thumb pins — 10
- Mini incandescent screw bulb holders — 10

Chapter 5: Magnetism

- A bar magnet — 1
- U-shaped Magnet — 1
- A plastic bottle — 1
- Steel paper clips
- Aluminium foil
- Iron nails
- A wooden ruler — 1
- Sand
- Iron filings — 10 g
- A sieve — 1
- A retort stand — 1
- An adhesive tape — 1
- A metal or plastic ruler — 1
- A magnetic compass — 1