DERT
DIRECTORATE OF EDUCATIONAL
RESEARCH & TRAINING

GOVERNMENT OF MEGHALAYA

Reach to Teach

CM IMPACT
Meghalaya Class Readiness Programme

IMPACT

CHIEF MINISTER'S INITIATIVE TO MAXIMIZE PASS ACHIEVEMENT AND CLASSROOM TRIUMPH

8

CLASS

3

WEEKS

info@reach-to-teach.org | Tel: 0124 6687881 | Mobile: +91 9099714652

Published by DERT, Shillong
dertmegh@gmail.com | Tel: 0364-22233248

Printed in India

MESSAGE

With the adoption of the National Education Policy (NEP) 2020 and its recommendations to transform school education, the Government of Meghalaya is committed to significantly improving the education landscape of the State. Our primary objective is to ensure that every student in Meghalaya receives quality education in an inclusive and equitable environment.

In our effort to reimagine education, we are keen on adopting innovative measures that address the unique challenges faced by our State. Our collaboration with Reach to Teach Foundation for Meghalaya Comprehensive School Transformation Programme has further strengthened this vision. One of the interventions towards realising our vision is the Meghalaya Class Readiness Programme (MCRP).

Designed to address the learning gaps among students and rebuild foundational skills, the MCRP integrates innovative methods such as activity-based and experiential activities rooted in Meghalaya's context to make education engaging and relatable for students.

I am confident that the concerted efforts of the Department of Education, the Directorate of Elementary and Secondary Education, the Directorate of Educational Research and Training (DERT), and our Knowledge Partner, Reach to Teach Foundation, will drive this reform successfully. Together, we can lay the groundwork for an education system that equips every student with the skills and knowledge to succeed.

Through collaborative efforts the will to transform the status of education in Meghalaya, these sustained initiatives will not only improve learning outcomes but also ensure that every student can thrive, creating a brighter future for education in our State.

Shri Vijay Kumar Mantri, IAS

Commissioner and Secretary,
Education Department, Government of Meghalaya

MESSAGE

Education is the cornerstone of progress, and the Government of Meghalaya is committed to providing quality education to every child across the State. We acknowledge existing challenges, particularly the learning gaps that have further widened in the years following the Covid-19 pandemic. To tackle these challenges, we aim to create a holistic, flexible, and multidisciplinary framework that addresses the diverse needs of learners, while nurturing essential skills like creativity, collaboration, and adaptability.

The Meghalaya Class Readiness Programme (MCRP) has been launched as a key initiative to help students achieve grade-level Learning Outcomes (LOs) by focusing on pre-requisite LOs and competencies from their previous classes needed to build upon concepts in their current class. These LOs are aligned with national standards set by NCERT, NIPUN Bharat, and the NCF 2023, ensuring integration of national benchmarks with Meghalaya's unique educational context.

The MCRP includes experiential and activity-based learning, core principles of NEP 2020 and NCF 2023. This approach helps students connect academic concepts to real-world situations, fostering deeper learning. The programme provides teachers with detailed, day-wise activities, strategies, tools, and methods to assess student performance. Teachers will be equipped to continuously evaluate current learning levels of their students and implement remedial measures, empowering them as agents of change. This will encourage innovative teaching practices, making learning more engaging and enjoyable.

We express our gratitude to the Directorate of Educational Research and Training (DERT), Shillong, and Reach to Teach Foundation for their invaluable collaboration in developing these resources. Their dedication is pivotal to the success of this initiative. We call on teachers, students, parents, community members, DIET faculty, administrators, and decision-makers to join hands in maximising the impact of this programme. Together, we can ensure every child receives quality education and is well-prepared for challenges and opportunities that lie ahead.

Shri Swapnil Tembe, IAS

Secretary, Education Department,
Director, School Education & Literacy,
State Project Director, Samagra Siksha Abhiyaan,
Government of Meghalaya

MESSAGE

The state of Meghalaya is home to a rich diversity of cultures and traditions, which is reflected in its education system. However, like many regions, our schools have faced unprecedented challenges in recent years. The disruptions caused by the COVID-19 pandemic, coupled with pre-existing geographical and infrastructural barriers, have significantly impacted the learning outcomes of our students. The closure of schools for extended periods not only interrupted academic progress but also led to a loss of connection with structured learning environments.

Recognising the urgency to address this issue, the **Meghalaya Class Readiness Programme (MCRP)** is being introduced in collaboration with Reach to Teach Foundation to help students recover from the learning losses and to help them achieve grade-level learning outcomes. This four-week programme is designed to provide targeted support to teachers to help their students strengthen concepts of previous grades, rebuild core concepts, and to foster engagement in learning.

The MCRP includes activity-based methods and contextually relevant material to ensure students achieve grade-level learning outcomes by doing activities centralised around pre-requisite outcomes. Teachers will play a pivotal role in identifying their students' learning gaps and addressing them through focused interventions in the upcoming academic year.

This initiative is aligned with the objectives of the **National Education Policy 2020** and the **National Curriculum Framework**, both of which emphasise the importance of foundational learning as a critical stage in a student's educational journey. It also reflects the Government's commitment to equitable and inclusive education.

Through our collaborative actions and collective resolve, we are confident that school education in Meghalaya will witness a significant transformation, ensuring that no student is left behind. Through our collective efforts, we can bridge learning gaps and build a brighter, more promising future for the students of Meghalaya.

Smt. R. S. Manners, MCS

Director, Directorate of Educational Research & Training, Shillong

INDEX

Meghalaya Class Readiness Programme (MCRP)

Dear Teacher,

It is widely acknowledged that of challenges you grapple with in your classroom, the gaps in your students' learning is a critical one. The prolonged school closures as a result of the COVID-19 pandemic has further exacerbated this gap, leading to students struggling to participate at their grade-appropriate learning levels. The Meghalaya Class Readiness Programme (MCRP) has been designed to address this challenge, as seasonal breaks (vacation) and in some cases the lack of access to learning resources also often contribute to loss in learning. When students return to classrooms after a long break, they may struggle to recall previously learned concepts, leading to a decline in their academic performance and their confidence.

The MCRP offers class-wise, experiential and activity-based interventions to reinforce pre-requisite skills, and aims to help teachers as well students settle into the new academic year. The programme ensures that learning remains inclusive and engaging, allowing students to better engage with their class's curriculum.

Given below is some information to help you use this Activity Pack in the most effective way:

1. What is MCRP and what does it cover?

The MCRP is a **bridge course** programme that will run in **primary, upper primary and secondary classes** at the beginning of the academic year. It focuses on enhancing the learning outcomes and competencies of the previous classes, which will help achieve the current grade-level outcomes. The subjects covered in this programme are English, Maths and Science.

The MCRP consists of Activity Packs containing subject-wise and class-wise activities **mapped to learning outcomes and their associated competencies**. These activities cater to pre-requisite LOs, an understanding of which is needed to grasp concepts in the current class. For example, the Activity Pack for Class 5 will contain activities mapped to the LOs of Classes 2, 3 and 4 which will help students better learn Class 5 concepts.

The first four weeks for Classes 1 to 5, and three weeks for Classes 6 to 10 will be earmarked for the MCRP. The objective is to ensure that students, particularly those struggling, acquire the necessary competencies to progress through their classes without difficulty. Activities have been made engaging and include local knowledge that students can relate to, making it easier for them to participate.

For each class, critical learning outcomes have been identified from the Learning Outcomes document developed by NCERT. The criticality of the learning outcomes has been judged based on the **SLAS** and **NAS 2021** results and **prioritising concepts** which are essential for foundational understanding.

2. How will it work – i.e. how it will facilitate learning and recovery?

The MCRP is designed to support teachers to help students bridge learning gaps and regain their confidence. Key ways in which the MCRP facilitates learning and recovery:

a. Activities are tailored to help master essential skills missed during breaks

b. Each week's activities cater to 1 or 2 LOs, and progress from simple to complex

c. Activities integrate local references such as folktales, flora and fauna, making them relatable and meaningful for students

d. Experiential and activity-based modules ensure the course uses storytelling, games, group discussions, and real-life examples to make learning enjoyable

e. The activities will enable students to work together from time to time, which will free you up to help students falling behind

f. The programme incorporates activities rooted in socio-emotional learning to help develop students' confidence, resilience, and adaptability

g. Weekly assessment activities are included in each week to help track progress and identify areas for improvement.

After the 4-week programme, you can continue regular classes using school textbooks. Try incorporating the pedagogy followed during MCRP in your regular classes.

3. What do the Activity Packs cover?

The Activity Packs consist of activities designed to keep students engaged for a 35-minute period. Using the Activity Packs, you will:

- Create engaging learning experiences, have discussions and offer explanations where relevant, thereby initiating learning
- Embed Socio-Emotional Learning in your processes. This will involve scope for students to collaborate, share, support each other and so on
- Assess learning every Friday by using the suggested assessment activities, which cater to the learning outcomes addressed in that week

4. How do the Activity Packs enable socio-emotional learning in your classroom?

Social-Emotional Learning (SEL) is the process through which students acquire the knowledge, skills, and attitudes necessary to understand and manage emotions, set and achieve positive goals, build healthy relationships, and make responsible decisions. SEL helps students recognise and regulate their emotions and reducing stress, enabling them to cope better with challenges, such as academic pressures or conflicts with peers.

Specific SEL activities have been included in the Activity Packs for each Class. Creating an environment where students are not afraid to speak is the best way to ensure students' healthy socio-emotional development.

5. How can you implement the Activity Packs effectively?

- ***Plan and prepare:*** Go through activities the previous day/week. This will help you visualise it, familiarise yourself with steps and ensure required preparations (such as the need for material for the activity) are in place
- ***Smile!:*** This is important – because it will help your students relax and feel at ease. This will help you develop a stronger bond with your students and make you feel happier
- ***Give clear instructions:*** Do give this part some thought. Recall the times students have been confused and what part of the instructions led to that.
- ***Offer support as needed:*** Encourage students to work on their own. In case some students are unable to respond, or to do what is expected of them, don't get upset. Instead, help them out and give thought to what was holding them back.
- ***Help students work on their own and feel successful:*** It is important that students try to do as much as they can on their own. Make them experience success by offering just enough help and support to make a difference
- ***Give explanations once students have tried working themselves – don't do this right away:*** Sometimes you may feel the need to 'teach' something immediately to students. However, let students try things out on their own first. This is especially needed as they are 'recovering' learning. If you feel the need to provide explanation, you can do that after students attempt the activity
- Over the day, it will be good to ***connect one activity with another*** where possible
- Remember, it is the ***students' role*** to do, think, and reflect on what they have done, and use this to develop their understanding. ***Your role*** is to make it interesting and engaging and to develop their understanding

6. How to use assessments to ensure every student succeeds in the MCRP?

It is important to keep track of how much your students learning. The activities for the last day of the week are Assessment Activities. At the end of each week, you can record student progress in the learning tracker based on the LOs covered. You may re-create the given format in your register or take printouts.

The MCRP is one of the many initiatives taken by the Government of Meghalaya to enhance student learning across the State. This programme will help you enable students to overcome their learning gaps over a period of one month and also help you identify what further support your students require over the academic year.

We wish you're the best and look forward to supporting you on this journey of implementing MCRP, making students Class Ready.

Reach to Teach Foundation

3-weeks suggestive time allocation

Time: 35 Minutes / 1 Period

Monday	Tuesday	Wednesday	Thursday	Friday
English	Mathematics	English	Science	Assessment-English, Mathematics and Science
English	Mathematics	English	Science	
Mathematics	Science	Mathematics	Mathematics	
Mathematics	Science	Mathematics	Mathematics	
Science	English	Science	English	
Science	English	Science	English	

Note:

- Follow this Timetable for **first 3 weeks** after school reopen **(10th February - 28th February 2025)**.
- Each week try to allocate **at least 350 minutes per subject**.

Instructions for teachers while conducting any activity in classroom

Before the activity

- Check the Learning Outcomes and Competencies mentioned in the Activity pack for a particular week and day.
- Prepare/arrange materials, resources, or tools mentioned in activities. Improvise the materials, resources, or tools that are available locally and ensure that the learning outcomes indicated are achieved for each session/class.
- Plan solutions for potential challenges (e.g. time management, resource allocation, grouping, etc.).
- Communicate the purpose of the activity, rules, roles, and guidelines.

During the activity

- Observe students for active participation and guide if it is needed.
- Encourage collaboration, teamwork, and positive interactions among students.
- Identify students who may need extra support or encouragement.
- Offer constructive feedback, celebrate achievements, and correct misconceptions.

After the activity

- Facilitate a brief discussion on the lesson taught and reflect with the students.
- Summarise key takeaways from the lesson.
- Plan for the next lesson based on the observation and experience.
- Record the learning levels of the students on the Tracker provided in the activity pack.

A brief note on integrating oracy in classroom transactions

Meghalaya has a rich oral tradition, deeply rooted in its culture, which provides a natural foundation for integrating oracy into classroom learning. Teachers should encourage students to express their thoughts, explain or discuss their answers aloud, or participate in small groups to exchange ideas. This helps to build their confidence and communication abilities. These simple practices not only enhance foundational literacy but also create a vibrant and engaging learning environment. Even in the absence of dedicated activities for speaking and listening, teachers should seamlessly weave oracy into everyday lessons along with listening, reading and writing.

CM IMPACT
Meghalaya Class Readiness Programme

CHIEF MINISTER'S INITIATIVE TO MAXIMIZE PASS ACHIEVEMENT AND CLASSROOM TRIUMPH

ENGLISH

WEEK 1 : DAY 1

Activity 1 Story Building

35 mins

Learning Objective

At the end of this activity, the students will learn to cooperate while doing an activity.

- Make students sit in a circle. Start the story with an opening sentence (e.g., "One day, a small bird flew into a big, mysterious forest.").
- Each student to take turns adding one sentence to the story, building upon what the previous student said.
- The goal is to listen to each other's ideas and continue the story in a way that makes sense.
- Tell students that everyone must listen to the person before them and each student should contribute only one sentence at a time.
- After the story is finished, ask the class:
  - "How did the story come together?"
  - "How did you make sure everyone's ideas fit into the story?"
  - "What helped the group work together well?"
- Emphasise that working together to create something new requires listening and cooperation.

WEEK 1 : DAY 1

Activity 2 Rumour has it!

35 mins

Learning Objective

At the end of this activity, students will be able to read text with comprehension and locate details and sequence of events.

Read the following story to the students. Read it in English first then translate to local language.

Rumour has it!

Once upon a time in a thick forest there lived many animals. They all lived together very happily. One day as the hare was resting under a tree he got an intuition and thought "What would happen if mother earth breaks?" At the same time a loud noise was heard in the forest. The hare got scared and thought that the earth is breaking. He ran as quickly as possible by shouting that the earth is breaking.

As he was running to go out of the forest another hare in the forest saw him running and asked him "What's the matter?" "Why are you running so fast?" For which hare replied that "The earth is breaking" you better save your life.

The second hare got even more scared and ran faster than the first hare. Both the hares were shouting that "Earth is breaking" run to save your lives. Many other animals who listened to these hares got scared and even they started to run along with the hares.

The news spread like a fire in the forest. All animals without really checking the authenticity of the words started running from the forest. All the animals, birds, ants, flies started running to save their lives.

A lion standing far away on the hills saw all the animals running out of the forest. At first the lion did not understand the reason for all the animals running.

He came down from the hill and asked one of the animals "What's the matter?" Why are you all running like this?" A parrot who was also flying as hard as possible yelled at the lion and said, "The earth is breaking" you also run as fast as possible to save your life.

The lion was surprised to hear the news and asked who told the parrots. Then the parrots said that they heard it from the monkeys. When the lion asked the monkeys. They said they heard it from tigers, and tigers heard it from elephants, and elephants from buffaloes. Finally, the lion got angry and understood who started this story.

The lion understood that it was the hare who started all this story. Finally, the lion caught hold of the hare and questioned him as to who gave such news to them. The hare who was very scared said "Your majesty, I heard a huge sound with my own ears".

The lion asked all the animals to stop running and explored the reason behind the cracking sound. It came to know that the sound was caused by the large coconut falling down from the tree. The coconut fell on a pile of rocks which caused the sound. All the animals were relieved that the earth is not breaking. The lion asked all the animals to go home and said to check rumour before believing it.

Source: https://www.india-a2z.com/power-of-rumour.html

Once the narration is over, ask questions like the ones given below.

- What did you like in the story?
- Was there something they found funny/silly/irritating?
- What is the sequence of events in the story?
- Who are the characters in the story?
- What is a hare? Is it different from a rabbit?
- What did the hare think at the beginning of the story?
- What happened just after he thought "if mother earth breaks"?

WEEK 1 : DAY 2

Activity 1 The Bus

35 mins

Learning Objective

At the end of this activity, students will be able to read text with comprehension and locate details and sequence of events.

- Write this text on the board and read it to students. Read it in English first. Then read it in English and translate to local language.

Bus
by Pratham Team

Po-po comes the bus
All along, blowing dust
The conductor calls everyone and
Takes them somewhere
Some people get off the bus
Some people get on the bus
Again, the bus blows the dust Po-po goes the bus.
(www.storyweaver.org.in)

- Ask the students, what information are you able to find about the bus journey through this poem? Which words do not give complete information?
- Ask students to find new words. (For these words, tell them the meaning)
- You could also work with students to write a paragraph on a bus journey using information from the poem and adding more from the discussion with students.

WEEK 1 : DAY 2

Activity 2 The Weekends

35 mins

Learning Objective

At the end of this activity, students will be able to read text with comprehension and locate details and sequence of events.

- Start with a quick question: “What's your favourite place to go on weekends, and why?”
- Provide the students with the paragraph: "John loved spending Saturdays at the park. He would ride his bicycle, feed the ducks, and play on the swings with his friend Rita. One sunny afternoon, while playing tag, Rita tripped and fell. John quickly helped her up and took her to a nearby bench. They laughed about how clumsy they both were and decided to rest and enjoy ice cream instead."
- Let students read silently.
- Provide these prompts to students and ask them to answer them verbally:
  - **Main Idea:** What is the paragraph mostly about?
  - **Characters:** Who are the main people in the story?
  - **Sequence of Events:** List what happened first, next, and last.
  - **Personal Connection:** Have you ever helped a friend? How did it feel?
- Students can write answers on paper or discuss in pairs/groups.

WEEK 1 : DAY 3

Activity 1 Rainy Evening

35 mins

Learning Objective

At the end of this activity, students will be able to read text with comprehension and locate details and sequence of events.

- Write the passage on the board.
- Read aloud the passage.
- Explain the passage in the local language.
- Ask the students to copy the passage in their notebooks.
- Discuss the questions and ask them to write the answers.

Rainy Evening

Dark clouds covered the sky, making the town look dim. The soft sound of raindrops falling on rooftops was calming. The streets shone as the rainwater reflected the blinking streetlights. Small puddles formed everywhere, rippling whenever a drop landed. A person in a bright yellow raincoat walked quickly along the sidewalk, splashing through the water. The smell of wet soil filled the air, mixing with the light scent of fresh coffee drifting from a nearby cafe.

- Why was the town looking dim?
- What made the environment calming?
- What reflected the streetlights?
- What was the person wearing?

WEEK 1 : DAY 3

Activity 2 A Quiet Morning by the Lake

35 mins

Learning Objective

At the end of this activity, students will be able to read text with comprehension and locate details and sequence of events.

- Write the passage on the board.
- Read aloud the passage.
- Explain the passage in the local language.
- Ask the students to copy the passage in their notebooks.
- Discuss the questions and ask them to write the answers.

A Quiet Morning by the Lake

The lake was calm and still, like a giant mirror reflecting the blue sky and fluffy white clouds. Birds chirped softly, their songs echoing in the quiet air. A gentle breeze moved through the tall grass by the water's edge, making its way back and forth. On the shore, a wooden boat rested, its paint peeling slightly from years of use. Nearby, a fisherman sat on a rock, his fishing rod still, as he waited patiently for a catch. The smell of fresh water and flowers filled the air, creating a peaceful and refreshing feeling.

- Which word in the passage means “Quiet and motionless”?
- Find a word that means “moving back and forth.”
- What was there on the shore?
- What did the lake reflect?
- What was the fisherman doing?
- Why there was a peaceful and refreshing feeling all around the lake?

WEEK 1 : DAY 4

Activity 1 Thumbelina Meets the Flower Prince

35 mins

Learning Objective

At the end of this activity, students will be able to read text with comprehension and locate details and sequence of events.

- Write the passage on the board.
- Read aloud the passage.
- Explain the passage in the local language.
- Ask the students to copy the passage in their notebooks.
- Discuss the questions and ask them to write the answers.

Thumbelina Meets the Flower Prince

Thumbelina was sitting on a leaf, floating gently down a stream. The sun shone brightly, and the water sparkled like tiny diamonds. Suddenly, a beautiful butterfly landed on the edge of her leaf, flapping its colourful wings. Thumbelina smiled and tied a piece of her sash to the butterfly, letting it pull her along the water. Just then, a handsome prince, no bigger than Thumbelina herself, appeared from a nearby flower. He wore a tiny golden crown and looked at her with kind eyes. "Will you come with me to my kingdom of flowers?" he asked.

- Where was Thumbelina sitting?
- Name the insect which landed on the edge of Thumbelina's leaf?
- Why do you think the prince asked Thumbelina to join him?
- What kind of kingdom might the prince be talking about?

WEEK 1 : DAY 4

Activity 2 Friends at School

35 mins

Learning Objective

At the end of this activity, students will be able to read text with comprehension and locate details and sequence of events.

- Write the poem on the board.
- Ask the students to recite it after you.
- Explain the poem in the local language if required.
- Discuss the questions with them.
- Ask the m to write the answers in their notebooks.

Friends at School

Friends at school can play and share,
Friends at school are kind and fair.
Friends at school will talk to you,
When you're feeling sad and blue.
Friends at school are big and small,
Friends at school are best of all.
(by Anonymous)

Answer the Questions:

- *What do friends at school do?*
- *How are friends kind?*
- *How are they fair?*
- *What does blue mean, in the poem?*

WEEK 1 : DAY 5

Assessment 1

35 mins

Competency	**C-1.2:** Identifies main points, summarises after a careful reading of the text, and responds coherently.
LO: 6.E.L05	Reads a variety of texts in English / Braille and identifies main ideas, characters, sequence of ideas and events and relates with his/her personal experiences.
LO: 7.E.L09	Identifies details, characters, main idea and sequence of ideas and events in textual / non-textual material.

- Ask students to read the following passage. You can write it on the board if needed.
- Malala Yousafzai (born 1997) is a Pakistani activist for female education and the youngest ever winner of the Nobel Peace Prize. Malala is from the Swat Valley in northwest Pakistan, where the local Taliban has banned girls from attending school. Malala, whose family ran a chain of local schools, publicly stood against the Taliban's actions and launched an international movement. On October 9th, 2012, a gunman from the Taliban boarded a school bus and shot her in the head. Malala remained in critical condition in the days following the attack but survived. Since then, she has continued to advocate internationally for women's education.
- Then to check student's comprehension, ask them to write answers for the following questions:
  - Who was Malala Yousafzai?
  - Why was Malala shot?
  - What is Malala advocating for?

WEEK 1 : DAY 5

Assessment 2

35 mins

Competency **C-1.2:** Identifies main points, summarises after a careful reading of the text, and responds coherently.

LO: 6.E.LO5 Reads a variety of texts in English / Braille and identifies main ideas, characters, sequence of ideas and events and relates with his/her personal experiences.

LO: 7.E.LO9 Identifies details, characters, main idea and sequence of ideas and events in textual / non-textual material.

- Write the passage on the board.
- Ask the students to read the passage and answer the questions.

A Morning in the Forest

The first rays of sunlight filtered through the thick treetops, casting a golden glow on the forest floor. The air was crisp and filled with the scent of pine needles and damp earth. Birds chirped sweetly from the treetops, creating a lively and cheerful sound that seemed to welcome the new day. A gentle breeze rustled the leaves, making them shimmer like emeralds in the light.

In the distance, a stream gurgled softly, its crystal-clear water gliding over smooth pebbles. The occasional splash of a jumping fish broke the surface, creating ripples that danced in the sunlight. Tall, ancient trees stood like silent guardians, their bark rough and weathered, whispering secrets of the past.

A family of deer grazed in a clearing, their ears twitching at the slightest sound. Nearby, a squirrel scampered up a tree, clutching an acorn in its tiny paws. The forest was alive, teeming with sights, sounds, and the quiet energy of countless creatures going about their day.

1. What word in the passage means "moving with a soft, bubbling sound"?
2. What time of day is described in the passage?
3. List three sounds mentioned in the forest scene.
4. What animals are mentioned in the passage?
5. Why do you think the forest floor is described as "alive"?

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 1

Roll No.	Name of the Student	6.E.L05			7.E.L09		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

WEEK 2 : DAY 1

Activity 1 The Listening Circle

35 mins

Learning Objective

At the end of this activity, students will be able to respond positively to the different thoughts, preferences, and emotional needs of their peers.

- Begin the class by asking students a question: “If your friend prefers a different game than you, how can you make them feel heard and included?” and “Why is it important to respect different opinions and preferences?”
- Arrange the students to sit in a circle. Explain that each person will have a chance to share while others listen without interrupting.
- Write the following cues on the board. Ask each student to respond to one of these prompts when it's their turn:
  - "One thing I really enjoy doing is..."
  - "One thing that makes me happy is..."
  - "Something that bothers me is..."
  - "One way someone helped me recently was..."
- Begin the activity by telling students about the talking ball (a crumbled piece of wastepaper). Only the student holding the talking ball speaks. Everyone else must listen attentively.
- Begin the activity by sharing something of your own. For example, “One thing I really enjoy is teaching.”
- Pass the ball to another student to share. Encourage students to respond positively.
- After everyone has shared, ask some questions:
  - "How did it feel to share your thoughts?"
  - "How did it feel when someone understood or responded to what you said?"
  - "What can we do to make sure everyone feels respected and included?"
- Write key points on the board (e.g., listen carefully, be kind, respect differences).

WEEK 2 : DAY 1

Activity 2 Parts of a Letter

35 mins

Learning Objective

At the end of this activity, students will be able to write different types of letters.

- Begin with a discussion: "Have you ever written a letter? Who was it for, and what was it about?"
- Explain the difference between informal (e.g., to a friend) and formal letters (e.g., to a principal or an official).
- Highlight that formal letters are used for specific purposes and require a proper format.
- Provide students with a sample formal letter.
- Read the letter together as a class. Ask students to point out its purpose.
- Divide students into pairs or small groups and ask them to identify and label the different parts of the letter written on the board: Sender's Address, date, recipient's address, salutation, body (Purpose, Details, Conclusion), closing line (e.g., Sincerely, Yours Faithfully), signature.
- Discuss their findings as a class and clarify any misunderstandings.

45A, Lady Veronica Road,
Laitumkhrah, Shillong

Subject: Application for Leave of Absence

Dear Sir/Madam,
I am writing to request leave for two days (March 14 and 15) due to a personal commitment. I assure you that I will complete my pending work before the leave.
Thank you for your understanding.

Sincerely,
Rebeca
39, New Polo Road
Shillong, Meghalaya

WEEK 2 : DAY 2

Activity 1 Dear Diary

35 mins

Learning Objective

At the end of this activity, students will be able to write a diary entry.

- Begin with a discussion: "Have you ever shared your thoughts or feelings with someone special? How did it feel?"
- Explain that a diary is like a trusted friend where we can write about our day, thoughts, and emotions freely.
- Share a simple diary entry as an example:

  March 16, 2024

  Dear Diary,

  Today was such a fun day! I played basketball with my friends after school, and we won the game. I felt so proud! After that, I helped my mom bake cookies, and they turned out delicious. I'm a bit tired now, but I'm happy. I can't wait for tomorrow!

  Goodnight!

  — [Your Name]

- Highlight the format:

  Date

  Addressing the diary (e.g., "Dear Diary")

  Writing about the day

  Closing line (e.g., "Goodnight")
- Ask students to write their own diary entry based on the example and the format.

WEEK 2 : DAY 2

Activity 2 Noun Hunt

35 mins

Learning Objective

At the end of this activity, students will be able to recognise nouns and their types.

- Begin the class with a quick recap of nouns (common and proper).
- Ask students to share a few examples from their daily lives.
- Divide students into small groups and distribute a set of 10 word slips to each group.
- The slips will contain nouns (both proper and common) and some unrelated words (like prepositions or verbs).
- Ask the groups to:
  - Identify and sort the nouns from the given words.
  - Classify the nouns (e.g., proper/common, abstract, collective).
- Using the sorted nouns, students will collaborate to create a short story.
  - Example: If the nouns are "cat," "park," "happiness," "team," they might write: "The team of children found a playful cat in the park, and their happiness grew as they played together."
- Each group presents their story to the class.

WEEK 2 : DAY 3

Activity 1 A Letter to Humans

35 mins

Learning Objective

At the end of this activity, students will be able to write different types of letters.

- Initiate a discussion with students about how the planet earth is home to so many species of birds, animals, plants, fishes and humans. Earth provides us with food, water, air, heat for life to survive. Share with them that in the last 200 years, humans have started to pollute the earth by throwing garbage in the rivers and seas, releasing smoke through factories and cars. All this is also harming the plants, animals and birds living on earth.
- Ask students to share what they think about this and what can be done to stop the harm being done to our home – earth?
- Then ask them to imagine that the birds, animals, fishes and trees have called for a joint meeting to discuss the pollution being caused by humans.
- Divide students into small groups and ask them to imagine that all of them have decided to write a letter to humans. Ask students to think, discuss and write that letter from birds, animals, fishes and tree to humans for saving their home-earth.
- Ask each group to read their letter to the whole class.

WEEK 2 : DAY 3

Activity 2 Exploring Tenses

35 mins

Learning Objective

At the end of this activity, students will be able to understand verbs and tenses.

- Ask students to form a circle.
- Start the activity by calling out a verb (e.g., "run") and a tense (e.g., "past").
- Pass a paper ball to a student. The student must say a sentence using the given verb and tense you have given (e.g., "I ran to school.").
- If the student answers correctly, ask him/her to pass the ball to the next student, and give them a new verb and tense. If any student struggles, encourage them to try again or help them with the correct form.
- After everyone's chance, ask the students to write a different sentence for a verb and tense of their choice.

WEEK 2 : DAY 4

Activity 1 Letter to a friend

35 mins

Learning Objective

At the end of this activity, students will be able to write different types of letters.

- Have a discussion with the students on Christmas
- Encourage them to speak in English
- Write the key words from the discussion on the board.
- Ask them to imagine a friend living in any other district or state and write a letter to him/her describing the Christmas Celebration
- You can provide a structure with some key words

Structure

- **Greeting**
  Start with a warm greeting (e.g., "Dear [Friend's Name],").
- **Introduction**
  Express well wishes and introduce the purpose of the letter (e.g., to share your Christmas celebration).
- **Details of the Christmas Celebration**
  Mention how you decorated (e.g., Christmas tree, lights).
  Share activities you did (e.g., family dinner, gift exchanges).
  Describe special moments or traditions (e.g., church service, family games).
- **Reflection or Emotions**
  Share how you felt during the celebration, such as joy, peace, or nostalgia.
- **Inquiring About Their Christmas**
  Ask how they celebrated and what made their holiday special.
- **Closing Wishes**
  Send well wishes for the New Year or a future meeting.
- **Sign-off**
  End with a friendly sign-off (e.g., "Warmest regards," or "With love," followed by your name).

WEEK 2 : DAY 4

Activity 2 Adjectives

35 mins

Learning Objective

At the end of this activity, students will be able to understand and recognise adjectives.

- Begin the class with a quick recap of adjectives. Ask students to share a few examples from their daily lives.
- Write the following passage on the board for students to read:
- "The British rule in India, which lasted for almost 200 years, was marked by significant events that shaped the nation's history. The Revolt of 1857, often called the First War of Independence, was a bold attempt by Indian soldiers and citizens to fight against the harsh and oppressive British policies. Later, during the freedom struggle, leaders like Mahatma Gandhi inspired millions with their peaceful yet powerful resistance through movements like the Salt March. However, tragic events like the Jallianwala Bagh massacre in 1919 revealed the brutality of the colonial regime and fuelled the determination of the Indian people to gain independence."
- Ask a student to come forward and underline an adjective from the passage on the board (bold, harsh, oppressive, peaceful, powerful, tragic, brutal). Give all students a chance to do the activity.
- After all the adjectives have been underlined, ask students to use the adjectives underlined on the board to make sentences of their own, in their notebooks.
- Ask them to share their answers with the whole class.

WEEK 2 : DAY 5

Assessment 1

35mins

Competency

C-3.1 Writes different kinds of letters and essays using appropriate style and registers for different audiences and purposes.

LO: 7.E.L018 Writes formal letters, personal diary, list, email, SMS, etc.

- Present a scenario to students: Imagine you are concerned about the excessive cutting of trees in your neighbourhood park, which is harming the environment. You want to write to the local municipal office to request action to conserve trees and promote awareness about saving natural resources.
- Recap the parts of a formal letter with the students.
- Ask students to draft their letters using the provided scenario.
- You can give the following prompts for the body of the letter:
  - State the purpose: Why are you writing this letter?
  - Describe the problem: What is happening to the natural resources?
  - Suggest solutions: How can the issue be resolved?

WEEK 2 : DAY 5

Assessment 2

35 mins

Competency

C-5.1: Uses appropriate grammar and structure in their writing.

LO: 7.E.LO16

Uses appropriate grammatical forms in communication (e.g. Noun, pronoun, verb, determiners, time and tense, passivisation, adjective, adverb, etc.).

- Write the following passage on the board for students to read:

  The Taj Mahal, a magnificent monument, was built by Emperor Shah Jahan in memory of his beloved wife, Mumtaz Mahal. This stunning structure, made of white marble, is admired by millions of tourists every year. The gardens surrounding the Taj Mahal are beautifully maintained, and the monument is considered one of the greatest symbols of love in the world.

- Ask students to draw a table like the one shown below and write all the nouns, adjectives from the passage in the respective columns.

Nouns	Adjectives

- Ask students to create their own sentences in their notebooks, using:
  - A **noun** from the passage.
  - An **adjective** from the passage to describe something new.

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 2

Roll No.	Name of the Student	7.E.L018			7.E.L016		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

WEEK 3 : DAY 1

Activity 1 The Journey

35 mins

Learning Objective

At the end of this activity, students will be able to write paragraphs, stories, poems, etc. coherently with an appropriate beginning, middle and end.

- Read the following poem to students:

> ***The Journey***
> *I started on a sunny day, (Beginning)*
> *The road ahead was bright and clear.*
> *But soon the clouds began to play, (Middle)*
> *And raindrops whispered in my ear.*
> *I walked until the storm was done, (End)*

- Discuss how the poem has a clear flow:
  - Beginning: Setting the scene.
  - Middle: A challenge or change.
  - End: A resolution or conclusion.
- Ask students to write their own short poem using this structure:
  - Beginning: Describe the start of an event or scene.
  - Middle: Introduce a problem or change.
  - End: Resolve the situation.
- You can also give some cues for inspiration:
  - A day at the beach.
  - Watching a thunderstorm.
  - Planting a tree.
- Ask students can share their poems with the class.

WEEK 3 : DAY 1

Activity 2 Prepositions

35 mins

Learning Objective

At the end of this activity, students will be able to understand and recognise prepositions and their types.

- Do a revision session on prepositions.
- Have a discussion on the concept of prepositions and the usage.
- Some examples with explanations are given below for your reference you can refer to those also if required.

1. Preposition of Place/Location

Example: "The book is *on* the table."

Explanation:

- On indicates the position of the book resting on the surface of the table.
- Prepositions of place describe where something is located relative to something else (e.g., *on, under, in, at, between*).

2. Preposition of Time

Example: "We have a meeting at 10 a.m."

Explanation:

- At refers to a specific time.
- Prepositions of time help pinpoint when something happens (e.g. *at, on, in*).
- Use **at** for specific times (*at 7 o'clock*), **on** for specific days or dates (*on Monday*), and **in** for longer periods (*in December*).

3. Preposition of Direction/Movement

Example: "She went *into* the room."

Explanation:

- *Into* shows movement from outside to inside.

- Prepositions of direction indicate the path of motion (e.g. *into, onto, towards, through*).

4. Preposition of Manner/Instrument

Example: "He wrote the letter *with* a pen."

Explanation:

- *With* shows the instrument used to perform the action.
- These prepositions describe how or by what means an action occurs (e.g. *with, by*).

5. Preposition of Cause/Purpose

Example: "She cried *because of* the bad news."

Explanation:

- *Because* of explains the reason for the crying.
- These prepositions explain why something happens (e.g. *because of, due to*).

6. Preposition of Comparison/Contrast

Example: "This house is small *compared to* the other one."

Explanation:

- Compared to shows the contrast between two things.
- These prepositions are used to draw comparisons (e.g. *like, unlike, compared to*).

7. Preposition of Agency

Example: "The book was written *by* her."

Explanation:

- By indicates the agent (person who performed the action).
- These prepositions indicate who or what is responsible for an action (e.g. *by, with*).

8. Preposition of Possession

Example: "The keys are *with* him."

Explanation:

- With shows possession or control over the keys.

9. Preposition in Idiomatic Expressions

Example: "She is under the weather today."

Explanation:

- Under the weather is an idiomatic expression meaning she feels unwell.
- Some prepositions are part of fixed phrases and change the literal meaning.

- Write the activity on the board
- Ask the students to copy the sentences and do the activity.

Fill in the Blanks with the Correct Preposition

1. The cat is hiding ___ the table.
   a) on
   b) under
   c) over
2. The picture is hanging ___ the wall.
   a) in
   b) on
   c) at
3. She is sitting ___ her best friend.
   a) between
   b) next to
   c) over
4. The books are ___ the shelf.
   a) in
   b) on
   c) under
5. He walked ___ the park to reach school.
   a) across
   b) into
   c) through
6. The dog jumped ___ the fence to chase the ball.
   a) over
   b) under
   c) above
7. I saw a beautiful bird flying ___ the trees.
   a) between
   b) over
   c) beside
8. We waited ___ the bus stop for 20 minutes.
   a) at
   b) on
   c) in
9. The pen is ___ the bag.
   a) beside
   b) in
   c) under
10. She lives ___ a small village near the mountains.
    a) in
    b) on
    c) at

WEEK 3 : DAY 2

Activity 1 The Clever Rabbit and the Lion

35 mins

Learning Objective

At the end of this activity, students will be able to write paragraphs, stories, poems, etc. coherently with an appropriate beginning, middle and end.

- Share this short Panchatantra story with the class:

> ***The Clever Rabbit and the Lion***
>
> *Once, there was a ferocious lion who terrorised all the animals in the forest. To stop him from killing everyone, the animals decided to send one animal daily to the lion as food. One day, it was the turn of a clever rabbit. The rabbit walked slowly to the lion's den and reached late. The angry lion demanded an explanation. The rabbit said, "I was stopped by another lion who claimed to be the king of the forest." The lion roared in fury and demanded to be shown this rival. The rabbit led the lion to a deep well and said, "The other lion is inside!" The lion looked into the well, saw his own reflection, and jumped in to fight it. He drowned. The clever rabbit saved the forest!*

- Discuss the beginning, middle, and end of the story.
  - Beginning: Introduction of the lion and the problem faced by the animals.
  - Middle: The clever rabbit's plan and actions.
  - End: The lion's fall and how the problem is solved.
- Ask students to retell the story in their own words, ensuring their writing includes: A beginning (Who are the characters? What is the problem?). A middle (What actions are taken to solve the problem?). An end (How is the problem resolved? What is the moral?)

WEEK 3 : DAY 2

Activity 2 Active and Passive Voice

35 mins

Learning Objective

At the end of this activity, students will be able to differentiate between active and passive voice.

- Begin the class by briefly explaining the difference between active and passive voice:
  - Active voice: The subject performs the action *(e.g., The cat chased the mouse)*.
  - Passive voice: The subject receives the action *(e.g., The mouse was chased by the cat)*.
- Provide a few simple examples on the board and demonstrate the conversion process.
- Divide the class into small teams (3-4 students per team). Place a set of active sentences (on slips of paper) at your desk.
- Example sentences:
  - She writes a letter.
  - The chef cooked a delicious meal.
  - The players won the match.
- Ask one student from each team to come to your desk and pick up a sentence. Take the slip back to their group and work together to convert the active sentence into passive voice. For example – "She writes a letter" becomes "A letter is written by her."
- Once done, another group member to come forward to take another sentence slip.
- Review some of the sentences with the whole class to ensure understanding.

WEEK 3 : DAY 3

Activity 1 Build-a-Story

35 mins

Learning Objective

At the end of this activity, students will be able to write paragraphs, stories, poems, etc. coherently with an appropriate beginning, middle and end.

- Ask: "What happens if we only write the middle of a story? Does it make sense without a beginning or end?"
- Divide students into small groups. Give each group a sentence starter. Example: "One day, a spaceship landed in our backyard."
- Instruct groups to:
  - Write the beginning (set the scene).
  - Pass their paper to another group to write the middle (main action).
  - Pass again to write the end (resolution).
- Ask the groups to read the completed stories aloud.
- Discuss which stories had clear beginnings, middles, and ends, and what made them engaging.

WEEK 3 : DAY 3

Activity 2 Adverb and Adjectives

35 mins

Learning Objective

At the end of this activity, students will be able to understand and use adverbs and adjectives.

- Have a discussion with the students on Adverbs.
- Tell them that it describes a verb. Give some examples

  Examples: She sang melodiously.

  Explanation: 'melodiously' tells how the action took place

  Example: The children played outside .

  Explanation: 'Outside' tells where the action took place.

  Example: He bought a new car yesterday.

  Explanation: 'Yesterday' tells the time when the action took place.
- Explain the difference between Adjectives and Adverbs with examples
- Explain the usage of Adjectives and Adverbs.
- Write the activity on the board and ask them to do the activity in the notebook.

Exercises:

1. The _____ (young, tall, excited) boy ran _____ (quickly, carefully, lazily) to catch the bus.
2. The chef cooked a _____ (delicious, spicy, messy) meal and served it _____ (beautifully, sloppily, calmly).
3. She gave a _____ (powerful, boring, inspiring) speech and spoke _____ (loudly, passionately, shyly) about the topic.

4. The _____ (playful, lazy, frightened) cat climbed the tree _____ (gracefully, cautiously, nervously).
5. The movie was so _____ (funny, emotional, dull) that everyone laughed _____ (loudly, silently, awkwardly).
6. He always finishes his _____ (important, messy, tiring) work _____ (carefully, poorly, cheerfully).
7. The baby slept in the _____ (soft, colourful, cosy) crib and snored _____ (gently, loudly, sleepily).
8. The _____ (bright, twinkling, faraway) stars twinkled _____ (beautifully, faintly, mysteriously) in the night sky.
9. She was _____ (nervous, confident, upset) during the game but answered the questions _____ (correctly, angrily, boldly).
10. The teacher explained the _____ (complex, simple, boring) concept _____ (clearly, vaguely, hastily) to the students. 'Outside' tells where the action took place.

WEEK 3 : DAY 4

Activity 1 Nature Conservation

35 mins

Learning Objective

At the end of this activity, students will be able to write paragraphs, stories, poems, etc. coherently with an appropriate beginning, middle and end.

- Have a discussion with the students on conservation of nature.
- Write the key words on the board.
- Discuss about each paragraph and write the key words for each paragraph on the board.
- Encourage them to think about the theme and help them to create sentences with the key words for each paragraph.

The Importance of Nature Conservation

Key Words:

- Environment
- Biodiversity
- Pollution
- Ecosystems
- Climate change
- Sustainability
- Wildlife
- Preservation

Paragraph Structure:

1. Beginning:

Introduce the importance of nature conservation.

Key words: environment, ecosystems, sustainability

2. Middle:

Explain the threats to nature, such as pollution and climate change, and how they affect biodiversity and wildlife.

Key words: pollution, climate change, biodiversity, wildlife

3. End:

Discuss the steps that can be taken to preserve nature and ensure a sustainable future.

Key words: preservation, sustainability, future, action.

WEEK 3 : DAY 4

Activity 2 Tenses

35 mins

Learning Objective

At the end of this activity, students will be able to identify the different forms of tenses.

- Have a discussion with students on tenses related to time.
- Write some sentences on the board and ask them to identify the tenses.
- Write some examples with Present Tense and show them how to rewrite the sentences by changing the tenses.

  Examples:

  My mother cooks for me. (Present Tense)

  My mother cooked for me. (Past Tense)

  My mother will cook for me. (Future Tense)

  Examples:

  She comes to school by bus. (Present Tense)

  She came to school by bus. (Past Tense)

  She will come to school by bus. (Future Tense)
- Write the activity on board and ask the students to rewrite the sentences by changing the tense.

Instructions:

Transform the following sentences into **past tense** and **future tense.**

1. **Present Tense:** She goes to the gym every morning.
   - Past Tense: _____
   - Future Tense: _____

2. **Present Tense:** They play football in the park.
   - Past Tense: _____
   - Future Tense: _____
3. **Present Tense:** I study English every day.
   - Past Tense: _____
   - Future Tense: _____
4. **Present Tense:** We eat dinner at 7 p.m.
   - Past Tense: _____
   - Future Tense: _____
5. **Present Tense:** The teacher explains the lesson clearly.
   - Past Tense: _____
   - Future Tense: _____
6. **Present Tense:** They visit their grandparents every summer.
   - Past Tense: _____
   - Future Tense: _____
7. **Present Tense:** He works at a hospital.
   - Past Tense: _____
   - Future Tense: _____
8. **Present Tense:** She walks to school in the morning.
   - Past Tense: _____
   - Future Tense: _____
9. **Present Tense:** We travel to the beach during the holidays.
   - Past Tense: _____
   - Future Tense: _____
10. **Present Tense:** I watch movies on weekends.
    - Past Tense: _____
    - Future Tense: _____

WEEK 3 : DAY 5

Assessment 1

35mins

Competency

C-2.1: Uses writing strategies, such as sequencing ideas, identifying headings/sub-headings and forming clear beginning, ending, and paragraphs.

LO: 6.E.LO14

Writes coherently with focus on appropriate beginning, middle and end in English/Braille.

- Provide students with a prompt to guide their writing – "Write a story about a character who experiences a significant change. The change can be anything—a new home, a new school, a new hobby, or a personal challenge. Describe how the character feels before the change, during the change, and after the change."
- Example of change: A young girl moves to a new city and experiences the challenges and excitement of starting over.
- Ask students to write a short story (about 200-250 words) based on the provided prompt, ensuring that their story has:
  - A clear beginning (introduction to the character and the change they are facing).
  - A detailed middle (describing the character's experiences during the change).
  - A well-developed end (the resolution or what happens after the change).

WEEK 3 : DAY 5

Assessment 2

35 mins

Competency **C-5.1:** Uses appropriate grammar and structure in their writing.

LO: 7.E.LO16 Uses appropriate grammatical forms in communication (e.g. Noun, pronoun, verb, determiners, time and tense, passivisation, adjective, adverb, etc.).

- Write the two activities on the board and explain the activities to the students.
- Ask them to do the activities in their notebooks.

Rewrite the sentences by changing the voice from Active to Passive.

1. The dog chased the ball.
2. The artist painted a beautiful portrait.
3. She solved the problem quickly.
4. The company launched a new product.
5. The children played in the park.
6. He fixed the broken chair.
7. The singer performed a wonderful song.
8. The workers built the house.
9. The teacher gave the students a test.
10. The scientist conducted an experiment.

Fill in the blanks with the correct adjective or adverbs.

1. The weather today is _____.
   a) sunny
   b) quickly
   c) happiness
   d) slowly

2. The car moved _____ through the traffic.
    a) fast
    b) red
    c) exciting
    d) careful
3. She was feeling _____ after the workout.
    a) tired
    b) quickly
    c) easily
    d) blue
4. The children played _____ in the park.
    a) loudly
    b) happy
    c) quickly
    d) playful
5. He answered the question _____.
    a) correct
    b) correctly
    c) soft
    d) beautiful
6. The movie was _____ interesting.
    a) very
    b) happily
    c) good
    d) run
7. The dog ran _____ after the ball.
    a) fast
    b) heavy
    c) neat
    d) slowly
8. She smiled _____ when she saw the gift.
    a) wide
    b) beautifully
    c) sunny
    d) loud
9. The cake tastes _____.
    a) delicious
    b) quickly
    c) carefully
    d) smooth
10. The team worked _____ on the project.
    a) hardly
    b) strong
    c) great
    d) slow

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 3

Roll No.	Name of the Student	6.E.L014			7.E.L016		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

CM IMPACT

Meghalaya Class Readiness Programme

ENGLISH

APPENDIX

Pre-requisite Competency and Learning Outcomes essential for Grade-level learning

The table below shows the mapped pre-requisite (from previous grades) learning outcomes that are essential for students to grasp concepts at the current grade-level. These learning outcomes have been taken from the Learning Outcomes developed by NCERT in 2017. Corresponding to some pre-requisite LOs you may see some concepts written in the Grade-level LO column. While the NCERT document does not have certain LOs progressing from the pre-requisite to the grade-level, these concepts are foundational for learning of the student and hence have been included in the activity pack.

Middle Stage (MS)	Pre-requisite LO	Grade Level LO
C-1.2 Identifies main points, summarises after a careful reading of the text, and responds coherently	**6.E.LO5:** Reads a variety of texts in English / Braille and identifies main ideas, characters, sequence of ideas and events and relates with his/her personal experiences	**8.E.LO14:** Identifies details, characters, main idea and sequence of ideas and events while reading
	7.E.LO9: Identifies details, characters, main idea and sequence of ideas and events in textual / non-textual material	
C-3.1 Writes different kinds of letters and essays using appropriate style and registers for different audiences and purposes	**7.E.LO18:** Writes formal letters, personal diary, list, email, SMS, etc.	**8.E.LO24:** Writes email, messages, notice, formal letters, descriptions/ narratives, personal diary, report, short personal/ biographical experiences, etc.

C-2.1 Uses writing strategies, such as sequencing ideas, identifying headings/sub-headings and forming clear beginning, ending, and paragraphs	**6.E.LO14:** Writes coherently with focus on appropriate beginning, middle and end in English / Braille	**8.E.LO22:** Writes short paragraphs coherently in English/Braille with a proper beginning, middle and end with appropriate punctuation marks
C-5.1 Uses appropriate grammar and structure in their writing	**7.E.LO16:** Uses appropriate grammatical forms in communication (e.g. Noun, pronoun, verb, determiners, time and tense, passivisation, adjective, adverb, etc.)	**8.E.LO20:** Communicates accurately using appropriate grammatical forms (e.g., clauses, comparison of adjectives, time and tense, active passive voice, reported speech, etc.)

CM IMPACT
Meghalaya Class Readiness Programme

CHIEF MINISTER'S INITIATIVE TO MAXIMIZE PASS ACHIEVEMENT AND CLASSROOM TRIUMPH

MATHEMATICS

WEEK 1 : DAY 1

Activity 1 How much do you have?

35 mins

Learning Objective

At the end of this activity, students will be able to represent the fractions as half, one fourth and three-fourths by using numbers/ numerals.

- Take a piece of paper and introduce fractions to students writing some examples on the board.
- Make three groups among students. Let the students work with three different materials (such as solid – 1 kg of rice/wheat, 2 metres of a stick or cloth, and liquid – 1 litre of water)
- Ask each group to divide equally their respective material and measure them and find out the quantity and represent them in fractions and with respective units (half litre / 500 ml / litre) (half kg / 500 gram / kg.) (half metre / 500 cm. / metre)
- Divide the materials into three equal parts, measure them and find out quantity and represent them in fractions and with units (333.33 ml / litre) (333.33 gram / kg.) (333.33 cm. / metre)
- Divide the materials into four equal parts, measure them and find out quantity and represent them in fractions and with units (250 ml / litre) (250 gram / kg.) (250 cm. / metre).

WEEK 1 : DAY 1

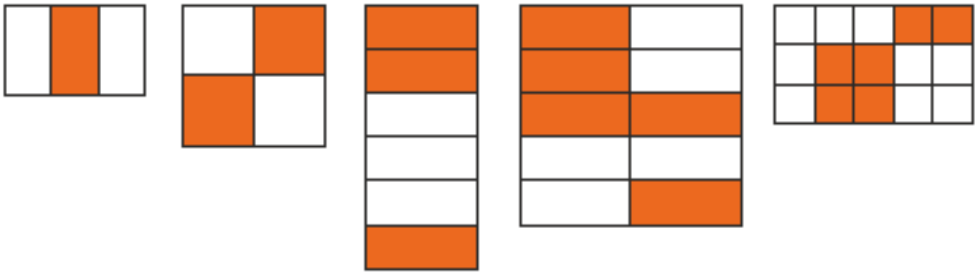
Activity 2 Draw Fractions

35 mins

Learning Objective

At the end of this activity, students will be able to represent the fractions as half, one fourth and three-fourths by using numbers/ numerals.

- Draw these pictures depicting fractions on the board.



- Ask students to draw these figures on their notebooks and write a fractional number for each figure.
- Now write some fractional numbers on the board and ask students to draw a picture for each fractional number.

WEEK 1 : DAY 2

Activity 1 Split the bill

35 mins

Learning Objective

At the end of this activity, students will be able to use fractions and decimals in different situations which involve money, length, temperature, etc.

Divide the students into 4-5 groups.

- Distribute each group a restaurant bill (e.g., ₹245.75)
- Ask them to split it equally among friends (e.g., among 3 or 5) using fractions and decimals.
- Add tax (e.g., 5%) or tip (e.g., 10%) to the total and distribute it accordingly.

Lastly, ask the students to share their experience with the classroom

WEEK 1 : DAY 2

Activity 2 Measuring Heights

35 mins

Learning Objective

At the end of this activity, students will be able to use fractions and decimals in different situations which involve money, length, temperature, etc.

- Provide students with measuring tapes and rulers.
- Pair students and ask them to measure their partner's height in meters or centimeters (e.g., 1.45 m or 145.5 cm) using measuring tapes and rulers.
- Ask them to record the measurements and convert them between units (e.g., meters to centimeters and vice versa).
- Discuss how fractions and decimals are used in measurements (e.g., 1.5 m = 1 ½ m).
- Repeat this activity with different objects.

WEEK 1 : DAY 3

Activity 1 Number Line race

35 mins

Learning Objective

At the end of this activity, students will be able to solve problems involving addition and subtraction of integers.

- Divide the students into some teams.
- Draw a number line on the floor or on the board.
- Ask students to roll the dice and move a marker forward (for positive numbers) or backward (for negative numbers) based on the dice result.
- They calculate their position after each roll. For example, starting at -3 and rolling +5 means moving to +2.
- Now give each team some addition and subtraction-based problems and ask them to show the operation using the number line.
- Teacher will record the time taken by each team and award the best team at last.

WEEK 1 : DAY 3

Activity 2 Integers Battle

35 mins

Learning Objective

At the end of this activity, students will be able to solve problems involving addition and subtraction of integers.

- Draw a coordinate grid on the blackboard with both positive and negative integers and axes.
- Ask students to copy the same on their copies.
- Draw "ships" at certain coordinates (e.g., (-2, 3), (4, -5) etc.).
- Instruct students to solve addition or subtraction problems using a coordinate (e.g., "What is -2 + 3?" etc.)
- Challenge the students if their answer matches a coordinate, they sink the ship.
- Repeat the activity using various coordinates.

WEEK 1 : DAY 4

Activity 1 Multiplication & Division by Paper folding

35 mins

Learning Objective

At the end of this activity, students will be able to interpret the division and multiplication of fractions.

Phase 1:

- Tell students to take out a piece of paper and cut/tear it into 8 equal parts.
- Ask students to organise 4 pieces in a row.
- Which will look like 1/8 + 1/8 + 1/8 + 1/8, There are 4 pieces of 1/8 together therefore these are 4/8 in number which can be deduced to ½. Explain how adding 1/8 for 4 times is equal to 4, multiplied by 1/8 which also results in 1/2. (Repetitive addition)
- Tell students to try for 3/8.
- Also ask students to add 3/8 twice. What it looks like, students will share their answers.
- Ask, how come 6/8 is equivalent to 3/4? Can we prove it using the same pieces of paper?

Phase 2:

- Ask students to take three papers and fold them in such a way that there are eight equal parts in each paper.
- Students will have three papers with eight parts, so they have a total of 24 parts.
- Ask the following question to students: 'If you have a total of 24 parts in three papers, how many parts would be in 2.5 paper or 5/2 paper?'
- Discuss which operation will be applied.
- Next discuss,
- 24/8 = 3 means 24 x 1/8 =3. Which means that multiplication is the inverse of division.
- The same is true for division as well.
- Now, can we divide 1/8 by 1/2 ?
- We want to Divide 1/8 by 1/2.

WEEK 1 : DAY 4

Activity 2 Fraction Puzzle

35 mins

Learning Objective

At the end of this activity, students will be able to interpret the division and multiplication of fractions.

Phase 1:

- Provide students with problems like 1/2 X 1/4
- Ask them to shade half of the grid in one colour and one fourth in another colour.
- The overlapping region represents the product 1/8
- Discuss how the product of fractions is smaller than both factors.

Phase 2:

- Divide students into teams.
- Provide problems like:

  "A recipe requires 2/3 cup of sugar for one batch of cookies. How much sugar is needed for 4 batches?" (Multiplication).

  "You have 3/4 liters of juice and want to pour it equally into 5 glasses. How much juice will each glass get?" (Division).
- Teams solve and pass their answers to another team for checking.

WEEK 1 : DAY 5

Assessment 1

15 mins

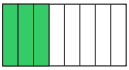
Competency

C-1.2: Represents and compares commonly used fractions in daily life (such as ½, ¼) as parts of unit wholes, as locations on number lines and as divisions of whole numbers.

LO: 4.M.LO2.2

Represents the fractions as half, one-fourth and three-fourths by using numbers/ numerals.

Draw this on the board and ask the students to copy the same. Then, ask them to identify the right fraction.

1		$\frac{1}{2}$	$\frac{3}{6}$	$\frac{5}{6}$	$\frac{1}{6}$	$\frac{6}{5}$
2		$\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{1}{5}$
3		$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{6}{8}$
4		$\frac{1}{3}$	$\frac{3}{6}$	$\frac{1}{2}$	$\frac{1}{5}$	$\frac{1}{4}$
5		$\frac{4}{6}$	$\frac{5}{6}$	$\frac{4}{5}$	$\frac{1}{6}$	$\frac{3}{5}$
6		$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{5}$	$\frac{2}{1}$
7		$\frac{1}{2}$	$\frac{3}{4}$	$\frac{5}{6}$	$\frac{1}{4}$	$\frac{4}{3}$
8		$\frac{1}{6}$	$\frac{2}{3}$	$\frac{3}{3}$	$\frac{1}{3}$	$\frac{2}{5}$
9		$\frac{3}{5}$	$\frac{3}{4}$	$\frac{5}{4}$	$\frac{4}{6}$	$\frac{4}{5}$

WEEK 1 : DAY 5

Assessment 2

20 mins

Competency **C-1.6:** Explores and applies fractions (both as ratios and in decimal form) in daily-life situations.

LO: 6.M.L05 Uses fractions and decimals in different situations which involve money, length, temperature, etc.

Draw the table on the board and ask the students to copy the same and solve on their copies:

Whole thing	Part of the whole thing	Fraction	Decimal
1 meter			
Rs. 100			
Rs. 520			
100 meter			
22 kilometer			

WEEK 1 : DAY 5

Assessment 3

15 mins

Competency **C-1.6:** Explores and applies fractions (both as ratios and in decimal form) in daily-life situations.

LO: 7.M.LO2 Interprets the division and multiplication of fractions.

Write down the questions on the board and ask them to solve on their copies:

1. What is the product of 3/4 x 2/5 ?
2. Solve: 32 ÷ 1/8, 65 ÷ 2/5
3. Albert ran 7/8 of a mile each day for 5 days. How many miles did Albert run in total?
4. A cake weighs 5/6 kg. If each slice weighs 1/12 kg, how many slices can be made?

WEEK 1 : DAY 5

Assessment 4

20 mins

Competency

C-1.3: Understands and visualises arithmetic operations and the relationships among them, knows addition and multiplication tables at least up to 10x10 (pahade) and applies the four basic operations on whole numbers to solve daily life problems.

LO: 6.M.L04

Solves problems involving addition and subtraction of integers.

Write down the questions on the board and ask them to solve on their copies:

1. Find the value:
   -7 + 10
   -10 – (-12)
2. If a=−4 and b=6, what is a−b?
3. On a number line, if you start at −6, move 4 steps to the right, and then 3 steps to the left, where do you land?
4. A student answered −10 questions incorrectly in a quiz but gained +25 points from correct answers. What is their total score?

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 1

Roll No.	Name of the Student	4.M.L02.2			6.M.L05			7.M.L02			6.M.L04		
		L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3

WEEK 2 : DAY 1

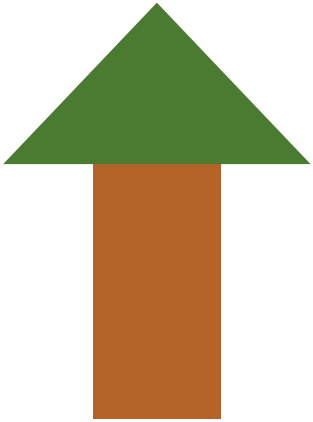
Activity 1 Explore the Area - 1

35 mins

Learning Objective

At the end of this activity, students will be able to find the perimeter and area of rectangular objects in the surroundings.

- Draw any object using the shapes square, triangle and rectangle. You may draw the picture shown which has a triangle and a rectangle.
- Next, find out the total area of the overall object or picture.
- First, calculate the area of the rectangle and then the area of the square. Add these areas together to get the total area of the picture.
- Total area = Area of rectangle + Area of square
- Ask students to draw a similar picture using a square, triangle and rectangle in their notebook.
- Next, ask them to find out the total area of the picture.



WEEK 2 : DAY 1

Activity 2 Explore the Area - 2

35 mins

Learning Objective

At the end of this activity, students will be able to find the perimeter and area of rectangular objects in the surroundings.

- Divide students into groups.
- Ask them to measure the textbooks present in their bags with the help of a scale. These measurements can be taken in inches or cm.
- When the measurements are taken, ask them to find the perimeter of each textbook with the help of the measurements taken.
- Draw this table on the board and ask them to complete it:

Item Name	*Length*	*Width*	*Perimeter*
Maths Book			
English Book			
Science Book			
Maths Notebook			
Drawing Box			
Eraser			

- After the students complete this table, ask each group to present and discuss it

WEEK 2 : DAY 2

Activity 1 Explore the Area - 3

35 mins

Learning Objective

At the end of this activity, students will be able to find the perimeter and area of rectangular objects in the surroundings.

- Divide students into groups of two and ask them to do the following exercises. While students are rehearsing, keep observing them to see how they are doing and where they are having difficulties.
  - Take out at least 5 things (books, notebooks, drawing boxes, etc.) from your bag and measure their length and width
  - Now say find the perimeter of each using the measurements taken.
  - Now ask them - which has the largest perimeter?
  - Which has the least perimeter?
- Then discuss with them:
  - What else is there in this classroom whose perimeter is greater than your notebook?
  - What are the things whose dimensions are less than your book?

WEEK 2 : DAY 2

Activity 2 Explore the Area - 4

35 mins

Learning Objective

At the end of this activity, students will be able to find the perimeter and area of rectangular objects in the surroundings.

- Ask students to draw a rectangle on a paper.
- Once they've drawn it, instruct them to measure the length of each side using a ruler (scale).
- Then, discuss how to calculate the area of the rectangle, that is, Base X Height.
- Next, discuss how to calculate the perimeter of the rectangle, that is, 2 (base + height).
- Ask students to find out the area and perimeter of their rectangle (s).
- Ask students to cut out the rectangle they drew in the previous activity.
- Once they have their cutout, guide them to measure the length of each side using a ruler.
- Emphasise that in a square, all sides are of equal length.
- Explain how to calculate the area of a square using the formula: side × side.
- Discuss how to find the perimeter of the square using the formula: 4 × side.
- Instruct students to calculate the area and perimeter of their square(s) based on the measurements they took.

WEEK 2 : DAY 3

Activity 1 Area and Perimeter of a Triangle

35 mins

Learning Objective

At the end of this activity, students will be able to explore the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit.

- Ask students to draw a triangle on a graph paper.
- Ensure they draw one side (base) of the triangle along a horizontal line of the graph paper.
- Instruct them to measure the length of all three sides using a ruler and record the measurements.
- Guide them to identify and measure the height of the triangle (the perpendicular distance from the base to the opposite vertex).
- Then, discuss how to calculate the area of the triangle, that is, ½ X Base X Height.
- Using the measurements of all three sides, ask students to calculate the perimeter of their triangle: Perimeter = Side 1 + Side 2 + Side 3.

WEEK 2 : DAY 3

Activity 2 Area and Perimeter

35 mins

Learning Objective

At the end of this activity, students will be able to explore the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit.

- Provide students with plain paper, a ruler, and coloured pencils.
- Ask students to draw a triangle, a square, and a rectangle on the paper using the ruler.
- Ensure they label all sides of each shape with measurements they choose.
- Guide them to measure the base and height of the triangle, the side of the square, and the length and breadth of the rectangle using the ruler.
- Instruct them to calculate the area of each shape using the following formulas:
  - **Triangle:** ½ × base × height
  - **Square:** side × side
  - **Rectangle:** length × breadth
- Encourage them to colour the shapes or outline them with different colours and write their calculations beside each shape.
- Have students exchange their work with a partner to check and verify the measurements and calculations.
- Conclude with a quick recap of how the formulas apply to different shapes and their practical significance.

WEEK 2 : DAY 4

Activity 1 What is power

35 mins

Learning Objective

At the end of this activity, students will be able to use an exponential form of numbers to simplify problems involving multiplication and division of large numbers.

Phase 1

Discuss with students the squares and cubes of simple numbers such as 2, 5, 10, 7, 11, etc.

Discuss the concept of exponent and powers, and explain exponent and power.

$10 = 10^1$

$100 = 10 \times 10$ (two times ten) $= 10^2$ (Read as Ten to Power 2)

$1000 = 10 \times 10 \times 10 = 10^3$ (Read as Ten to Power 3)

$10000 = 10 \times 10 \times 10 \times 10 = 10^4$ (Read as Ten to Power 4)

Now write the value of 10^5, 10^6

Phase 2

Ask the students if can we multiply numbers written like this (with powers) the same way as we do multiplication and division of numbers.

Explain- When the base is the same then power can be added up.

Do multiplication of 10 X 10 = 100

$10^1 \times 10^1 = 10^2$

$10^{1+1} = 10^2$

So we can say that $A^m \times A^n = A^{m+n}$ However, base A must be the same.

Phase 3

Explain the division of numbers following the same above steps

WEEK 2 : DAY 4

Activity 2 Power Tower challenge

35 mins

Learning Objective

At the end of this activity, students will be able to use an exponential form of numbers to simplify problems involving multiplication and division of large numbers.

Teacher will carry sticky notes labeled with numbers in exponential form (e.g., 2^3,2^4,10^2) and many match boxes

1. Divide the class into teams.
2. Ask the teams to build towers with match boxes by solving problems like $2^3 \times 2^4$ or $10^5 \div 10^2$
3. Each correct answer adds a block to their tower.
4. The tallest correct tower will win.

WEEK 2 : DAY 5

Assessment 1

20 mins

Competency

C-4.1: Discovers, understands, and uses formulae to determine the area of a square, triangle, parallelogram, and trapezium and develops strategies to find the areas of composite 2D shapes.

LO: 6.M.L017

Finds the perimeter and area of rectangular objects in the surroundings like floor of the classroom, surfaces of a chalk box, etc.

Write the questions on the board and ask students to solve it.

1. A rectangular chalk box has a length 16 cm, breadth 8 cm and height 5 cm. Find its total surface area.
2. If the area of a square is 81 square cm, then what would be the length of the sides of the square?
3. If the two opposite sides of the square are doubled, then find the area and perimeter of the new shape formed. Name the new shape formed.

WEEK 2 : DAY 5

Assessment 2

20 mins

Competency

C-1.1: Develops a sense for and an ability to manipulate (e.g., read, write, form, compare, estimate, and apply operations) and name (in words) large whole numbers of up to 20 digits, and expresses them in scientific notation using exponents and powers.

LO: 7.M.L05

Uses an exponential form of numbers to simplify problems involving multiplication and division of large numbers.

Write the questions on the board and ask students to solve it.

1. Simplify the below problems:
   $10^5 \times 10^3$
   $8^6 \div 8^4$
2. What is the result of $10^7 \div 10^4$?
3. Express $2^5 \times 2^3$ in exponential form
4. A computer can perform 10^6 operations per second. How many operations can it perform in 10^3 seconds?

WEEK 2 : DAY 5

Assessment 3

20 mins

Competency

PS/C-3.4: Understands the definition and formula for the area of a square or rectangle as length times breadth.

LO: 4.M.L04

Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit.

Question 1:

A rectangular garden has a length of 5 meters and a width of 3 meters.

a) What is the area of the garden?

b) What is the perimeter of the garden?

Question 2:

Using a square of 1 cm x 1 cm as a unit, find the area and perimeter of the following shapes (use figures provided or ask students to draw shapes):

a) A square with a side of 4 cm.

b) A triangle with a base of 6 cm and height of 3 cm.

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 2

Roll No.	Name of the Student	6.M.L017			7.M.L05			4.M.L04		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

WEEK 3 : DAY 1

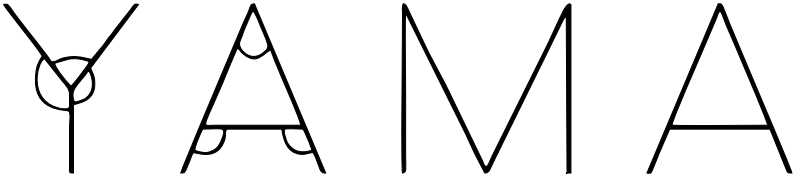
Activity 1 Find angles in your name

35 mins

Learning Objective

At the end of this activity, students will be able to estimate the measure of angles using 45°, 90°, and 180° as reference angles.

- Show students to write a name on the board like this.



- Ask the students to write their name in the same way.
- After students finish writing their names, ask them to find how many angles are there in each name.
- Ask them to measure all the angles formed.
- Now ask them to make a table showing the total number of acute, obtuse and right angles formed.

WEEK 3 : DAY 1

Activity 2 Angles in real world

35 mins

Learning Objective

At the end of this activity, students will be able to estimate the measure of angles using 45°, 90°, and 180° as reference angles.

Phase 1:

- Divide students into small groups.
- Ask them to explore the classroom and identify real-world examples of different angles (e.g., the corners of books, door hinges, or clock hands).
- Use protractors to measure and classify each angle (acute, right, obtuse, or straight).

Phase 2:

- Ask each group to use their arms, legs, or bodies to form different angles (e.g., acute by bending an elbow, straight by standing upright).
- Other groups guess the type of angle being formed.

WEEK 3 : DAY 2

Activity 1 Find out the congruent triangles

35 mins

Learning Objective

At the end of this activity, students will be able to explain congruence of triangles on the basis of the information given about them like (SSS, SAS, ASA, AAS, RHS).

Teacher will make cutouts of 8-10 triangles and put them on the table. Groups of 4-5 students will be formed, and one by one, each group will come and find out which two triangles are congruent and by what properties. To find congruency, students can use their scales, protractors, etc.

Note: *While making cut-outs, please take care of the properties of congruence – make at least two congruent pairs.*

Next, ask each group to make eight cut-outs of triangles with two pairs of triangle cut-outs being congruent. Students can do this activity with other groups.

Lastly, ask students to draw-

a. two triangles that are congruent by SSS criteria.
b. two triangles that are congruent by SAS criteria.
c. two triangles that are congruent by RHS criteria.

WEEK 3 : DAY 2

Activity 2 Congruence Hunt

35 mins

Learning Objective

At the end of this activity, students will be able to explain congruence of triangles on the basis of the information given about them like (SSS, SAS, ASA, AAS, RHS).

Phase 1:

1. Divide the class into small groups.
2. Provide each group with a set of measurements of triangle. (e.g., sides, angles).
3. Each student in the group completes one step in constructing the triangle.
4. Compare the completed triangles across groups to check for congruence.
5. Students sort the triangles into groups based on the congruence criteria.

Phase 2:

1. Send the groups on a “congruence hunt” around the school to find objects forming congruent triangles (e.g., window panes, floor tiles etc.).
2. Ask students to measure or estimate and explain the congruence criteria met by the triangles.

WEEK 3 : DAY 3

Activity 1 Fraction with grid

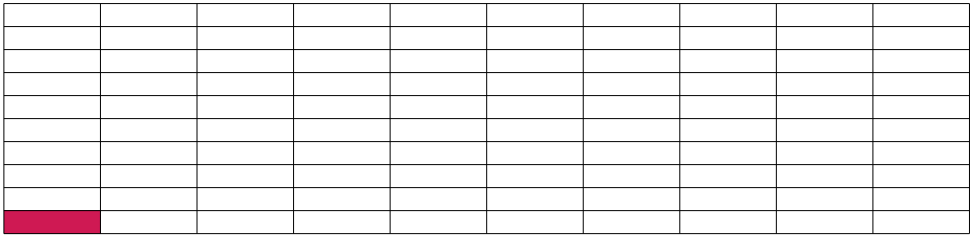
35 mins

Learning Objective

At the end of this activity, students will be able to solve problems related to the conversion of percentage to fraction and decimal and vice versa.

- Explain the concept of tenths to students by making the table given below on the board. Ask student to make it in their notebook as well.

$^{1}/_{10}$ or one tenth = 0.1



$^{1}/_{100}$ or hundredth part = 0.01

- Next, ask the students to complete the table below in groups of 4 each.

Whole Thing	Part of whole thing	Fractional Number	Decimal Number
1 Meter	Half	½ Meter	0.5 Meter
Rs. 1	Quarter	¼ Rupees	Rs. 0.25
Rs. 5		⅕ Rupees	
100 Meter			0.01 Meter
Rs. 100	One Tenth		
Rs. 10	Half		

WEEK 3 : DAY 3

Activity 2 Fraction in daily life

35 mins

Learning Objective

At the end of this activity, students will be able to solve problems related to the conversion of percentage to fraction and decimal and vice versa.

- Tell students to look at their class time-table and write how much time (in fractions) they spent on studying a specific subject/activity on a given day:
  - Monday – English
  - Tuesday – lunch break
  - Wednesday – Science and Social science
  - Thursday – Sports
  - Friday – Music
  - Saturday – Morning Assembly
- Tell students to recreate their timetable and write the duration of periods in hours.
- Next, calculate the time spent on each subject in a week and convert it into fractions.
- Lastly ask students to find the percentage of time spent on –
  - Monday – Morning Assembly
  - Tuesday – Maths
  - Wednesday – Sports
  - Thursday – English
  - Friday – Science
  - Saturday – Social Science

WEEK 3 : DAY 4

Activity 1 Draw a bar graph

35 mins

Learning Objective

At the end of this activity, students will be able to interpret data using bar graph.

- Ask students to write down the subject-wise marks they obtained during last year's examination.
- Let them total all subjects' marks.
- Next, they can make a table of the subject-wise marks and total marks obtained.
- Now ask them to prepare a bar chart of subject-wise marks. (don't include total marks)

WEEK 3 : DAY 4

Activity 2 Draw a pie chart

35 mins

Learning Objective

At the end of this activity, students will be able to interpret data using bar graph.

- Teacher will draw a circle on the floor.
- Ask students to collect leaves and stones from the surroundings.
- Ask them to fill 1/4 of the circle with leaves and another 1/4 with stones.
- Tell students that the remaining half is 50%. Also remember that the circle is total 360 degree. So, leaves and stones occupy 50-50% space in the circle, i.e, 180 degree in the circle.
- Ask them to draw a circle and practice the same in their notebook.
- Now change some conditions and ask the students to do the same process using floor, leaves, stones and notebooks.

WEEK 3 : DAY 5

Assessment 1

15 mins

Competency

C-3.5: Understands congruence and similarity as it applies to geometric shapes and identifies similar and congruent triangles.

LO: 7.M.L014

Explains congruence of triangles on the basis of the information given about them like (SSS, SAS, ASA, AAS, RHS).

Write down the questions on the board and ask the students to solve on their copies:

1. Two triangles have sides of equal lengths: 5 cm, 7 cm, and 9 cm. Which congruence criterion is satisfied?
2. Two right-angled triangles have equal hypotenuses and one corresponding leg equal. Which criterion proves their congruence?
3. How can you prove that two triangles are congruent using the RHS criterion?
4. Triangle ABC has sides AB = 6 cm, BC = 8 cm, and AC = 10 cm. Triangle DEF has sides DE = 6 cm, EF = 8 cm, and DF = 10 cm. Prove that these two triangles are congruent.

WEEK 3 : DAY 5

Assessment 2

20 mins

Competency

C-1.6: Explores and applies fractions (both as ratios and in decimal form) in daily-life situations.

LO: 7.M.L09

Solves problems related to the conversion of percentage to fraction and decimal and vice versa.

Draw the table given below on the board and ask students to convert the quantity of the grocery items into kilograms and litres and write it in fractions and percentages. *(Add more items to the list)*

Item	Quantity in gm	Quantity in (kg/L)	Fraction (kg/L)	Fraction (kg/L)
Spinach	250 gm	0.25 kg	$\frac{1}{4}$ L	25% of 1 L
Potato	500 gm			
Milk	200 ml			
Apple	750 ml			
Water	250 ml			
Cumin	50 gm			
Soy Sauce	250 ml			

WEEK 3 : DAY 5

Assessment 3

15 mins

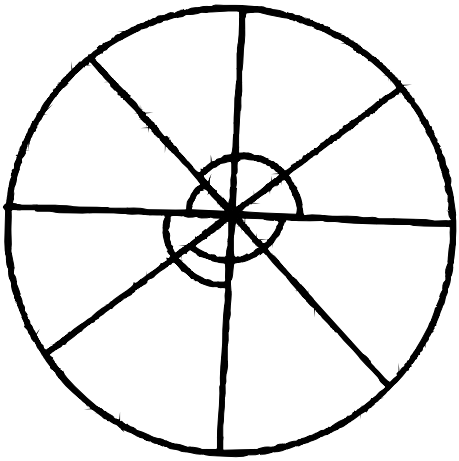
Competency

C-3.4: Draws and constructs geometric shapes, such as lines, parallel lines, perpendicular lines, angles, and simple triangles, with specified properties using a compass and straightedge.

LO: 6.M.L011.3

Estimating the measure of angles using 45°, 90°, and 180° as reference angles.

- Draw the below circle on the board and ask the students to copy the same on their notebooks.
- Then, ask the students to measure all the angles formed in the circle with the help of a protractor.
- Also, write the measurement of each of the angles in degrees along with their type.



WEEK 3 : DAY 5

Assessment 4

20 mins

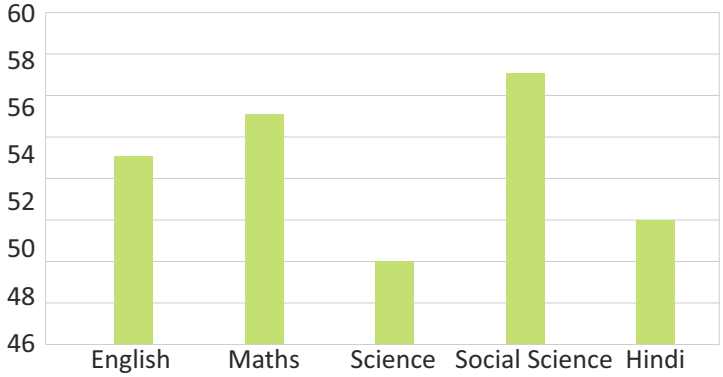
Competency

C-5.2: Selects, creates, and uses appropriate graphical representations (e.g., pictographs, bar graphs, histograms, line graphs, and pie charts) of data to make interpretations.

LO: 7.M.LO20

Interprets data using bar graph such as consumption of electricity is more in winters than summer, runs scored by a team in first 10 overs, etc.

- The teacher will draw the below graph of marks obtained by Danny in last year's annual examination on the board. Then he/she will ask the below questions.



1. How many more marks in Social Science did Yama get than in Science?
2. In which subject has he got the maximum marks?
3. What are the total marks obtained by Yama?
4. This exam was of 300 marks, what will be the percentage of marks obtained by Yama?
5. The sum of the marks in Maths and Science is how much more or less than that of Social Science?
6. In which subjects did he get 55 or fewer marks?

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 3

Roll No.	Name of the Student	7.M.L014			7.M.L09			6.M.L011.3			5.M.L02.4			7.M.L020		
		L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3

CM IMPACT

Meghalaya Class Readiness Programme

MATHS

APPENDIX

Pre-requisite Competency and Learning Outcomes essential for Grade-level learning

Competency Preparatory Stage (PS)/ Middle Stage (MS)	Pre-requisite LOs	Grade Level LOs
(PS) C-1.2: Represents and compares commonly used fractions in daily life (such as ½, ¼) as parts of unit wholes, as locations on number lines and as divisions of whole numbers	**4.M.LO2.2:** Represents the fractions as half, one fourth and three-fourths by using numbers/ numerals	**8.M.LO9:** Applies the concept of percent in profit and loss situation in finding discount, VAT and compound interest
		8.M.LO10: Solves problems based on direct and inverse proportions
(MS) C-1.6: Explores and applies fractions (both as ratios and in decimal form) in daily-life situations	**6.M.LO5:** Uses fractions and decimals in different situations which involve money, length, temperature, etc.	**8.M.LO9:** Applies the concept of percent in profit and loss situation in finding discount, VAT and compound interest
	7.M.LO2: Interprets the division and multiplication of fractions	**8.M.LO10:** Solves problems based on direct and inverse proportions
	7.M.LO9: Solves problems related to the conversion of percentage to fraction and decimal and vice versa	

<table>
<tr><td rowspan="3">(MS) C-1.1: Develops a sense for and an ability to manipulate (e.g., read, write, form, compare, estimate, and apply operations) and name (in words) large whole numbers of up to 20 digits, and expresses them in scientific notation using exponents and powers</td><td>6.M.LO4: Solves problems involving addition and subtraction of integers</td><td>8.M.LO1: Generalises properties of addition, subtraction, multiplication and division of rational numbers through patterns</td></tr>
<tr><td rowspan="2">7.M.LO5: Uses an exponential form of numbers to simplify problems involving multiplication and division of large numbers</td><td>8.M.LO4: Finds squares, cubes and square roots and cube roots of numbers using different methods</td></tr>
<tr><td>8.M.LO5: Solves problems with integral exponents</td></tr>
<tr><td rowspan="2">(MS) C-4.1: Discovers, understands, and uses formulae to determine the area of a square, triangle, parallelogram, and trapezium and develops strategies to find the areas of composite 2D shapes</td><td rowspan="2">8.M.LO15: Constructs different quadrilaterals using compasses and straight edge C16</td><td>8.M.LO18: Finds surface area and volume of cuboidal and cylindrical object</td></tr>
<tr><td>8.M.LO17: Finds the area of a polygon</td></tr>
<tr><td>(MS) C-3.5: Understands congruence and similarity as it applies to geometric shapes and identifies similar and congruent triangles</td><td>7.M.LO14: Explains congruence of triangles on the basis of the information given C16about them like (SSS, SAS, ASA, AAS, RHS)</td><td>8.M.LO15: Constructs different quadrilaterals using compasses and straight edge</td></tr>
</table>

(MS) C-3.4: Draws and constructs geometric shapes, such as lines, parallel lines, perpendicular lines, angles, and simple triangles, with specified properties using a compass and straightedge	**6.M.LO11.3:** Estimating the measure of angles using 45°, 90°, and 180° as reference angles	**8.M.LO15:** Constructs different quadrilaterals using compasses and straight edge
(MS) C-5.2: Selects, creates, and uses appropriate graphical representations (e.g., pictographs, bar graphs, histograms, line graphs, and pie charts) of data to make interpretations	**7.M.LO20:** Interprets data using bar graph such as consumption of electricity is more in winters than summer, runs scored by a team in first 10 overs, etc.	**8.M.LO19:** Draws and interprets bar charts and pie charts

CM IMPACT
Meghalaya Class Readiness Programme

CHIEF MINISTER'S INITIATIVE TO MAXIMIZE PASS ACHIEVEMENT AND CLASSROOM TRIUMPH

SCIENCE

WEEK 1 : DAY 1

Activity 1 Material Around Us

35 mins

Learning Objective

At the end of this activity, students will be able to classify materials, organisms and processes based on observable properties.

- Divide the class into 4-5 groups, each designated as a "Material Classification Team" to promote collaboration and problem-solving.
- Provide each group with a variety of materials, such as glass, paper, rubber, sponge, plastic, wood, cloth, metal, stone, and aluminium foil.
- Introduce the classification task by explaining the categories: hard/soft, transparent/opaque/translucent, rough/smooth, and flexible/rigid. Ask the groups to classify the materials based on these properties through testing and observation.
- Provide a Testing Framework:
  - **Hard/Soft:** Press the material with fingers or lightly tap to check resistance.
  - **Transparent/Opaque/Translucent:** Hold materials against light to observe light passage.
  - **Rough/Smooth:** Touch and feel the surface to assess texture.
  - **Flexible/Rigid:** Bend or apply light pressure to see if the material changes shape.
- Each group creates a detailed table in their notebooks, with columns for the material name, observed property, and classification.
- Groups summarise their findings by preparing a chart or poster, clearly displaying the materials and their classified properties. They can use colours or symbols to represent properties for better clarity.
- Each group presents their chart to the class, explaining their observations and the reasoning behind their classifications.

- Discuss the practical applications of material properties, such as why glass is used for windows (transparent and rigid) or why rubber is used for tires (flexible and durable).
- Conclude with a class discussion on the importance of understanding material properties in science, engineering, and daily life, encouraging students to share examples from their surroundings.

WEEK 1 : DAY 1

Activity 2 Disease Detective

35 mins

Learning Objective

At the end of this activity, students will be able to relate processes and phenomenon with causes.

- Divide the class into small groups of 4-5 students. Assign each group a hypothetical scenario of a disease outbreak caused by poor sanitation. Examples include waterborne diseases like cholera, typhoid, or diarrhoea.
- Provide each group with:
  - A "Disease Report" card detailing the symptoms of a fictional outbreak.
  - A "Sanitation Practices" card listing possible causes (e.g., untreated sewage, open defecation, unclean drinking water).
  - Materials for creating a flowchart, such as A3 sheets and coloured markers.
- Analyse the provided materials to identify the probable causes of the disease.
- Create a flowchart connecting poor sanitation practices with the disease symptoms listed on the "Disease Report" card.
- Ask each group to predict the potential long-term effects if the sanitation issues are not addressed.
- Each group presents their findings to the class, explaining the link between the sanitation problem and the disease.
- Summarise by discussing key points, such as how improved sanitation practices (e.g., proper sewage treatment and personal hygiene) can prevent these outbreaks.

WEEK 1 : DAY 2

Activity 1 Material Around Us

35 mins

Learning Objective

At the end of this activity, students will be able to classify materials, organisms and processes based on observable properties.

- Setup the Classroom as a Marketplace: Arrange tables or stations with different “material categories” labelled (e.g., Hard/Soft, Transparent/Opaque/Translucent).
- Provide a Variety of Materials: Items could include glass pieces, rubber bands, steel spoons, plastic sheets, butter paper, cotton balls, wooden blocks, etc.
- Assign Each Group a "Shopkeeper" Role: Each group will act as shopkeepers for one category. Their job is to ensure the correct items are placed in their category.
- Other Groups as Buyers: Remaining groups will be buyers who sort materials and deliver them to the correct shop based on the material's properties.
- Challenge Rules:
  - Each "buyer group" gets a basket of mixed materials.
  - They must quickly analyse and classify the materials, placing them in the correct shop.
  - Points are awarded for accurate classifications.
- Reflection and Discussion: Once the challenge ends, discuss any mistakes and explain why certain materials belong in specific categories.

WEEK 1 : DAY 2

Activity 2 Decomposer's role in Forest ecosystem

35 mins

Learning Objective

At the end of this activity, students will be able to relate processes and phenomenon with causes.

- Divide the class into small groups of 4-5 students each. Assign roles such as a recorder, presenter, and researcher within each group.
- Distribute activity sheets with a diagram of a forest ecosystem, markers, and cutouts representing plants, soil layers, decomposers (e.g., fungi, bacteria), and forest animals.
- Instruct students to map interactions between plants, soil, and decomposers on the diagram by drawing arrows and annotating relationships. For example:
  - Plants shed leaves, which decompose into nutrients.
  - Decomposers break down organic material, improving soil fertility.
  - Nutrient-rich soil supports plant growth.
- Pose reflective questions such as:
  - "What happens to the soil if decomposers are removed?"
  - "How do these interactions support the forest as a lifeline for other organisms?"
- Ask each group to present their completed diagram and explain the processes and their interconnections.
- Wrap up the activity by highlighting the importance of decomposers in sustaining the forest ecosystem and how it links to the chapter's concept.

WEEK 1 : DAY 3

Activity 1 Physical and Chemical Change

35 mins

Learning Objective

At the end of this activity, students will be able to classify materials, objects, organisms, phenomena and processes, based on, properties or characteristics.

- Set up the classroom as a "Change Lab": Arrange stations with different experiments/demonstrations of changes.
- Divide students into groups: Each group acts as a team of "change detectives."
- Provide materials for each station: Examples include:
  - **Station 1:** Melting ice cubes (physical change).
  - **Station 2:** Burning a piece of paper (chemical change).
  - **Station 3:** Dissolving salt in water (physical change).
  - **Station 4:** Mixing vinegar and baking soda (chemical change).
  - **Station 5:** Cutting a piece of paper (physical change).
- Challenge each group to:
  - Observe the changes happening at each station.
  - Identify whether the change is physical or chemical.
  - Record their reasoning (e.g., "In Station 1, the ice cube melting is a physical change because no new substance is formed").
- Reflection and Discussion: After completing the stations, discuss the characteristics of physical and chemical changes as a class.

WEEK 1 : DAY 3

Activity 2 Life Cycle sorting challenge

35 mins

Learning Objective

At the end of this activity, students will be able to differentiate materials and organisms on the basis of their properties, structure and functions.

- Form small groups of 4-5 students each.
- Provide each group with a set of cards. These cards will include:
  - Names of organisms (e.g., amoeba, hydra, rose plant, frog, human).
  - Reproductive structures (e.g., seeds, eggs, spores).
  - Modes of reproduction (e.g., budding, binary fission, pollination, external fertilisation).
- Instruct each group to:
  - Sort the cards into categories based on the type of reproduction (asexual or sexual).
  - Match organisms with their reproductive structures and the corresponding mode of reproduction.
- Encourage the groups to explain their reasoning for each categorisation. Ask guiding questions like:
  - Why does this organism use this mode of reproduction?
  - What are the advantages of this reproductive strategy?
- Each group presents their sorted categories to the class. Allow other groups to ask questions or suggest corrections.
- Summarise the key differences between asexual and sexual reproduction. Highlight the importance of reproductive structures and modes in an organism's survival and adaptation.

WEEK 1 : DAY 4

Activity 1 Physical and Chemical Change

35 mins

Learning Objective

At the end of this activity, students will be able to classify materials, objects, organisms, phenomena and processes, based on, properties or characteristics.

- Transform the classroom into 4–5 "Change Labs," where each group will conduct hands-on experiments to observe and classify physical and chemical changes.
- Equip each lab with materials, including vinegar, baking soda, water, salt, sugar, metal spoons, candles, ice cubes, iron nails, sandpaper, and beakers.
- Complete the following challenges:
  - **Heat and Cool:** Melt ice cubes into water and then boil the water into steam. Observe and classify each transformation as physical or chemical.
  - **Rust Formation:** Sand an iron nail to remove rust, then expose it to water and air. Record the formation of rust and classify the process.
  - **Sugar Caramelization:** Heat sugar until it melts and turns brown. Observe the change and determine if it is physical or chemical.
  - **Baking Soda and Vinegar Reaction:** Mix vinegar with baking soda, observe the bubbling reaction, and identify the gas formed. Classify the reaction.
  - **Candle Experiment:** Burn a candle, noting the melting wax and burning wick. Classify these changes as physical or chemical.
- Design your own experiment: Groups use the provided materials to create and perform their own "Change Experiment." Record observations and classify the changes.
- Present your findings: Each group explains their observations, classifications, and the science behind the changes. Highlight real-life examples where these changes occur and their significance.

- Discuss key takeaways as a class, reflecting on:
  - The characteristics of physical and chemical changes.
  - The impact of such changes in daily life and the natural world.
- Reflect on the importance of experimenting and observing changes to better understand scientific processes in our environment.

WEEK 1 : DAY 4

Activity 2 Seed Detective

35 mins

Learning Objective

At the end of this activity, students will be able to relate processes and phenomenon with causes.

- Divide students into groups of 4-5 members. Provide each group with:
  - Three small transparent containers.
  - Cotton or paper towels.
  - Seeds (e.g., beans).
  - Labels.
- Guide each group to set up their germination stations:
  - **Container 1:** Adequate water, oxygen, and light.
  - **Container 2:** Excess water but no air (submerged in water).
  - **Container 3:** Dry conditions with no water.
- Instruct groups to label the containers appropriately.
- Ask students to observe the containers over the next 2-3 days. Instruct them to note:
  - Changes in seed size or appearance.
  - Time taken for the radicle to emerge.
  - Differences in growth across the setups.
- Discuss the observations as a class. Use guiding questions:
  - Which container showed successful germination? Why?
  - What hindered germination in other containers?
  - How do water, air, and light individually impact the process?
- Draw a cause-effect diagram on the board linking each germination stage to its necessary conditions. Invite students to contribute their findings.
- End the session by discussing the importance of understanding germination for farming, gardening, and environmental conservation.

WEEK 1 : DAY 5

Assessment 1

70 mins

Competency

- **MS C-1.1:** Classifies matter based on observable physical (solid, liquid, gas, shape, volume, density, transparent, opaque, translucent, magnetic, non-magnetic, conducting, non-conducting) and chemical (pure, impure; acid, base; metal, non-metal; element, compound) characteristics.
- **MS C-1.2:** Describes changes in matter (physical and chemical) and uses particulate nature to represent the properties of matter and the changes.
- **MS C-1.4:** Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds).

1. You are provided with the following materials: glass, sponge, steel spoon, and butter paper. Classify them as:
   - Hard or Soft
   - Transparent, Opaque, or Translucent
2. Why do you think butter paper is considered translucent?
3. Name one material from your kitchen that is:
   - Hard and opaque
   - Soft and translucent
4. Imagine you are designing a new classroom window. Which material(s) will you choose to make it? Explain your choice based on the properties of materials (e.g., glass, plastic, or wood).
5. Why do you feel colder when standing under a fan after a shower?
6. Why is it easier to lift an object underwater compared to lifting it on land?
7. Place one metal spoon and one wooden spoon in a cup of hot water. Which one becomes hotter, and why?
8. Why do vacuum-sealed packets of chips puff up when taken to high altitudes?
9. Why Do Clothes Dry Faster on a Sunny Day?

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 1

Roll No.	Name of the Student	MS C-1.1			MS C-1.2			MS C-1.4		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

WEEK 2 : DAY 1

Activity 1 Living Creatures: Exploring their Characteristics

35 mins

Learning Objective

At the end of this activity, students will be able to conduct simple investigations to seek answers to queries.

1. **Setup**: Provide each student with the following materials:
   a. A small potted plant.
   b. A flashlight or desk lamp.
   c. A transparent bowl with water.
   d. A small stick or pencil for marking.
2. **Experiment 1: Phototropism Test**
   a. Place the potted plant on a flat surface.
   b. Shine a flashlight or desk lamp from one side of the plant.
   c. Observe and record any movement of the leaves or stem toward the light over 10–15 minutes.
3. **Experiment 2: Hydrotropism Demonstration**
   a. Submerge only the tip of the plant's roots in a transparent bowl of water.
   b. Watch and record any bending or movement of the roots toward the water during the session.
4. **Experiment 3: Growth Pattern Observation**
   a. Slightly tilt the potted plant sideways.
   b. Use a stick or pencil to mark the initial position of the stem.
   c. Observe and record any visible adjustment or movement of the plant over time.
5. **Record Observations**
   a. Use a notebook to document findings from all three experiments, including drawings of the plant's movement and notes on changes observed.
6. **Reflect and Conclude**
   a. Write a short paragraph explaining why plants show these movements and how phototropism and hydrotropism help them survive.
   b. Share insights with the class in a brief individual presentation or discussion.

WEEK 2 : DAY 1

Activity 2 Evaporation Exploration

35 mins

Learning Objective

At the end of this activity, students will be able to explain processes and phenomenon.

- Divide students into small groups of 4-5 members.
- Provide each group with:
  - A shallow dish of water.
  - A heat lamp or access to sunlight.
  - Pieces of dark and light-coloured cloth.
  - A thermometer.
  - A fan or a handheld blower.
  - A recording sheet.
- Instruct each group to test how various factors influence evaporation by setting up experiments with:
  - Heat (using the heat lamp or sunlight).
  - Airflow (using the fan).
  - Surface area (shallow vs deep dishes).
  - Surface material (dark vs light cloth under the dish).
- Ask students to:
  - Measure the initial water level or volume.
  - Place the dish under different conditions (e.g., with a heat lamp or fan).
  - Note changes in water level after 10 minutes.
  - Record temperature and other observations (e.g., speed of evaporation).
- Encourage students to compare results within their groups and identify which factors caused faster evaporation.
- Lead a class discussion where groups share their findings. Summarise how heat, airflow, surface area, and colour impact evaporation.
- Wrap up by explaining how evaporation is vital in everyday life and its significance in natural processes like the water cycle and cooling mechanisms.

WEEK 2 : DAY 2

Activity 1 Reproduction

35 mins

Learning Objective

At the end of this activity, students will be able to differentiate materials and organisms on the basis of their properties, structure and functions.

1. **Provide Materials and Organism Cards:**
   - Set up stations or provide cards with information about organisms such as amoeba, hydra, flowering plants, humans, and fungi. Include key details about their structures, types of reproduction (asexual or sexual), and examples of each type.
2. **Observe and Record:**
   - Ask students to study the cards and note the following:
     - The structure of the organism (unicellular/multicellular, specialised reproductive parts).
     - The mode of reproduction (asexual/sexual).
     - Examples of reproduction methods (e.g., budding, binary fission, pollination).
3. **Classify:**
   - Instruct students to group the organisms based on their mode of reproduction.
   - For sexual reproduction, differentiate organisms based on their reproductive structures (e.g., flowers in plants, gametes in animals).
   - For asexual reproduction, highlight processes like binary fission, budding, or spore formation.

4. **Compare:**
   - Have students create a comparison table for organisms reproducing sexually and asexually. Include factors such as:
     - Speed of reproduction.
     - Genetic diversity in offspring.
     - Survival advantages in different environments.
5. **Predict and Discuss:**
   - Encourage students to predict the survival rate of organisms in changing environments based on their mode of reproduction. For example:
     - "Would a sexually reproducing organism or an asexually reproducing organism adapt better to environmental changes?"
   - Discuss the role of genetic diversity in evolution and survival.
6. **Present Findings:**
   - Ask each student or group to present one organism, explaining:
     - Its reproductive method.
     - The advantages and limitations of its reproduction method.
     - How its structure supports its reproductive function.
7. **Reflect and Conclude:**
   - Facilitate a class discussion on why reproduction is essential for the survival of organisms and how understanding reproductive methods helps in areas like conservation and agriculture.

WEEK 2 : DAY 2

Activity 2 Condensation Chronicles

35 mins

Learning Objective

At the end of this activity, students will be able to explain processes and phenomenon.

- Divide the class into groups of 4-5 students.
- Provide each group with materials such as a clear glass jar, a small bowl of hot water, a metal plate, and some ice cubes.
  - Guide the groups to conduct an experiment. Instruct them to:
  - Pour hot water into the jar.
  - Cover the jar with the metal plate.
  - Place ice cubes on top of the plate.
- Observe and record how water droplets form on the underside of the metal plate. Explain that this is due to the cooling of water vapour into liquid, a process called condensation.
- Discuss as a class:
  - The conditions necessary for condensation to occur.
  - Real-life examples such as dew on grass, foggy windows, or clouds forming in the sky.
- Encourage groups to draw diagrams illustrating the experiment and label key stages of the condensation process.
- Conclude by summarising how condensation plays a role in the water cycle and other natural phenomena.

WEEK 2 : DAY 3

Activity 1 Forests: Our Lifeline

35 mins

Learning Objective

At the end of this activity, students will be able to make efforts to protect environment.

- Divide students into 4-5 groups.
- Set up the classroom as a "Forest Conservation Centre" with stations for different activities.
- Provide each group with materials like charts, pictures of forest resources (e.g., timber, fruits, medicinal plants), and mock items like paper, wooden products, or non-recyclable items.
- Assign tasks to each group:
  - **Group 1:** Identify and list resources provided by forests.
  - **Group 2:** Calculate the impact of deforestation by solving simple problems. For example:
    - "If one tree produces 200 kg of oxygen per year, how much oxygen is lost if 50 trees are cut down?"
  - **Group 3:** Suggest alternatives to deforestation by brainstorming ideas like recycling or using eco-friendly products.
  - **Group 4:** Design a poster or slogan on forest conservation.
- Have each group present their findings and solutions to the class.
- Conclude with a short discussion on steps students can take in their daily lives to protect forests

WEEK 2 : DAY 3

Activity 2 Ice Exploration Challenge

35 mins

Learning Objective

At the end of this activity, students will be able to explain processes and phenomenon.

- Divide the class into small groups of 4–5 students.
- Give each group a tray with the following items:
  - Ice cubes
  - Beakers or small bowls
  - Salt
  - Thermometers
  - A stopwatch or timer
  - Worksheets for recording observations
- Experimentation:
  - **Step 1:** Instruct the groups to measure the temperature of an ice cube at room temperature and record it.
  - **Step 2:** Ask them to sprinkle salt on one ice cube and observe what happens over time.
  - **Step 3:** Guide the groups to compare how quickly the salted ice melts versus an unsalted ice cube.
  - **Step 4:** Demonstrate freezing by placing water in a small container and freezing it in a portable freezer or refrigerator (if available) or describe the process if not.
- Facilitate a class discussion where each group shares their observations and conclusions about how salt affects the melting process and how freezing reverses the state of water.
- Relate the activity to real-life scenarios, such as the use of salt on icy roads or freezing water to make ice cubes.
- Summarise the key points of the activity, emphasising the processes of melting and freezing, and how these are part of the water cycle and everyday life.

WEEK 2 : DAY 4

Activity 1 Sanitation Solutions Workshop

35 mins

Learning Objective

At the end of this activity, students will be able to make efforts to protect environment.

- **Transform** the classroom into a "Sanitation Improvement Centre," simulating public spaces like parks, schools, or markets. Set up mock stations with materials such as waste bins, coloured paper for segregation labels, water containers, and sample waste items (e.g., paper waste, plastic bottles, food waste).
- **Organise** students into 4–5 groups and assign each group a specific sanitation-related task:
  - **Group 1: Waste Classification Team**
    Identify and classify waste items into biodegradable and non-biodegradable categories.
  - **Group 2: Waste Management Planners**
    Design a waste segregation system for a public space. Solve scenarios like: "If a park has 4 bins, each holding 20 kg, how much waste can it handle in a day?"
  - **Group 3: Water Treatment Engineers**
    Simulate a simple wastewater treatment process using materials like sand, pebbles, and cloth to filter dirty water.
  - **Group 4: Awareness Campaigners**
    Create posters or slogans to promote proper waste disposal and sanitation practices in public spaces.
- **Demonstrate:** Ask each group to present their solutions to the class. Encourage them to showcase their work creatively, such as through mock demonstrations or visual aids.

- **Discuss:** Facilitate a class discussion on:

  The importance of waste segregation and water treatment in maintaining public hygiene.

  Practical ways students can contribute to better sanitation practices in their communities.

- **Reflect and Commit:** Conclude the activity by asking each student to write one actionable step they can take to improve sanitation in their school or neighbourhood.

WEEK 2 : DAY 4

Activity 2 Water Cycle Dynamics

35 mins

Learning Objective

At the end of this activity, students will be able to relate processes and phenomenon with causes.

- Divide the class into small groups of 4-5 students each.
- Provide each group with the following materials:
- oPrinted cards describing processes (evaporation, condensation, freezing, melting).
    - Pictures of scenarios (e.g., boiling water, frost forming on windows, dew on grass, ice melting).
    - A set of cause-effect cards (e.g., "Sun's heat increases temperature" → "Evaporation occurs").
- Introduce the activity by explaining: "Water undergoes different state changes due to environmental factors. Your task is to link the processes with their causes and observe their interdependence in real life."
- Guide students to:
    - Categorise the pictures under the correct processes.
    - Match the processes with their respective cause-effect cards.
    - Draw a mini water cycle diagram using the given cards, ensuring to label each step (evaporation, condensation, freezing, melting) and highlight its cause.
- Facilitate a classroom discussion where each group presents their diagrams, explaining:
    - The process they depicted.
    - The role of environmental factors such as heat or cooling in causing the process.
- Conclude with an interactive Q&A, prompting students to relate these processes to phenomena they observe daily (e.g., sweating, fogging of glasses, formation of icicles).

WEEK 2 : DAY 5

Assessment 1

70 mins

Competency

- **MS C-1.4**: Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds).
- **MS C-3.2:** Distinguishes the characteristics of living organisms (need for nutrition, growth and development, need for respiration, response to stimuli, reproduction, excretion, cellular organisation) from non-living things.
- **MS C-1.4:** Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds).

- Draw a potted plant kept near a window and label its parts.
- Explain in one sentence why the plant grows towards the light.
- Match the following:

I.	Hydra	(a)	Asexual reproduction
II.	Humans	(b)	Sexual reproduction
III.	Amoeba	(c)	Binary fission

- List two benefits of forests for the environment.
- Write one way to reduce wastewater at home

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 2

Roll No.	Name of the Student	MS C-3.2			MS C-1.4		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

WEEK 3 : DAY 1

Activity 1 Light an object

35 mins

Learning Objective

At the end of this activity, students will be able to conduct simple investigations to seek answers to queries.

- **Pair** students into teams of two to conduct the experiments collaboratively.
- **Provide** each pair with materials, including a flashlight, a small mirror, a cardboard sheet with a small hole, transparent glass, and opaque objects.
- **Complete** the following tasks together:
  - **Task 1**: Shine the flashlight through the hole in the cardboard sheet and observe the beam on the wall. Discuss why the light travels straight.
  - **Task 2**: Place an opaque object in the beam's path and observe the shadow. Explain why the shadow forms and how its shape relates to the object.
  - **Task 3**: Use a mirror to reflect the flashlight beam and guide it through a maze drawn on a board. Observe how the light changes direction but still follows a straight path.
  - **Task 4**: Shine the flashlight on transparent, translucent, and opaque objects. Compare how light interacts with each and record observations.
- **Discuss** findings as a pair and prepare a brief explanation of how your observations support the concept that light travels in a straight line.
- **Present** your results to the class, sharing your observations for each task and any questions that arose during the experiment.

WEEK 3 : DAY 1

Activity 2 Reflection of Light

35 mins

Learning Objective

At the end of this activity, students will be able to conduct simple investigations to seek answers to queries.

- **Divide** the class into 4-5 groups.
- **Provide** each group with materials such as mirrors, flashlights, white paper, protractors, and small objects like coins or pencils.
  - **Task 1:** Shine a flashlight on a mirror at an angle and observe the reflected beam on a sheet of paper. Use a protractor to measure the angle of incidence and the angle of reflection. Discuss how these angles relate to the law of reflection.
  - **Task 2:** Arrange two mirrors at a right angle and shine a flashlight beam at one of them. Observe how the beam reflects twice and explain the path of the light.
  - **Task 3:** Set up a small obstacle (e.g., a pencil) in front of a mirror and observe its reflection. Students identify how the object's distance and orientation appear in the reflection.
  - **Task 4:** Use a small mirror to reflect sunlight or flashlight beams to a target (e.g., a specific spot on the wall). Discuss how the direction of the reflection changes by tilting the mirror.
- Each group presents their findings and explains how their observations demonstrate the principles of reflection.

WEEK 3 : DAY 2

Activity 1 Light through a Maze

35 mins

Learning Objective

At the end of this activity, students will be able to conduct simple investigations to seek answers to queries.

- **Pair** students and assign each pair the task of navigating the light beam through the maze.
- **Set Up the Maze**:
  - Create a maze on a large chart or classroom floor using tape, marking a "Start" and "End" point.
  - Place obstacles and reflective surfaces (mirrors) strategically throughout the maze.
- **Provide Materials**:
  - Each pair receives a flashlight, 2–3 small mirrors, white paper, and a marker.
- **Guide the Light**:
  - Shine the flashlight at the maze's "Start" point.
  - Work together to tilt and adjust the mirrors to guide the beam around obstacles and reach the "End" point.
  - Record the beam's path on the white paper, marking the angle of incidence and reflection at each mirror.
- **Discuss Findings**:
  - Reflect on how the light's path changed at each reflection and relate it to the law of reflection.
  - Identify challenges faced while navigating the maze and how adjustments to the mirrors helped.
- **Present Results**:
  - Each pair shares their mapped beam path, strategies, and observations with the class.

WEEK 3 : DAY 2

Activity 2 Light through Prism

35 mins

Learning Objective

At the end of this activity, students will be able to conduct simple investigations to seek answers to queries.

- Divide the students into 4-5 groups.
- Provide each group with materials: a prism, a flashlight, white paper, a sheet of black paper, and tape.
- **Activity Steps:**
  - Darken the room and ask each group to shine a flashlight through the prism at an angle onto the white paper. Observe how the light splits into a spectrum of colours (VIBGYOR).
  - Have each group identify and write down the order of colours observed in the spectrum.
  - Cut a small hole in the black paper, place it over the white light beam before it passes through the prism, and observe if the spectrum changes. Discuss findings.
  - Each group arranges the colours (e.g., using coloured paper or markers) in the order they observed to reinforce their understanding of the components of white light.
- **Challenge Task:**
  - Ask groups to tilt the prism at different angles and note how the spectrum shifts.
- Groups present their results and discuss the concept of dispersion and the composition of white light.

WEEK 3 : DAY 3

Activity 1 Exploring Magnets - I

35 mins

Learning Objective

At the end of this activity, students will be able to identify materials and organisms on the basis of observable features, i.e., appearance, texture, function, aroma, etc.

- **Provide** each student with a magnet and a set of materials, such as a paperclip, plastic spoon, key, iron nail, coin, rubber band, wood block, aluminium can, and a piece of cloth.
- **Test** the materials one by one to check if they are magnetic or non-magnetic by observing whether the magnet attracts them.
- **Record** the results in a table, categorising the items into "Magnetic" and "Non-Magnetic" based on their response to the magnet.
- **Analyse** the findings and identify patterns, such as which types of materials (e.g., metals) are magnetic and why others (e.g., plastic, wood) are not.
- **Reflect** on the results by writing a short paragraph explaining why certain materials are magnetic and the common properties they share.
- **Conclude** with a classroom discussion, where students share their results and collectively identify key characteristics of magnetic and non-magnetic materials.

WEEK 3 : DAY 3

Activity 2 Exploring Magnets - II

35 mins

Learning Objective

At the end of this activity, students will be able to conduct simple investigations to seek answers to queries.

- Divide students into 4-5 groups.
- Provide each group with a magnet, compass, and small objects (like pins, clips, or nails).
- Instruct each group to find the North and South poles of the magnet using a compass.
- Ask the students to mark the poles of the magnet.
- Next, have students place the magnet on the table and use the compass to identify the direction the magnet is pointing.
- Ask students to predict how the magnet will behave when they place small objects near it.
- Each group will investigate how the magnet attracts or repels the small objects, noting any differences in behaviour when the objects are placed near the poles.
- After the activity, have the groups share their findings about the poles of magnets and how they find directions using a compass.

WEEK 3 : DAY 4

Activity 1 Electric Current and its effects - I

35 mins

Learning Objective

At the end of this activity, students will be able to explain processes and phenomenon.

1. **Pair** students and provide each pair with a battery, copper wire, small compass, and an iron nail.
2. **Connect** the battery to the copper wire to form a simple circuit, ensuring the wire allows current to flow through.
3. **Observe** the deflection of the compass needle as the pair places the compass near the wire and passes current through it. Record the changes in the needle's position.
4. **Create** an electromagnet by wrapping the wire around the iron nail. Test its strength by using the nail to pick up small objects like paper clips or pins. Experiment with the number of wire coils to observe changes in strength.
5. **Record** observations in a notebook, noting how the current affects the compass needle and the strength of the electromagnet when picking up objects.
6. **Explain** findings as a pair, discussing:
   - The phenomenon of magnetic effects of electric current.
   - Real-life applications, such as the use of electromagnets in motors, magnetic cranes, and other devices.

WEEK 3 : DAY 4

Activity 2 Electric Current and its effects - II

35 mins

Learning Objective

At the end of this activity, students will be able to construct models using materials from surroundings and explains their working.

- Divide students into 4-5 groups.
- Provide each group with the following materials: a small electric bell, copper wire, battery, iron nail, switch, and some small metallic objects like paper clips or screws.
- Instruct each group to first create a simple electromagnet by wrapping copper wire around the iron nail and connecting the wire ends to the battery.
- Ask the groups to test their electromagnets by trying to pick up small metallic objects, like paper clips or screws.
- Next, instruct the groups to create a simple electric bell system by connecting the electromagnet to the bell in a basic circuit, using the switch to control the current.
- The objective is to create a circuit that, when switched on, energises the electromagnet, which in turn attracts a metal piece that triggers the bell.
- Have the groups test their electric bells and observe how the electromagnet attracts the metal piece to sound the bell.
- Each group should explain how the electric current flows through the circuit, generating a magnetic field that powers the bell.

WEEK 3 : DAY 5

Assessment 1

35 mins

Competency

C-2.4: Demonstrates rectilinear propagation of light from different sources (natural, artificial, reflecting surfaces), verifies the laws of reflection through manipulation of light sources and objects and the use of apparatus and artefacts (such as, plane and curved mirrors, pinhole camera, kaleidoscope, periscope).

1. How do you prove that light travels in a straight line?
2. What is the angle of reflection when the light struck the mirror at a 45° angle to the normal?
3. Describe the colours when the light passes through the prism. What does this tell you about the components of white light?
4. What if there were no laws of reflection?

WEEK 3 : DAY 5

Assessment 2

35 mins

Competency

- **C-2.3:** Describes the properties of a magnet (natural and artificial; Earth as a magnet).
- **C-2.2:** Describes how electricity works through manipulating different elements in simple circuits and demonstrates the heating and magnetic effects of electricity.

- Using a small compass, demonstrate how a magnet can be used to find the directions (North and South). Hold the compass flat and observe the needle's direction when placed near the magnet.
- Explain why the compass needle points North. How does the Earth's magnetic field interact with the compass?
- What if you use a thin wire in a circuit with a high-power battery?
- What if a fuse blows in your circuit when you connect multiple appliances?

Sample Learning Level Tracker

Keep a record of weekly assessment results in the tracker.

As you conduct assessments based on the activities suggested, put a tick mark as per the following:

Level 1: Not able to solve problems and having difficulty comprehending the problem

Level 2: Solves most of the problems with external support

Level 3: Solves problems independently

Name of the School	UDISE
Block	District
Name of the Teacher	Assessment Date

WEEK 3

Roll No.	Name of the Student	MS C-2.2			MS C-2.4			MS C-2.3		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

CM IMPACT
Meghalaya Class Readiness Programme

SCIENCE

APPENDIX

Pre-requisite Competency and concepts essential for Grade-level learning:

The Learning Outcomes in Science are consistent across grades, with concepts becoming progressively more complex as students advance. Accordingly, the following table outlines the concepts included in the MCRP, designed to effectively support the understanding of the grade-level concepts which students will encounter.

Competency Middle Stage (MS)	Prerequisite Concepts	Grade Level Concepts
C-1.2 Describes changes in matter (physical and chemical) and uses particulate nature to represent the properties of matter and the changes	Classify materials wrt properties like hard, soft, transparent, opaque, translucent Physical and Chemical Change	• Conditions for combustion • Ideal fuel - fuel efficiency and other parameters
C-3.2 Distinguishes the characteristics of living organisms (need for nutrition, growth and development, need for respiration, response to stimuli, reproduction, excretion, cellular organisation) from non-living things	Growth and Movement in Plants Reproduction in Organism	• Flora and Fauna • Sexual Reproduction
C-3.4 Explains the conditions suitable for sustaining life on Earth and other planets (atmosphere; suitable temperature-pressure, light; properties of water)	Importance of forest Sanitation in public places	• Conservation of forest and wildlife - sanctuary, biosphere reserve and national park • Recycling of paper and reforestation

<table>
<tr><td rowspan="3">C-2.4
Demonstrates rectilinear propagation of light from different sources (natural, artificial, reflecting surfaces), verifies the laws of reflection through manipulation of light sources and objects and the use of apparatus and artefacts (such as, plane and curved mirrors, pinhole camera, kaleidoscope, periscope)</td><td>Light travels in a straight line</td><td rowspan="3">• Laws of reflection
• Multiple reflection
• Dispersion of light</td></tr>
<tr><td>Reflection of light</td></tr>
<tr><td>Components of white light</td></tr>
<tr><td rowspan="2">C-2.3
Describes the properties of a magnet (natural and artificial; Earth as a magnet)</td><td>Magnetic and non-magnetic materials</td><td rowspan="4">• Conduction of electricity by liquids
• Tester - Bulb, LED, Magnetic
• Good and Poor Conductor of electricity</td></tr>
<tr><td>Poles of Magnets, Finding directions</td></tr>
<tr><td rowspan="2">C-2.2
Describes how electricity works through manipulating different elements in simple circuits and demonstrates the heating and magnetic effects of electricity</td><td>Magnetic effects of electric current</td></tr>
<tr><td>Electromagnet - Electric Bell</td></tr>
</table>

DERT
DIRECTORATE OF EDUCATIONAL
RESEARCH & TRAINING

Reach to Teach