

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.

Term 1

Chapter 1

Matter in Our Surrounding (11 LPs)

Chapter 2

Is Matter Around Us Pure? (20 LPs)

UASM 1

This unit assessment will assess concepts learned in Chapters 1 and 2.

Chapter 8

Motion (17 LPs)

Chapter 9

Force and Laws of Motion (14 LPs)

UASM 2

This unit assessment will assess concepts learned in Chapters 8 and 9.

Chapter 5

The Fundamental Unit of Life (16 LPs)

Chapter 6

Tissues (15 LPs)

UASM 3

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

Chapter 7

Diversity in Living Organisms (19 LPs)

* Chapter dropped as per the rationalized syllabus of AY 2022-23

Chapter 13

Why do we fall ill? (12 LPs)

* Chapter dropped as per the rationalized syllabus of AY 2022-23

Learning Journey for the Year

MOY

Middle of the Year Assessment

Term 2

Chapter 3

Atoms and Molecules (15 LPs)

Chapter 4

Structure of the Atom (16 LPs)

UASM 4

This unit assessment will assess concepts learned in Chapters 3, and 4

Chapter 10

Gravitation (17 LPs)

UASM 5

This unit assessment will assess concepts learned in Chapter 10

Chapter 15

Improvement in Food Resources (11 LPs)

UASM 6

This unit assessment will assess concepts learned in Chapter 15

Chapter 11

Work and Energy (14 LPs)

Chapter 12

Sound (9 LPs)

UASM 7

This unit assessment will assess concepts learned in Chapters 11 and 12

Chapter 14

Natural resources (10 LPs)

EOY

End of the Year Assessment

The LEAD Method

3. LBD: Learning by Doing



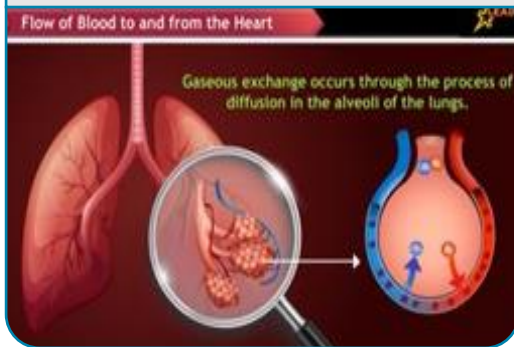
Learning by Doing method helps you build:

Deeper understanding of Science concepts

Better connection of Science topics to life

Better reasoning skills

Videos



Demonstrations



Laboratory Experiments



In class Activities



Important Icons

Icons and Features of the Book



Concept Time

Simplifies, explains, and summarizes select concepts for ease of understanding and revision



Practice Questions

Provides the students with a wide range of questions for practice and the development of higher order thinking skills



Solved Examples

Provides model solutions to questions of various types



Did you Know?

Shares interesting facts that help broaden student's understanding of a topic or concept



Writing Good Answers

Explains the structures and steps that students must follow to answer different types of questions that appear frequently in exams



Revision Guide

Provides a checklist to help students revise a chapter

Important Icons

Icons and Features of the Book



Think

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



Observe



Read

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



Turn and Talk



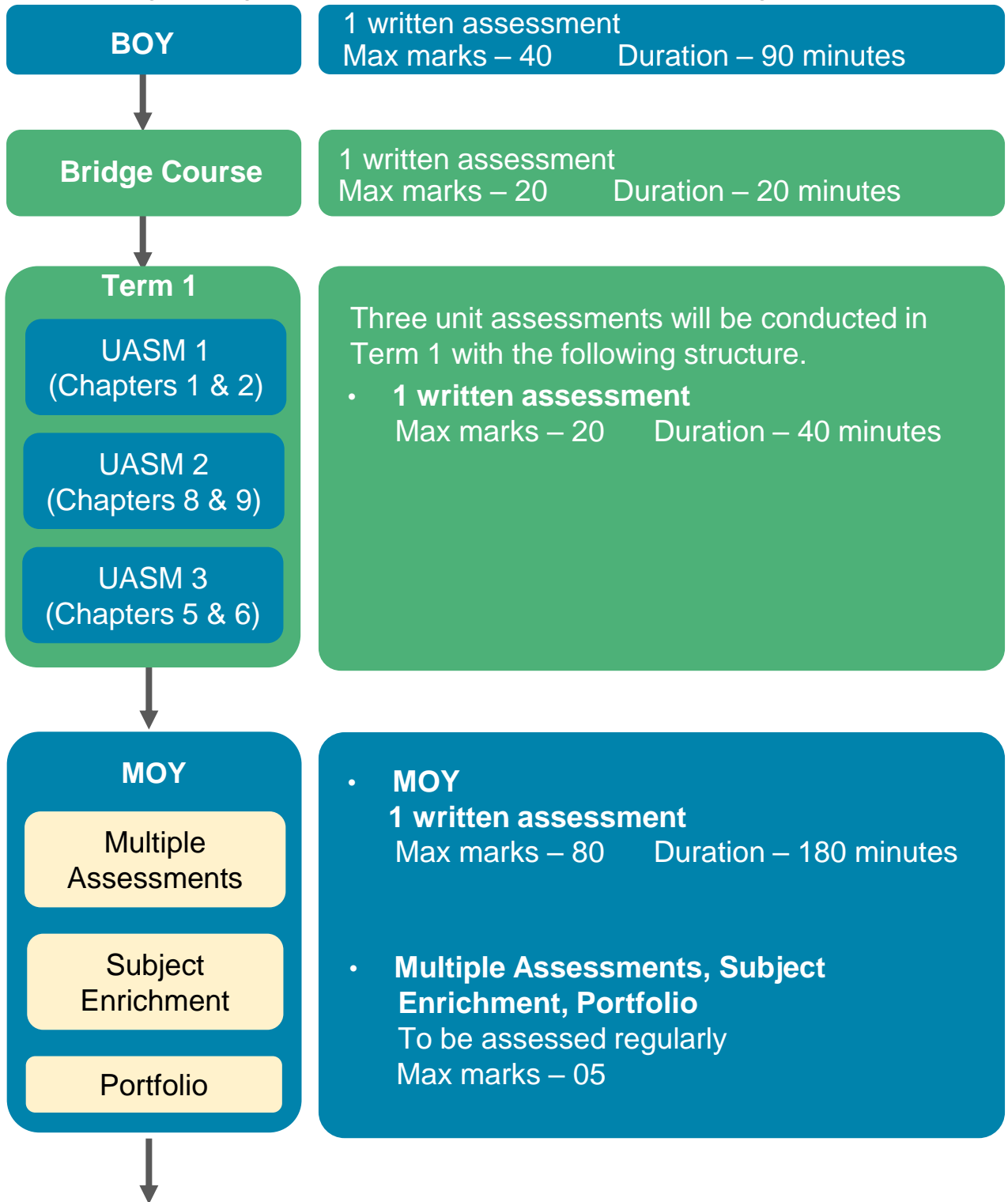
Turn-Write-Pair-Share



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

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:



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Term 2

UASM 4
(Chapters 3 & 4)

UASM 5
(Chapter 10)

UASM 6
(Chapter 15)

UASM 7
(Chapters 11 &
12)

Four unit assessments will be conducted in Term 2 with the following structure.

- **1 written assessment**
Max marks – 20 Duration – 40 minutes

EOY

Structure of the End of the Year Assessment

1 written assessment

Max. marks – 80

Duration – 180 minutes

Assessment Structure for the Year

Internal Assessment – In addition to the End of Year written examination (EOY), the Board suggests an Internal Assessment for 20 marks. The structure of the Internal assessment is as follows

Internal Assessment

Periodic Tests
(5 marks)

Periodic Multiple Assessments
(5 marks)

Portfolio
(5 marks)

Subject Enrichment Activities
(5 marks)

Schools may choose the UASMs and MOY as a form of a Periodic Test

In-class Quizzes, Oral Tests, Concept Maps, Exit Cards, and Visual Expressions to be conducted by the teacher. Graded as per the rubric provided. Assessed once per term.

A portfolio is a collection of intentionally chosen student work. Assembled over time, it represents the learner's efforts, progress, growth, and achievements with respect to learning outcomes. Assessed once per term

It is essential to assess at least one subject enrichment activity per term. For science, the Board suggests Lab Days as Subject Enrichment

Assessment Framework

Unit Assessments

The written unit assessments will have the following structure.

Types of Questions	Marks	Questions	Total Marks
Multiple Choice Questions	1	4	4
Assertion-Reason Questions	1	2	2
Very Short Answer Questions	2	1	2
Short Answer Questions	3	1	3
Long Answer Questions	5	1	5
Case based Questions	4	1	4
		10 questions	20 marks

MOY Assessment

Middle of the Year Assessment will have the following structure.

Types of Questions	Marks	Questions	Total marks
Multiple Choice Questions	1	16	16
Assertion-Reason Questions	1	4	4
Very Short Answer Questions	2	6	12
Short Answer Questions	3	7	21
Long Answer Questions	5	3	15
Case based Questions	4	3	12
		39 questions	80 marks

*Note: The **End of the Year Assessment** structure will be as per the sample question paper released by the board for the current academic year.*

Assessment Framework

Spiraling in Assessments

- In Unit Assessments – Syllabus for UASM can be seen in the Important notes section.
- In MOY – All the questions will be from Term 1 chapters.
- In EOY – All the questions will be from Term 1 and Term 2 chapters.

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 Assessments- 46% LOTS : 22% MOTS : 32% HOTS

MOY/EOY Assessments- 46% LOTS : 22% MOTS : 32% HOTS

Materials Required

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

List of Materials Required

To Be Bought Locally

Chemistry

Chapter 1: Matter in Our Surrounding

- A balloon
- Three 100 ml syringes
- A matchbox
- An incense stick
- Potassium permanganate crystals
- Camphor balls
- Vegetable oil
- Pieces of rotten food items
- Broken pieces of chalk
- Water (hot and cold)
- Distilled water
- Transparent glasses
- An open bowl
- An iron nail
- A rubber band
- A hammer
- A cutter/knife
- Blue ink
- Honey
- Ice cubes
- Cotton
- Salt
- Paper
- Poster colours
- A measuring cylinder
- A spatula

Chapter 2: Is Matter Around Us Pure?

- Sulphur powder
- Iron filings
- Full cream milk

Continue...

Materials Required

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

List of Materials Required

To Be Bought Locally

Chemistry

Chapter 2: Is Matter Around Us Pure? (Continued.)

- A lemon
- Camphor balls
- Vegetable oil
- Water (hot and cold)
- Distilled water
- Transparent glasses
- A vessel for churning
- An open bowl
- A torch
- A churner
- Cotton
- Salt
- Paper
- Poster colours
- A measuring cylinder
- A packet or a tin of Amul ghee (Even the outer cover is sufficient.)
- A filter paper
- A spatula
- Mud
- A matchbox

Materials Required

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

List of Materials Required

To Be Bought Locally

Biology

Chapter 5: The Fundamental Unit of Life

- An incense stick
- A matchbox or a lighter
- Raisins
- Water
- Sugar
- Safranin
- Glycerin
- A dropper
- A razor
- A plant stem

Chapter 6: Tissues

- Safranin
- Glycerin
- A dropper
- A blade
- Watch glass

Chapter 7: Diversity in Living Organisms

NA

Chapter 13: Why do we fall III?

NA

Materials Required

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

List of Materials Required

To Be Bought Locally

Physics

Chapter 8: Motion

- Graph paper
- A 30 cm scale

Chapter 9: Force and Laws of Motion

- Graph paper
- A long and strong rope for a tug-of-war game
- Five-rupee coins (x3)
- Playing cards (x2)
- Tumblers/Glasses (x2)
- Plastic or paper cups (x4)
- A tray
- Balloons (x4)

Materials Required

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

List of Materials Required

To Be Bought Locally

Chemistry

Chapter 3: Atoms and Molecules

- A digital weighing balance
- One of the following sets of X and Y chemicals:
 - (i) X = copper sulphate and Y = sodium carbonate
 - (ii) X = barium chloride and Y = sodium sulphate
 - (iii) X = lead nitrate and Y = sodium chloride
- Any coloured element such as copper turnings/shavings or carbon or zinc pellets

Chapter 4: Structure of Atom

- A piece of cloth
- A piece of paper
- A small plastic container
- Four plastic glasses of the same height
- A sheet of cardboard
- 10–15 small ping-pong or tennis balls
- Pompom balls - 8
- Plastic ball - 1
- Double-sided tape - 1
- Cardboard (20cmx20cm)
- Marker
- Pair of scissors

Materials Required

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

List of Materials Required

To Be Bought Locally

Biology	Chapter 14: Natural Resources <ul style="list-style-type: none">• Glass bottle• Candles• A pair of scissors
	Chapter 13: Improvement in Food Resources NA

Materials Required

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

List of Materials Required

To Be Bought Locally

Physics

Chapter 10: Gravitation

- An iron nail

Chapter 11: Work and Energy

- Two glass marbles
- A rubber ball
- Rubber bands
- Chalk

Chapter 12: Sound

- Thick rope or long skipping rope
- Small rubber bands (5)
- Medium rubber bands (30–40)
- Large rubber bands (5)