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

CLASS 6

3 WEEKS

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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 child 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 Education Department, the Directorate of School Education and Literacy, the Directorate of Educational Research and Training (DERT), and our Knowledge Partner, Reach to Teach Foundation, partners 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 child 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

The Government of Meghalaya is committed to transforming education in line with the National Education Policy (NEP) 2020. Our goal is to ensure every child receives quality, inclusive, and equitable education.

To bridge learning gaps and strengthen foundational skills, we have launched the **Meghalaya Class Readiness Programme (MCRP)** in partnership with Reach to Teach Foundation. MCRP integrates activity-based and experiential learning methods rooted in Meghalaya's context, helping students achieve grade-level learning outcomes aligned with NCERT, NIPUN Bharat, and NCF standards.

This initiative is made possible through the dedication of our stakeholders, including the Hon'ble Minister of Education, Shri Rakkam A Sangma and the guidance of Shri Vijay Kumar Mantri, IAS, Commissioner & Secretary, Education Department. We also acknowledge the efforts of the Directorate of Educational Research and Training (DERT) in developing these resources.

We invite teachers, students, parents, administrators and the broader community to collaborate in making the most of this programme. Together, we can build an education system that empowers every child to succeed, shaping a brighter future for Meghalaya.

Shri. R.Rapthap, IAS
Commissioner and Secretary, Education Department (R.R), 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 child'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 child 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

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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 as 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 activites 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 activies 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's 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 recreate 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 all 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 Timetable

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 observa on 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.

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

ENGLISH

Main Menu

WEEK 1 : DAY 1

Activity 1 Our Emotions

35 mins

Learning Objective

At the end of this activity, students will be able to understand and respond positively to different thoughts, preferences, and emotions.

- Write down various emotions on slips of paper. Examples:
  - Happy
  - Sad
  - Excited
  - Angry
  - Nervous
  - Surprised
  - Confident
  - Confused
- One student will pick a slip, act out the emotion (no words or sounds), and the rest of the class will guess.
- Once the emotion is guessed, ask:
  - When might someone feel this way?
  - How can we help someone experiencing this emotion?
  - What was easy or hard about recognising emotions?
  - How can we use this understanding to support our friends and family?

WEEK 1 : DAY 1

Activity 2 School Bell

35 mins

Learning Objective

At the end of this activity, students will be able to recite poems, comprehend them and answer related questions.

- Write the following poem on the blackboard and ask students to read it.

School bell
by Anonymous

I hear the school bell in the morning
It goes "Ton Ton Ton"
And it makes me 'Run Run Run'
Because if I get late,
Then my friends will wait.
In the afternoon, the bell rings again
It goes, "Ton Ton Ton"
And again, I want to 'Run Run Run'
Because at home, my lunch awaits

- Based on the reading of the poem, ask students:
  - What time of the day does the school bell ring? What does it signify?
  - Find rhyming words from the poem.
  - What do you do when you hear the school bell in the morning and afternoon?
  - Who waits for you at school in the morning? Do you rush home when school is over? Who waits for you at home?

WEEK 1 : DAY 2

Activity 1 Latitudes and Longitudes

35 mins

Learning Objective

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

- Write the following passage on the blackboard and ask students to read it.

Latitudes and longitudes are imaginary lines on the Earth that help us locate places. Latitudes run horizontally, parallel to the Equator, which is the main latitude dividing the Earth into the Northern and Southern Hemispheres. Longitudes run vertically, meeting at the poles, with the Prime Meridian being the main longitude that divides the Earth into the Eastern and Western Hemispheres. These lines form a grid system, allowing us to determine the exact position of any place on Earth using coordinates. For example, the coordinates (20°N, 77°E) show a location in India.

- Ask students comprehension questions, to check their understanding:
  - What are latitudes and longitudes?
  - What is the main latitude called?
  - Which line divides the Earth into the Eastern and Western Hemispheres?
  - What is the purpose of the grid system formed by latitudes and longitudes?
  - Why do you think it is important to have a system to locate places on Earth?
  - How do latitudes and longitudes help in understanding the geography of the Earth?

WEEK 1 : DAY 2

Activity 2 Grandma's Call

35 mins

Learning Objective

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

Ask students to listen to the following phone conversation.

Grandma's call

Telephone rings
Tring Tring Tring
I pick up say
Hello Hello Hello
Who is there?
The voice asks
It's me, Tashi
Who are you
It is grandmother
How are you granny?
I am good. I am coming to your home next month.
Can you please tell your mother to pick me on 20th March from the bus stop?
Yes Granny, I will tell her, says Tashi
Okay, bye. I will see you soon.
Bye Granny.

Now ask every student to write the message from the phone conversation. Also, ask them whether Tashi has all the information needed to pick her grandmother up. What question could she have asked her grandmother for more accurate information?

WEEK 1 : DAY 3

Activity 1 The Lost Puppy

35 mins

Learning Objective

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

- Write the following passage on the blackboard and ask students to read it.

One sunny afternoon, Dawnei was walking in the park when she heard a soft cry from the bushes. She peeked inside and found a small, scared puppy with a red collar. The tag read, "Buddy" and had a phone number.
Dawnei gave Buddy water and called the number. A worried woman answered, saying Buddy had run away. Dawnei told her to come to the park entrance. Soon, the woman arrived and hugged Buddy tightly, thanking Maya for her help.
From then on, every time Dawnei visited the park, Buddy happily ran up to her, wagging his tail.

- Ask students comprehension questions, to check their understanding:
  - Where was Dawnei when she found Buddy?
  - What did Dawnei do to help Buddy?
  - How did Buddy's owner feel when she got him back?
  - What did Buddy do when he saw Dawnei in the park later?

WEEK 1 : DAY 3

Activity 2 A Different Friend

35 mins

Learning Objective

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

- Write the following story on the blackboard and ask students to read it. You can also narrate it. Translate it to the local language when needed:

Three Friends

Once upon a time, in a small village, there lived two friends named Lian and Diana. They were both nine years old and went to the same school. Every day, they would meet along with others and play in the park. They loved to climb trees, go on the slides, or play 'catch' and other games.

One day, while they were playing hide and seek, Lian tripped and fell. He scraped his knee and it started to bleed. He was finding it difficult to walk. Diana, being the good friend she was, ran to the door of the nearest house and knocked. 'Do you have a bandage?' she asked the kind lady who opened.

'Oh, no! I've just run out of bandages. See that grandpa across the road? I've seen him use a bandage – maybe he has one.' Diana went ove r to the old man. 'Grandpa, do you have a bandage – my friend is hurt!'

'Oh dear, I wish I did! I always get it from that shop over there,' he pointed. Diana ran to the shopkeeper and asked. But he said: 'Do you have 10 rupees for the bandage?' Diana's face fell. 'I don't,' she said in a sad voice. She was ready to cry. 'Hello, Diana, what happened?' she heard. Diana turned and saw that it was Polly, the shopkeeper's daughter and her classmate. She quickly explained how Lian was hurt.

'Dad, she's my friend,' said Polly and immediately fished out a pack of bandages. Both of them ran to the ground where Lian was still sitting on a rock, holding his knee, trying not to cry. Polly knew how to clean a wound and apply the bandage. The two girls worked together and soon Lian's knee was nicely wrapped. He tried standing and was able to walk slowly. 'You're my true friends,' he said. 'Thank you!'

- Use every opportunity during the story to ask prediction questions to the students for example:
  - Do you think the lady will solve Diana's trouble?
  - Do you think the grandpa will?
  - The shopkeeper?
  - Polly? Why?
- At the end of the story ask some questions (like the ones given below) which will help students express themselves and their feelings for their friends:
  - What happened that Diana needed to help Lian?
  - Can you tell if your friend is in pain even if he/she doesn't say anything? How?
  - Do your friends understand when you're sad or happy? How?

WEEK 1 : DAY 4

Activity 1 Water and Ice

35 mins

Learning Objective

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

- Initiate a discussion with students about the relationship between ice and water.
- Ask them that how they can make water into ice. How does nature convert water into ice? Also, when the spring arrives, what happens to all the snow? Where does it go?
- Ask students to read the following passage:

  Take a glass of water and pour it in a pan. Keep the pan on a gas stove and let the water boil. Soon you will see steam rising from the pan. When heat is given to water, it expands and changes its form to steam. Now remove the pan from the gas stove and let it cool. Once the water has cooled, put the pan in a freezer. Take out the pan after 6 hours. The water has disappeared and there is only ice in the pan. When water is cooled below zero degree Celsius, it freezes and becomes ice.

- After students have read the passage, ask them to explain its meaning. Ask them to highlight the new words in the passage. Share the meaning of the new words with your students.
- Now ask students to answer the following questions in their notebook:
  - How does water convert into ice?
  - How does water convert into steam?
  - How will you convert ice into water?

WEEK 1 : DAY 4

Activity 2 The Snowman

35 mins

Learning Objective

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

- Ask students to listen to the following passage:

It was the season of winter. It had begun to snow. The school was shut. It was very cold. We were inside our house. My sister was feeling bored. She wanted to go out and play. I had an idea. We both wore our jackets, gloves, boots, and caps. We ran outside. We decided to make the biggest snowman.
We began making his big stomach. It became so big we couldn't reach it to put the head on the top.

- Divide the students into groups.
- Write the following sentences from the story on the board in a jumbled manner.
  - My sister was feeling bored and wanted to go out.
  - It was the season of winter, and it began to snow.
  - We wore jackets, gloves, boots, and caps.
  - We ran outside to make the biggest snowman.
  - The snowman's stomach became so big we couldn't place the head on top.
  - The school was shut, and we stayed inside the house.
- Students work in groups to arrange the sentences in the correct order based on the story.
- Move around in groups and help students wherever needed.

WEEK 1 : DAY 5

Assessment 1 Winter

35 mins

Competency

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

LO

4.E.LO4: Responds verbally and in writing in English to questions based on day-to-day life experiences, an article, story or poem heard or read.

5.E.LO8: Reads text with comprehension, locates details and sequence of events.

1. Take 5-10 minutes to revise with students the importance of reading a text with comprehension and the activities done in the past 4 days.
2. Ask students to listen carefully to the passage:
3. It was the season of winter. It had begun to snow. The school was shut. It was very cold. We were inside our house. My sister was feeling bored. She wanted to go out and play. I had an idea. We both wore our jackets, gloves, boots and cap. We ran outside. We decided to make the biggest snowman. We began making his big stomach. It became so big we couldn't reach it to put the head on the top.
4. Now ask students to draw a picture of the story with the all the characters. Also ask them to complete the story by solving the problem of putting the head on top.
5. Ask students to share answer the following questions in their notebooks:
   a. What clues from the passage tell you the time of year?
   b. Why was the school shut during this time?
   c. What problem did the siblings face while making the snowman?
   d. Why do you think the sister was feeling bored initially?

WEEK 1 : DAY 5

Assessment 2 Winter

35 mins

Competency

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

LO

4.E.LO4: Responds verbally and in writing in English to questions based on day-to-day life experiences, an article, story or poem heard or read.

5.E.LO8: Reads text with comprehension, locates details and sequence of events.

Write the following story on the blackboard and ask students to

The Old Man Who Knit

There was an old man who loved to knit. He would knit scarves, sweater, caps and more. He would choose the brightest colours and make the most beautiful winter clothes. He would choose the softest wool and start knitting away.

One day he was feeling lonely. He decided to knit two beautiful students. He first knitted a little girl. She had long black hair and brown eyes. He made her a beautiful red dress. Next, he knitted a young boy. The boy had a blue cap to cover his messy hair. The old man named the girl, Tashi and the boy was called, Lobsang. They looked at the kind eyes of the old man and loved him. All three of them started to live together and the old man never felt alone again. And whenever Tashi and Lobsang needed anything, he would knit it for them.

(Inspired from Granny Knits, NBT)

After reading the story, ask students to write the answers to the following questions in their notebooks:

1. What did the old man love to do? What kind of winter clothes did the old man knit? What was the old man's solution to his loneliness?
2. Ask students story sequencing questions: what happened first, then, after that and in the end.
3. Analyse the character of old man in the story, his character traits and his relationship with Tashi and Lobsang. Next ask them to write character sketch of the old man in the story.

Sample Learning Level Tracker

(Teachers are suggested to maintain this tracker at the end of each week)

LEARNING LEVEL TRACKER

About the Traker: Keep a record of weekly assessment results in the traker. As you conduct assessment based on the activities suggested.

Put a tick mark as per the following:
Level 1 (Needs support): Not able to solve problems and having difficulty comprehending the problem
Level 2 (Satisfactory): Solves most of the problems with external support
Level 3 (Excellent): Solves problems independently with minimum external support

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

Roll No.	Name of the Student	Week 1					
		4.E. L04			5.E. L08		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

Main Menu

WEEK 2 : DAY 1

Activity 1 Compliment Chain

35 mins

Learning Objective

At the end of this activity, students will be able to interact comfortably with other students and adults.

- Arrange the students in a circle so everyone can see each other.
- Discuss the importance of noticing and appreciating positive qualities in others.
- Explain that they will give a genuine compliment to someone in the group, focusing on traits like kindness, helpfulness, or effort.
- Begin the activity by giving a compliment to one student. - Example: “I want to compliment Sarah for always helping others with their homework.”
- The complimented student then gives a compliment to another person in the circle.
- Continue until everyone has given and received a compliment.
- Ask a few students how it felt to receive a compliment and how it felt to give one.
- Discuss:
  - Why is it important to recognise positive traits in others?
  - How can we continue to spread kindness every day?

WEEK 2 : DAY 1

Activity 2 Naming Nouns

35 mins

Learning Objective

At the end of this activity, students will be able to understand the concept of nouns and make appropriate sentences.

- Write the following passage on the blackboard and ask students to read it.

The Earth has many types of landforms that make up its surface. Mountains are tall, rocky areas that rise high above the surrounding land. Valleys are the low areas between mountains or hills. Plains are flat stretches of land, often used for farming. Plateaus are high, flat areas that look like tables. Deserts are dry and sandy regions with very little water, while forests are covered with trees and plants. Rivers, lakes, and seas are examples of water bodies found in different types of landforms. Each landform is unique and plays an important role in supporting life on Earth.

- Invite students to the blackboard and ask them to underline a noun. Examples: mountains, valleys, plains, rivers, lakes, forests, deserts.
- If students struggle, briefly review the definition of nouns with the class. Explain that nouns are words that name people, places, things, or animals.
- Write examples of each category on the board:
  - Person: teacher, student, doctor
  - Place: school, park, beach
  - Thing: pencil, book, chair
  - Animal: dog, cat, elephant
- Ask students to write one sentence about their favourite landform using at least three nouns. Example: “The mountains have rivers, forests, and rocks that are beautiful to see.”

WEEK 2 : DAY 2

Activity 1 Working with Verbs

35 mins

Learning Objective

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

- Write a list of verbs (action words) on small pieces of paper. You can also just make a list for your own use.
- Divide the class into two teams. Each team will take turns acting out verbs.
- A student from one team selects a card (or you call out a verb to them). The team member who draws the card has 10-20 seconds to act out the verb without speaking.
- The other team members have to guess the verb being acted out.
- If the team guesses correctly, they earn a point. If they don't, the other team gets a chance to guess.
- Reiterate the meaning and purpose of verbs.
- Ask students to choose a verb taken up in the activity and write a short imaginative story using it.

WEEK 2 : DAY 2

Activity 2 Nouns and Verbs

35 mins

Learning Objective

At the end of this activity, students will be able to differentiate between nouns and verbs.

- Write a set of nouns and verbs on the board. Write them in a jumbled manner.
- Ask the students to choose one noun and one verb and make a sentence using them in their notebooks.
- Encourage them to add more details to make their sentence interesting.
- Invite students to read their sentences aloud.
- Discuss as a class:
  - Are the sentences logical?
  - How can we improve them if needed?

WEEK 2 : DAY 3

Activity 1 Understanding Prepositions

35 mins

Learning Objective

At the end of this activity, students will be able to understand the concept of prepositions and use them verbally and in writing.

- Start by explaining what prepositions are: Prepositions are words that show the relationship between a noun (person, place, or thing) and another word in the sentence. Examples: in, on, under, next to, behind, between, over, beside, in front of.
- Write a few simple examples on the board:
  - The book is on the table.
  - The cat is under the chair.
  - The dog is beside me.
- Ask students if they can give other examples of prepositions or sentences using prepositions.
- Place a few objects (like a book, pencil, eraser, box) on a table or on the floor.
- Stand in front of the class and describe where the objects are using prepositions. For example:
  - The pencil is in the box.
  - The eraser is beside the book.
- Ask students to take turns and use prepositions to describe where objects are.
- To assess if students understood, ask them to move the objects around and give new descriptions, e.g., “The book is under the chair.”
- Write the following few sentences on the board and ask students to complete them with appropriate prepositions:
  - The ball is _____ the box.
  - The cat is _____ the sofa.
  - The dog is _____ the bed.
  - The lamp is _____ the desk.

WEEK 2 : DAY 3

Activity 2 Working with Prepositions

35 mins

Learning Objective

At the end of this activity, students will be able to use prepositions to describe things, verbally and in writing.

- Ask students to make a drawing of a fruit shop in the market and label all the fruits in the drawing.
- Next ask students how fruits are kept in a shop? What words in English will they use to describe the position of fruits in their own drawing? Where is the apple kept and where are the bananas hanging? Re-introduce students to prepositions such as under, above, beside, inside, outside, behind.
- Divide students into pairs and ask each student to indicate the position of fruits in their drawing using the words 'under, above, beside, inside, outside, behind' to their partner.
- Ask each student to write these sentences next to their drawing. For instance, the bananas are hanging above the shop, apples are inside the box, watermelons are kept beside the oranges etc.

WEEK 2 : DAY 4

Activity 1 Understanding Adjectives

35 mins

Learning Objective

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

- Write a simple sentence on the board: “The dog is big.”
- Ask students, “How is the dog?” Point out that “big” is a word that describes the dog. Explain to students that an adjective is a word that describes a noun (person, place, or thing). It tells us more about the noun, such as how it looks, feels, tastes, or sounds.
- Provide a few more examples of sentences with adjectives:
  - “The flower is beautiful.”
  - “The car is fast.”
- Ask students to share other adjectives they know (e.g., tall, small, shiny, blue, loud, soft).
- Divide the class into two teams.
- A student from one team picks an adjective card (you can write adjectives on small cards) and acts it out. The team has to guess the adjective.
- For example, if the adjective is “slow,” the student might walk slowly.
- The other team members try to guess the adjective based on the action.
- After each round, discuss the adjective and how it describes something.

WEEK 2 : DAY 4

Activity 2 The Cozy Cottage

35 mins

Learning Objective

At the end of this activity, students will be able to use adjectives to describe things, verbally and in writing.

- Write the following paragraph on the board:

The old man lived in a cozy cottage nestled in the rolling hills of Meghalaya. The house was surrounded by lush green forests and vibrant, colourful flowers that bloomed in the cool, misty air. Every morning, the golden sun peeked through the clouds, casting soft light over the mist-covered valley. The man's pet cat, a fluffy grey creature with a thick coat, loved to nap by the crackling fireplace, enjoying the warmth.

- Ask students to come forward and underline the adjectives in the paragraph. They also have to share which noun they are describing.
- Divide students into pairs or small groups and ask them to add their own adjectives to the paragraph.
- After 5-7 minutes, ask each group to share their revised paragraph with the class.

WEEK 2 : DAY 5

Assessment 1 Nouns and Adjectives

35 mins

Competency

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

LO

4.E.LO16: Uses nouns, verbs, adjectives, and prepositions orally and in writing.

5.E.LO6.b: Uses meaningful grammatically correct sentences to describe and narrate incidents; and for framing questions.

1. Start by quickly reviewing the concepts of nouns and adjectives.
2. Write the following sentences on the board and ask students to identify the noun and the adjective in each sentence. Ask them to write them down in their notebook:

a. The tall tree stood in the middle of the yard.
Noun: _____
Adjective: _____

b. She wore a beautiful dress to the party.
Noun: _____
Adjective: _____

c. The quick rabbit ran across the field.
Noun: _____
Adjective: _____

d. The old man sat on the bench near the lake.
Noun: _____
Adjective: _____

e. The bright sun made the day very hot.
Noun: _____
Adjective: _____

f. My brother has a small dog named Max.
Noun: _____
Adjective: _____

g. We went on a long hike in the mountains.
Noun: _____
Adjective: _____

h. The soft pillow was perfect for a nap.
Noun: _____
Adjective: _____

i. The colorful bird flew high in the sky.
Noun: _____
Adjective: _____

j. He found a shiny coin in the sand.
Noun: _____
Adjective: _____

f.

WEEK 2 : DAY 5

Assessment 2 Verbs and Adjectives

35 mins

Competency

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

LO

4.E.LO16: Uses nouns, verbs, adjectives, and prepositions orally and in writing

5.E.LO6.b: Uses meaningful grammatically correct sentences to describe and narrate incidents; and for framing questions.

1. Begin the class by revising the concepts of verbs and adjectives.
2. Write a few adjectives and verbs on the board. A few are given here.

Colourful	Run	Jump	Glide	Furry
Slimy	Climb	Spiky	Squishy	Smooth
Shiny	Swim	Fly	Bumpy	Dig
Crawl	Hard	Hike	Dance	Soft

3. Ask students to make a table in their notebooks with two categories: verbs and adjectives. Ask them to identify adjectives and verb from the list and write in the respective column
4. Using the verbs and adjectives, ask the students to write a short story.

Sample Learning Level Tracker

(Teachers are suggested to maintain this tracker at the end of each week)

LEARNING LEVEL TRACKER

About the Traker: Keep a record of weekly assessment results in the traker. As you conduct assessment based on the activities suggested.

Put a tick mark as per the following:
Level 1 (Needs support): Not able to solve problems and having difficulty comprehending the problem
Level 2 (Satisfactory): Solves most of the problems with external support
Level 3 (Excellent): Solves problems independently with minimum external support

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

Roll No.	Name of the Student	Week 2					
		4.E. L016			5.E. L06.b		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

Main Menu

WEEK 3 : DAY 1

Activity 1 Situations at Home

35 mins

Learning Objective

At the end of this activity, students will be able to write short paragraphs with the help of verbal/visual clues.

- Prepare a set of clues on the board, that outline a simple scenario. For example:
  - Where is the person? (e.g., in a park, at a library)
  - What is the person doing? (e.g., reading, playing, talking to a friend)
  - What happens next? (e.g., it starts to rain, they find something interesting)
  - How does the story end? (e.g., they go home, they share the discovery)
- Give students a sample paragraph – Example Paragraph: One day, I was at the library. I found a mysterious old book with a strange symbol on the cover. When I opened it, I saw a map inside. Suddenly, the librarian came over and told me it was a magical treasure map. I decided to follow it, but I needed to plan carefully first.
- Ask students to write a paragraph (4–6 sentences) based on the clues.

WEEK 3 : DAY 1

Activity 2 Working with Prepositions

35 mins

Learning Objective

At the end of this activity, students will be able to write stories, poems, posters etc. creatively.

- Briefly explain the roles of the three organs of government:
  - Legislature: Makes laws
  - Executive: Implements laws
  - Judiciary: Ensures laws are followed and protects rights
- Use simple examples to make the concepts relatable:
  - Legislature is like deciding the rules for a school game
  - Executive is like ensuring everyone plays by the rules
  - Judiciary is like resolving disputes if someone breaks the rules
- Ask students to create a short story where the three organs of government are characters working together to solve a problem.
- Example Prompt: Imagine your town has a big problem: people are littering everywhere! The "Legislature" writes a rule to fine people for littering, the "Executive" ensures the rule is followed by setting up trash bins and fining litterbugs, and the "Judiciary" handles cases where people don't pay their fines. Write a short story about how they work together to make your town clean again.
- Invite students to share their stories with the whole class.

WEEK 3 : DAY 2

Activity 1 Peer Review

35 mins

Learning Objective

At the end of this activity, students will be able to write short paragraphs with the help of verbal/visual clues.

- Divide students in small groups. Give different situations (as listed below) to each group to discuss.
  - If the pillow spoke to the sheet, what would it say?
  - What would a lock say to the key?
  - If a mouse was stuck in a kitchen, what would it do: bite, eat, make a spoon fall?
  - If a cow peeps in through the window, what would it tell its calf about things inside the house?
  - If a vegetable and knife had a conversation, what would it be?
  - If the gas stove spoke to the pan, what would they talk about?
  - What could a conversation between a potato, onion and peas be?

- After discussions, each group to write their responses on a piece of paper.
- Make the groups exchange their answers with a different group. Each group to then read the answers and review the usage of punctuation marks. Groups to suggest corrections and share with the whole group.

WEEK 3 : DAY 2

Activity 2 Poster Making

35 mins

Learning Objective

At the end of this activity, students will be able to write different kinds of letters and essays using appropriate style.

- Ask students to imagine they have lost their cycle. How would they feel? How would they describe the cycle to others so that they can help find it? Tell your class today a poster will be made to help find the lost cycle.
- Ask them what information will be required to make this poster. For example, what brand, what colour and what size is the cycle? What are its striking features (for example, a broken headlight, old tyres, some sticker pasted, etc.)? Add a picture of the cycle and your contact number. Keep noting these points on the board.
- Once you have the key points, ask them how they would make a poster – heading, picture; its qualities – colour, brand, size; its striking features – broken tail light, headlight, painted spokes, etc.
- Get them into groups of 3-4 and give them time to make a poster and share with the class. (In case cycles are not common in your area – use something that students are familiar with. It could even be a pet).

WEEK 3 : DAY 3

Activity 1 Appreciation Note

35 mins

Learning Objective

At the end of this activity, students will be able to read and comprehend a text and answer questions related to it.

- Write the following paragraph on the blackboard. Read it with students and then ask them to share their thoughts on it. Please share the meaning of the story in the local language.

A civilization is a complex society where people live together and share common customs, traditions, and systems of governance. Civilizations are often marked by advances in areas like agriculture, art, science, and architecture. Early civilizations, such as those in Mesopotamia and the Indus Valley, developed along rivers because water was essential for farming and daily life. People in a civilization usually create systems of writing, laws, and trade to organize their lives. A civilization helps its people grow and thrive by working together to build cities, create tools, and share knowledge.

- Ask students to think about the questions given below and try to answer them in their notebooks:
  - What is a civilization?
  - Name two early civilizations mentioned in the paragraph.
  - Why did early civilizations develop along rivers?
  - What are some areas of advancement in a civilization?

WEEK 3 : DAY 3

Activity 2 Different perspectives

35 mins

Learning Objective

At the end of this activity, students will be able to write stories, poems, posters etc. creatively.

1. Write 'Point of View' on the blackboard. Ask students what they think this might mean. Accept all answers and write them on the blackboard, then circle the ones which are correct.
2. Explain how 'point of view' refers to the perspective of the person who is telling the story or narrating something or seeing something from their understanding and knowledge. The narrator can tell the story/incident from 1st person, 2nd person or 3rd person point of view. The pronouns used can help us find out which point of view it is:
   - 1st person - 'I' and 'we'
   - 2nd person - 'you'
   - 3rd person - 'he', 'she', 'it', they'(You can write the above on the board)
3. Divide your class into groups of 4. Give each group one of the situations below and ask them to frame the description of the situation from an unusual point of view. For instance:
   - 1st Situation – An Indian flag narrating what it sees
   - 2nd Situation - The tap describing what it sees on school days and on weekends
   - 3rd Situation - School building as a narrator
   - 4th Situation - Blackboard as the narrator
4. Once they have discussed and completed the task, each group can narrate their story to the rest of the class.
5. As homework, ask students to choose another picture and write the story from a different point of view.

WEEK 3 : DAY 4

Activity 1 Write a Story

35 mins

Learning Objective

At the end of this activity, students will be able to write short paragraphs with the help of verbal/visual clues.

- Begin the class by asking students the tasks they do before coming to school (e.g., a sequence of daily activities: waking up, having breakfast, going to school).
- Provide verbal cues related to the pictures, such as: “She wakes up in the morning.”, “After breakfast, she packs her bag.”, “She leaves the house and goes to school.”
- Ask students to write a short paragraph based on the verbal cues. They should:
  - Use linking words to connect their sentences logically.
  - Write at least 5-6 sentences to describe the sequence of events.
  - Focus on using correct grammar, spelling, and punctuation.
- Have students pair up and read each other’s paragraphs.
- Ask them to suggest any improvements (e.g., adding or changing linking words).

WEEK 3 : DAY 4

Activity 2 Cinquain poem

35 mins

Learning Objective

At the end of this activity, students will be able to write stories, poems, posters etc. creatively.

- Introduce the structure of a Cinquain poem, a five-line poem with a specific pattern:
  - Line 1: One word (title) – a noun
  - Line 2: Two words – adjectives describing the noun
  - Line 3: Three words – action verbs related to the noun
  - Line 4: Four words – a phrase or feeling about the noun
  - Line 5: One word – synonym or related word for the title

  Example:
  - Tree
  - Tall, green
  - Growing, swaying, shading
  - A home for birds
  - Nature
- Ask students to think of something they like (e.g., an animal, a place, a favorite thing).
- List some examples on the board to inspire ideas.
- Guide students to write their poem step by step, following the Cinquain structure.
- Encourage them to use creative, descriptive words.
- Invite a few students to read their poems aloud.
- Discuss how each poem makes the subject come alive through words.

WEEK 3 : DAY 5

Assessment 1 Nouns and Adjectives

35 mins

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

LO **5.E.LO13:** Writes paragraphs in English from verbal, visual clues, with appropriate punctuation marks and linkersc.

1. Write the following questions on the board. Give students a few minutes to think about them.
   a. Do you think it is fair to keep birds in cages?
   b. Do you think that the birds would be as happy in a cage while the people view them?
3. Ask students to express their opinion, give reasons and write about it in their notebooks.

WEEK 3 : DAY 5

Assessment 2 Mystery Bag Story

35 mins

Competency

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

LO

5.E.LO17: Attempts to write creatively (stories, poems, posters, etc).

1. Prepare a mystery bag filled with 5–6 small, random objects (e.g., a toy car, a feather, a key, a small book, a shell, or a pencil). You can choose objects which are easily available for you.
2. Create curiosity among students by asking them to guess what is inside the mystery bag.
3. Reveal the items of the bag on the table for everyone to see.
4. Ask students to write their own creative story using at least 3 of the objects from the bag.
5. Encourage them to:
   a. Create an interesting beginning, middle, and end.
   b. Use descriptive language to bring their story to life.
   c. Use proper punctuation and linkers like and, but, because, so, then etc.

Sample Learning Level Tracker

(Teachers are suggested to maintain this tracker at the end of each week)

LEARNING LEVEL TRACKER

About the Traker: Keep a record of weekly assessment results in the traker. As you conduct assessment based on the activities suggested.

Put a tick mark as per the following:
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Level 2 (Satisfactory): Solves most of the problems with external support
Level 3 (Excellent): Solves problems independently with minimum external support

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

Roll No.	Name of the Student	Week 3					
		5.E. L013			5.E. L017		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

CM IMPACT

Meghalaya Class Readiness Programme

ENGLISH

APPENDIX

Main Menu

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
C-1.2 Identifies main points, summarises after a careful reading of the text, and responds coherently	**5.E.LO8** Reads text with comprehension, locates details and sequence of events	**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
	4.E.LO4 Responds verbally and in writing in English to questions based on day-to-day life experiences, an article, story or poem heard or read	**6.E.LO7** Responds to a variety of questions on familiar and unfamiliar texts verbally
C-5.1 Uses appropriate grammar and structure in their writing	**4.E.LO16** Uses nouns, verbs, adjectives, and prepositions orally and in writing **5.E.LO6.b** Uses meaningful grammatically correct sentences to describe and narrate incidents; and for framing questions	**6.E.LO12** Writes grammatically correct sentences for a variety of situations, using noun, pronoun, verb, adverb, determiners, etc.

C-5.1 Uses appropriate grammar and structure in their writing	**5.E.LO13** Writes paragraphs in English from verbal, visual clues, with appropriate punctuation marks and linkers	**6.E.LO13** Drafts, revises and writes short paragraphs based on verbal, print and visual clues **6.E.LO10.a** Uses meaningful sentences to describe /narrate factual / imaginary situations in speech
MS C-3.1 Writes different kinds of letters and essays using appropriate style and registers for different audiences and purposes	**5.E.LO17** Attempts to write creatively (stories, poems, posters, etc)	**6.E.LO15** Writes messages, invitations, short paragraphs and letters (formal and informal) and with a sense of audience

CM IMPACT
Meghalaya Class Readiness Programme

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

MATHEMATICS

Main Menu

WEEK 1 : DAY 1

Activity 1 Make numbers

35 mins

Learning Objective

At the end of this activity, students will be able to compare numbers up to 999 for their value based on their place value.

Start by explaining that many numbers can be formed from only 3 digits. For example, if there are 3 digits – 8, 3, and 7, the numbers that can be formed are: 378, 873, 837, 387, 783, 738.

Now divide the students into groups of 4 and give them 3 sets of digits each to form different numbers using those digits:

- Once students have formed the numbers, ask them to write the following:
- The smallest number
- The largest number
- Sort the numbers in ascending order
- The sum of all numbers and
- The difference between the largest and the smallest number
- Observe students as they work and help where needed

WEEK 1 : DAY 1

Activity 2 Human Number Line

35 mins

Learning Objective

At the end of this activity, students will be able to compare numbers up to 999 for their value based on their place value.

- Divide students into groups of three. Each group represents a number, with each student holding a card for one digit (e.g., 345).
- Next, ask the groups to arrange themselves in ascending or descending order based on their numbers.
- Discuss how the hundreds, tens, and one places determine their order.

WEEK 1 : DAY 2

Activity 1 Multiply using Array method

35 mins

Learning Objective

At the end of this activity, students will be able to multiply 2- and 3-digit numbers.

- Use different colouring chalks to explain the Array method of multiplication.
- Write a multiplication on the board. E.g. 123 × 45
- Break the numbers by their Place Values, such as: 123= 100 + 20 + 3 and 45= 40 + 5
- Create a grid using colouring chalks (3 rows 123 and 2 columns for 45). Label the rows with 100, 20, 3 and the columns with 40,5.
- Next, multiply each part of 123 by each part of 45:
  100×40=4000
  100×5=500
  20×40=800
  20×5=100
  3×40=12
  3×5=15
- Lastly, add all the partial products: 4000 + 500 + 800 + 100 + 120 + 15= 5535
- Now, give another 2 and 3 digit multiplications for the students and encourage them to follow this Array method

WEEK 1 : DAY 2

Activity 2 Roll and Multiply

35 mins

Learning Objective

At the end of this activity, students will be able to multiply 2- and 3-digit numbers.

- Divide students into 4-5 groups. Give each group a dice and papers.
- Ask each group to roll a dice to generate a 2-digit and 3-digit number (e.g., 35 × 124).
- Encourage them to solve the multiplication using any strategy (traditional, array method, etc.).
- Ask them to compare results with other groups.
- Repeat this activity for several rounds.

WEEK 1 : DAY 3

Activity 1 Multiply from grid

35 mins

Learning Objective

At the end of this activity, students will be able to multiply 2- and 3-digit numbers.

- Form groups of four and ask them to make this grid on a piece of paper and keep it between them. You can show it on the board. Let them make this quite big.

16	**12**	**17**
15	**11**	**13**
19	**14**	**18**

- Along with this, place tables of 1 to 10 in each group.
- Now show students how they can take turns to drop two small objects (pebbles or erasers or sharpeners) on the grid at the same time.
- They have to multiply the two numbers on which their objects fall.
- Let them look up the multiplication tables with them, and then write down the product.
- The other student takes a turn and writes his/her product. Who got more? Let each group play 5 rounds of this game (or even more).
- Then talk about the process of making the tables after the game.

NOTE: *Provide the background understanding and practice of multiplication as needed. Do this activity a few times (not just once) to strengthen student understanding.*

WEEK 1 : DAY 3

Activity 2 Complete the table

35 mins

Learning Objective

At the end of this activity, students will be able to multiply 2- and 3-digit numbers.

- Make a table of 11 rows and 11 columns on the board. Ask the students to copy this table on their copies.
- Write 2-digit numbers from the second column and second row.
- Demonstrate the multiplication of numbers written in horizontal and vertical alignments.
- Ask students to complete the whole table.

Multiplication	10	11	12	13	14	15	16	17	18
20									
25									
30									
35									
40									
45									
50									

WEEK 1 : DAY 4

Activity 1 Guess the number

35 mins

Learning Objective

At the end of this activity, students will be able to solve simple daily life problems using addition and subtraction of three-digit numbers with and without regrouping, sums not exceeding 999.

- Teacher can initiate and students will play in the group.
  - I am a number.
  - I have 4 digits, among which 4 is one.
  - If you add all my digits, you will get 12.
  - Tell me who I am

- Students will play this in their group.

Note: using similar format, change the level by adding a few more criteria such as;

  - If you add all my digits, you will get 12 (you can change this number).
  - If you add all my digits, you will get an odd number (change this number).
  - If you add all my digits, you will get an even number (change this number).
  - If you add all my digits, you will get a number that is divisible by 5 (change this number).
  - If you add all my digits, you will get a number that is divisible by 3 (change this number).
  - Repeat the activity with different questions and steps.

WEEK 1 : DAY 4

Activity 2 Calendar Math

35 mins

Learning Objective

At the end of this activity, students will be able to solve simple daily life problems using addition and subtraction of three-digit numbers with and without regrouping, sums not exceeding 999.

- Draw a calendar on the board.
- Ask students to draw the same on their copies.
- Now write some questions based on the calendar and ask them to solve.
- Example: “Catherene’s birthday is 275 days from now. How many days after today will that be if today is day 100?”, “If today is January 5th, what date will it be in 15 days?”, “A school term runs from September 1st to December 15th. How long is the term in days?” etc.
- Develop similar type of questions and repeat the steps.

WEEK 1 : DAY 5

Assessment 1

20 mins

Competency

C-1.1 Represents numbers using the place value structure of the Indian number system, compares whole numbers and knows and can read the names of very large numbers.

LO

3.M.LO1.2: Compares numbers up to 999 for their value based on their place value.

Write the below table on the board and ask the students to complete the table:

1. Write the Numbers:
2. 500 + _____ + 5 = 560
3. _____ + 89 + 2 = 960
4. Write the numbers 482, 248, and 284 in ascending order.
5. Which is greater: A truck carrying 789 kg or a van carrying 798 kg?
6. What is the greatest 3-digit number that can be made using the digits 6, 2, and 8?
7. Write the numbers 482, 248, and 284 in ascending order.

WEEK 1 : DAY 5

Assessment 2

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

4.M.LO1.1: Multiplies 2- and 3-digit numbers.

Ask students to make a counting chart from 1 to 100.
Now ask them the questions given below. Students will circle the number answering that question on their counting chart.

1. Multiply 10 by 7
2. 45 multiplied by 2
3. Multiply 3 by 33
4. 76 divided by 4
5. 99 divided by 9
6. Multiply 18 by 5
7. 35 divided by 7

WEEK 1 : DAY 5

Assessment 3

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

3.M.LO1.3: Solves simple daily life problems using addition and subtraction of three-digit numbers with and without regrouping, sums not exceeding 999.

Ask students to pick/select any 4 digits from the number line 1 to 9. Draw the table below on the board and instruct the students to complete the task on their copies.

Create teh highest number with your selected digits What is the sum of all the digits you selected? What is half of the number you created? What is double of the number you created? What is 3 times of the number you created? What is the difference between tghe highest possible number from 4 digits and the number you have created?	
Create the lowest four-digit number with your selected digits What is the sum of all the digits you selected? What is half of the number you created? What is double of the number you created? What is 3 times of the number you created? What is the difference between the lowest possible number from 4 digits and the number you have created?	

Sample Learning Level Tracker

(Teachers are suggested to maintain this tracker at the end of each week)

LEARNING LEVEL TRACKER

About the Traker: Keep a record of weekly assessment results in the traker. As you conduct assessment based on the activities suggested.

Put a tick mark as per the following:
Level 1 (Needs support): Not able to solve problems and having difficulty comprehending the problem
Level 2 (Satisfactory): Solves most of the problems with external support
Level 3 (Excellent): Solves problems independently with minimum external support

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

Roll No.	Name of the Student	Week 1								
		3.M.L01.2			4.M.L01.1			3.M. L01.3		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

WEEK 2 : DAY 1

Activity 1 Calculate the money

35 mins

Learning Objective

At the end of this activity, students will be able to solve simple daily life problems using addition and subtraction of three-digit numbers with and without regrouping, sums not exceeding 999.

- Read aloud the problem given below to students two or three times.
- Write it on the board as well.
- Now ask them to solve the given questions in groups of two.
- When students are solving, keep asking them questions in between.

All students were asked to participate in the tour program at Andrew's school. Andrew was given 200 rupees by her parents. Grandfather gave 75 rupees and grandmother gave 40 rupees. Andrew gave 15 rupees to her brother for expenses. He bought 3 notebooks for 45 rupees and 2 pencils for 4 rupees out of this money. To buy this he gave 50 rupees to the shopkeeper and the shopkeeper returned 1 rupee. Andrew decided to keep 10 rupees for his expenses and deposit the rest for a tour program at the school. How much money did he deposit for the tour program?

- How much money did Andrew get in all? How did you calculate, which mathematical operation did you apply?
- How much money was left with Andrew after giving the money to his brother? How did you know this? Which operation did you apply?
- 3Andrew's brother gave Rs.50 to the shopkeeper, he returned Rs.1. How much will 1 notebook cost? And how much will 1 pencil cost?
- How much money is needed to buy 1 notebook and 1 pencil of the same type?
- How much money did Andrew have left for the tour programme? How did you calculate?

WEEK 2 : DAY 1

Activity 2 Explore your favourite sport

35 mins

Learning Objective

At the end of this activity, students will be able to solve simple daily life problems using addition and subtraction of three-digit numbers with and without regrouping, sums not exceeding 999.

- Create some mock sports scores and write it down on the board.
- Example: “Team A scored 325 runs, and Team B scored 289 runs. How many more runs did Team A score?”, “Team A scored 245 runs in the first innings and 182 runs in the second innings. How many runs did Team A score in total?”, “Runner A completed the race in 127 seconds, while Runner B took 135 seconds. Who was faster, and by how many seconds?” etc.
- Ask students to solve the problems on their copies.
- Encourage each student to create one similar type of question by their own and try to solve it.

WEEK 2 : DAY 2

Activity 1 Multiply using Array method

35 mins

Learning Objective

At the end of this activity, students will be able to divide a number by another number using different methods like pictorially (by drawing dots), equal grouping or repeated subtraction and by using inter-relationship between division and multiplication.

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 $\frac{1}{8}+\frac{1}{8}+\frac{1}{8}+\frac{1}{8}$, There are 4 pieces of $\frac{1}{8}$ together therefore these are $\frac{1}{8}$ in number which can be deduced to $\frac{1}{2}$. Explain how adding $\frac{1}{8}$ for 4 times is equal to 4, multiplied by $\frac{1}{8}$ which also results in $\frac{1}{2}$. (Repetitive addition)
- Tell students to try for $\frac{3}{8}$.
- Also ask students to add $\frac{3}{8}$ twice. What it looks like, students will share their answers.
- Ask, how come $\frac{6}{8}$ is equivalent to $\frac{3}{4}$? 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 $\frac{5}{2}$ paper?'
- Discuss which operation will be applied.

Next discuss,

- $\frac{24}{8}$ = 3 means 24 x $\frac{1}{8}$ = 3. Which means that multiplication is the inverse of division.
- The same is true for division as well.
- Now, can we divide $\frac{1}{8}$ by $\frac{1}{2}$?
- We want to Divide $\frac{1}{8}$ by $\frac{1}{2}$.

WEEK 2 : DAY 2

Activity 2 Storytelling with groupings

35 mins

Learning Objective

At the end of this activity, students will be able to divide a number by another number using different methods like pictorially (by drawing dots), equal grouping or repeated subtraction and by using inter-relationship between division and multiplication.

Divide students into 4-5 groups.
The teacher will distribute many buttons or pebbles to each group.

Now, ask students to distribute the objects equally into 5 groups. Then motivate them to prepare some daily life situations based on the numbers and groups.

WEEK 2 : DAY 3

Activity 1 Estimate and verify- 1

35 mins

Learning Objective

At the end of this activity, students will be able to estimate sum, difference, product and quotient of numbers and verifies the same using different strategies like using standard algorithms or breaking a number and then using operation.

Set up four stations in your classroom- Addition, Subtraction, Multiplication and Division.
Divide students into 4 groups consisting of 4-5 members in each group and place them at the stations mentioned.
At each station, other students will-

- Estimate the answer to a problem
- Solve it using a standard algorithm
- Compare their estimation with exact answer

Teacher can prepare some problems consisting daily life problems, complex operation etc.

WEEK 2 : DAY 3

Activity 2 Estimate and verify- 2

35 mins

Learning Objective

At the end of this activity, students will be able to estimate the length of an object/distance between two locations and verifies them by actual measurement.

- Tell students - Here, we are going to measure things. Begin with something smaller like a window or door. And then move on to something longer, like a wall or the floor.
- Start by asking students to guess: If we measure this window or board in your hand spans, how many hand spans will it be?
- Students make their guesses and write this down in their notebook.
- Now, have them actually measure the window/board with their hand spans and check against the guesses they had noted. They can work in pairs – one measures and the other notes, and then they reverse their roles.
- You can use this approach for different things:
- Length of the room (in steps)
- Length of the book (in fingers)
- How many thumb impressions will fit on the cover of the book?
- Finally, ask students to discuss in groups – why did everyone not get exactly the same measure? Then they can present it to the whole class.

WEEK 2 : DAY 4

Activity 1 2D and 3D shapes

35 mins

Learning Objective

At the end of this activity, students will be able to identify and make 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc.

- Help students to identify 2D and 3D shapes. Begin by discussing basic 2D shapes such as circles, squares, triangles, and rectangles. Then move on to more complex shapes such as trapezoids and parallelograms.
- Explain that the 2D shapes are flat and can be seen from one angle whereas 3D shapes have depth and can be seen from multiple angles. Show examples of 3D shapes such as cubes, spheres, cones, and cylinders.

Bring experience in the classroom of 2D and 3D shapes by showing and touching the available materials.

- How did you know if the table is a 2D or 3D shape?
- Can you name anything used in your home that is 3D shaped?
- Can you name any real-life objects that are 2D shaped?

Discuss more such questions.

WEEK 2 : DAY 4

Activity 2 Paper Folding for symmetry

35 mins

Learning Objective

At the end of this activity, students will be able to identify and make 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc.

- Provide students with square sheets of paper.
- Ask them to fold the paper to create different 2D shapes like triangles, rectangles, or squares.
- Discuss the lines of symmetry in the folded shapes. For example: Fold a square diagonally to form two triangles.
- Ask them to cut along the lines to create the shapes.
- Challenge them to assemble the shapes to create new objects (e.g., a house using a triangle for the roof and a square for the base).

WEEK 2 : DAY 5

Assessment 1

15 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

5.M.LO1.4: Estimates sum, difference, product and quotient of numbers and verifies the same using different strategies like using standard algorithms or breaking a number and then using operation.

Write the questions on the board and ask students to solve in groups:

1. Add any two numbers to bring 875. Make three number sets of that.
2. The difference of which two numbers will be 35? Make three number sets of that.
3. Write your age. Then, find out how many days old are you?
4. If there are 56 villages in a block in Meghalaya and there are 100 blocks how many villages are there in all the blocks?

WEEK 2 : DAY 5

Assessment 2

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

4.M.LO1.2: Divides a number by another number using different methods like pictorially (by drawing dots), equal grouping or repeated subtraction and by using inter-relationship between division and multiplication.

1. Divide students into two large groups, give names to both groups.
2. Have a crossword game with numbers between the two groups.
3. The first group will say a three-digit number, the second group will say a two-digit number from the number at the unit place spoken by the first group. Example, if the first group said 132 then the second group can say 25, then the first group would say 573 then the second group would say 38…….
4. Now ask them to choose 5 three-digit numbers and multiply them by choosing a two-digit number.
5. Then ask them to do division with the same numbers.

WEEK 2 : DAY 5

Assessment 3

15 mins

Competency

C-3.5 Devises strategies for estimating the distance, length, time, perimeter (for regular and irregular shapes), area (for regular and irregular shapes), weight, and volume and verifies the same using standard units.

LO

4.M.LO6.a: Estimates the length of an object/distance between two locations and verifies them by actual measurement.

Write down the questions on the board and ask the students to copy those and solve them:

1. Estimate the distance between your desk and the teacher's desk in meters.
2. Measure the height of the door using a measuring tape and compare it with your estimate.
3. Which is the most reasonable estimate for the length of a classroom blackboard?
   (a) 1 cm
   (b) 1 m
   (c) 10 m
   (d) 100 m

WEEK 2 : DAY 5

Assessment 4

15 mins

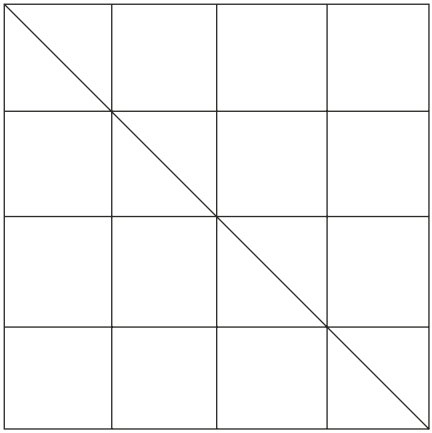
Competency

C-2.1 Identifies, compares, and analyses attributes of two- and three-dimensional shapes and develops vocabulary to describe their attributes/properties.

LO

3.M.LO4.1: Identifies and makes 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc.

Draw this figure on the board. Ask the students to draw the same on their copies and count the number of squares, rectangles and triangles in the figure.
Then ask them to colour the shapes as triangle- red, square- yellow and rectangle- blue.



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

Roll No.	Name of the Student	Week 2											
		5.M.L01.4			4.M. L01.2			4.M.L06.a			3.M.L04.1		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

Main Menu

WEEK 3 : DAY 1

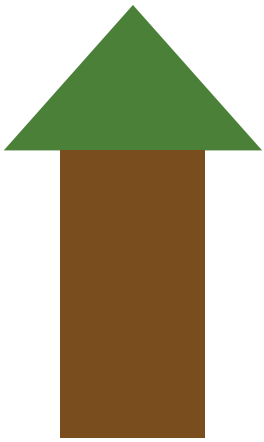
Activity 1 Find out the area

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.

- 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 3 : DAY 1

Activity 2 Explore the area

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.

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 3 : DAY 2

Activity 1 Know your classroom

35 mins

Learning Objective

At the end of this activity, students will be able to represent the collected information in tables and bar graphs and draws inferences from these.

Form groups of four. Write the questions given below. Give them 5 minutes to look around the class and note it down within each group based on the questions. They should try to find at least 3 items in the class against each question.

How many objects are:

- Bigger than you?
- Smaller than you?
- Red in colour
- Green in colour
- Round in shape
- Square in shape

- Once done, have them present what they have found.
- Now ask them to make a table like given below:

Objects	*Numbers*
Bigger than me	
Smaller than me	
Red	
Green	
Round shaped	
Square shaped	

WEEK 3 : DAY 2

Activity 2 Data with signs and symbols

35 mins

Learning Objective

At the end of this activity, students will be able to represent the collected information in tables and bar graphs and draws inferences from these.

- Divide students into 4-5 groups. Explain the signs and directions to each group.

Sign	*Meaning*
	a student wearing a white
	a student wearing a red
	a student wearing a yellow
	a student wearing a bule suit
	a student wearing a green

- Read this statement to students and write it on the board as well.
- "There are a total of 37 students in a class. Out of these, 7 students were wearing green clothes. 5 students have come dressed in red, 4 in yellow, 8 in blue and the rest in white."
- Now ask students to display this information in a table as a graph.

Repeat this activity with a different statement and follow the similar steps

WEEK 3 : DAY 3

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.

- 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 3 : DAY 3

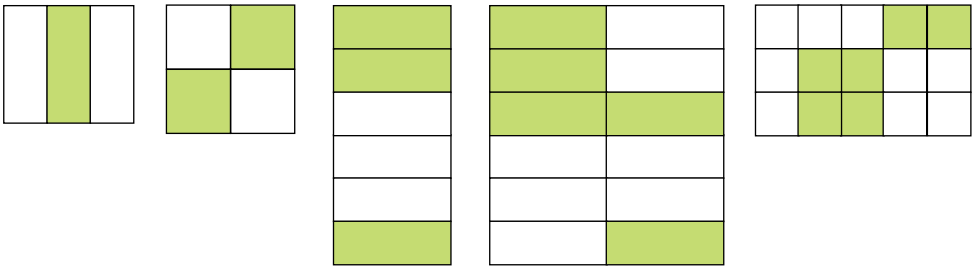
Activity 2 Draw fractions

35 mins

Learning Objective

At the end of this activity, students will be able to identify half, one-fourth, three-fourths of a whole in a given picture by paper folding and also in a collection of objects.

- Draw these pictures depicting fractions on the board.



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

WEEK 3 : DAY 4

Activity 1 Fractions with grid

35 mins

Learning Objective

At the end of this activity, students will be able to convert fractions into decimals 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 one hundredth = 0.01

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

Whole thing	*Part of whole thing*	*Fractional numbers*	*Decimal numbers*
1 meter	Half	1/2 meter	0.5 meter
Rs. 1	Quarter	1/4 Rupees	Rs. 0.25
Rs. 5		1/5 Rupees	
100 meter			0.1 meter
Rs. 100	One tenth		
Rs. 10	Half		

WEEK 3 : DAY 4

Activity 2 Find equivalent fraction

35 mins

Learning Objective

At the end of this activity, students will be able to identify and form equivalent fractions of a given fraction.

Teacher will draw the table on the board.

1						
1/2	1/2					
1/3	1/3	1/3				
1/4	1/4	1/4	1/4			
1/5	1/5	1/5	1/5	1/5		
1/6	1/6	1/6	1/6	1/6	1/6	
1/7	1/7	1/7	1/7	1/7	1/7	1/7
1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/9
1/10	1/10	1/10	1/10	1/10	1/10	1/10	1/10	1/10	1/10
1/11	1/11	1/11	1/11	1/11	1/11	1/11	1/11	1/11	1/11	1/11
1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12

The above figure shows us various fractions of a bar.

The one whole bar is first divided into two parts, becoming 1/2 and 1/2.
(1/2 + 1/2 = 2/2 = 1)

If the same bar is divided into 3 equal parts, then each fraction is represented as 1/3. (1/3 + 1/3 + 1/3 = 3/3 =1)

Similarly, for the last row, the bar is divided into 12 parts each fraction Representing 1/12 of the whole.

Next, after explaining the equivalent fractions the teacher will ask the students to represent the equivalent fraction in figure.

WEEK 3 : DAY 5

Assessment 1

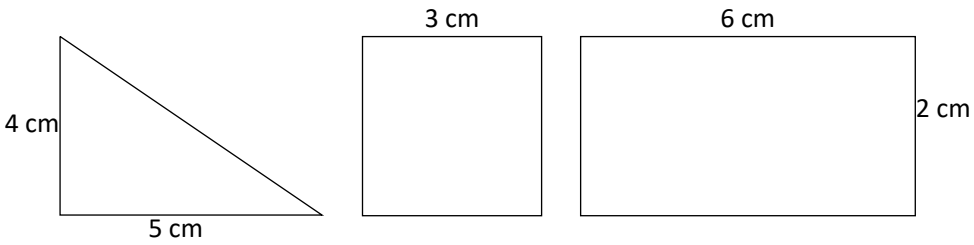
10 mins

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

LO **4.M.LO4:** Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit.

Draw these shapes on the board and write the given measurements. Ask students to find out the following:

1. Area of triangle
2. Perimeter of square
3. Area and perimeter of rectangle



WEEK 3 : DAY 5

Assessment 2

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.

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

1) 	1/2	3/6	(5/6)	1/6	6/5
2) 	1/4	3/4	1/6	1/3	1/5
3) 	1/2	3/8	1/6	1/7	6/8
4) 	1/3	3/6	1/2	1/5	1/4
5) 	4/6	5/6	4/5	1/6	3/5
6) 	1/2	1/4	1/2	1/5	2/1
7) 	1/2	3/4	5/6	1/4	4/3
8) 	1/6	2/3	3/3	1/3	2/5
9) 	3/5	3/4	5/4	4/6	4/5

WEEK 3 : DAY 5

Assessment 3

10 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.LO2.1: Identifies half, one-fourth, three-fourths of a whole in a given picture by paper folding and also in a collection of objects.

1. Draw the below table on the board.
2. Ask students to complete the table, working in groups of 4.

Figure	*Fraction*	*Object/Group*	*Total parts*
	*1/4*	*1*	*4*
	1/3		
			
	2/5		
			
	5/9		

WEEK 3 : DAY 5

Assessment 4

10 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 **5.M.LO2.4:** Converts fractions into decimals and vice versa.

The teacher will draw the table on the board and ask the students to copy the same on their copies.
Fill in the missing value in the given table.

Fraction	***Decimal***
1/5	
	0.98
3/8	
	12.35
4/15	

WEEK 3 : DAY 5

Assessment 5

10 mins

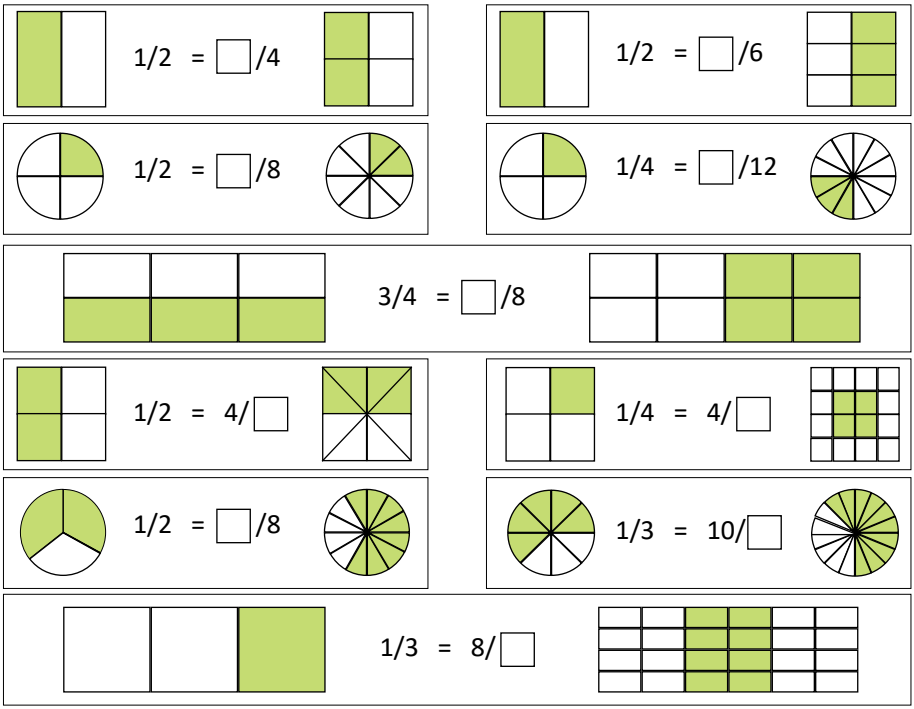
Competency

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

5.M.LO2.2: Identifies and forms equivalent fractions of a given fraction.

1. Make small groups of 4 to 5 each and distribute the worksheet to each group.
2. Ask the group to find out the complete fractions that are having the blank.
3. Discuss in the group how given fractions are related to each other.



WEEK 3 : DAY 5

Assessment 6

15 mins

Competency **C-4.3** Selects appropriate methods and tools for computing with whole numbers, such as mental computation, estimation, or paper pencil calculation, in accordance with the context.

LO **4.M.LO13:** Represents the collected information in tables and bar graphs and draws inferences from these.

1. Prepare a table for time spent by you in a day for different activities. Show the same information in a bar graph or pictograph.
2. Look at the table below and answer the questions.

Fruit	*Numbers*
Apple	24
Bananas	15
Mangoes	12
Oranges	30
Papayas	13

a) Which fruits are in maximum number? _____
b) Which fruits are in minimum numbers? _____
c) Which fruit has exactly double number than number of mangoes? _____
d) Which fruit has exactly half the number of oranges? _____

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Name of the Teacher	**District**
Assessment Date	

Roll No.	Name of the Student	Week 3														
		4.M.L04			4.M.L02.2			4.M.L02.1			5.M.L02.4			5.M.L02.2		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

Main Menu

CM IMPACT
Meghalaya Class Readiness Programme

MATHEMATICS

APPENDIX

Main Menu

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

Competency Preparatory Stage (PS)	Pre-requisite LO	Grade-level
C-1.1 Represents numbers using the place value structure of the Indian number system, compares whole numbers and knows and can read the names of very large numbers	**3.M.LO1.2** Compares numbers up to 999 for their value based on their place value	**6.M.LO2** Recognises and appreciates (through patterns) the broad classification of numbers as even, odd, prime, co-prime, etc.
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	**3.M.LO1.3** Solves simple daily life problems using addition and subtraction of three-digit numbers with and without regrouping, sums not exceeding 999	**6.M.LO1** Solves problems involving large numbers by applying appropriate operations (addition, subtraction, multiplication and division)
	4.M.LO1.1 Multiplies 2- and 3-digit numbers	
	4.M.LO1.2 Divides a number by another number using different methods like pictorially (by drawing dots), equal grouping or repeated subtraction and by using inter-relationship between division and multiplication	

C-1.4 Recognises, describes, and extends simple number patterns such as odd numbers, even numbers, square numbers, cubes, powers of 2, powers of 10, and Virahanka–Fibonacci numbers	**5.M.LO1.4** Estimates sum, difference, product and quotient of numbers and verifies the same using different strategies like using standard algorithms or breaking a number and then using operation	**6.M.LO2** Recognises and appreciates (through patterns) the broad classification of numbers as even, odd, prime, co-prime, etc. **6.M.LO3** Applies HCF or LCM in a particular situation
C-3.5 Devises strategies for estimating the distance, length, time, perimeter (for regular and irregular shapes), area (for regular and irregular shapes), weight, and volume and verifies the same using standard units	**4.M.LO6.a** Estimates the length of an object/distance between two locations and verifies them by actual measurement	**6.M.LO17** Finds out the perimeter and area of rectangular objects in the surroundings like floor of the class room, surfaces of a chalk box etc.
C-2.1 Identifies, compares, and analyses attributes of two- and three-dimensional shapes and develops vocabulary to describe their attributes/ properties	**3.M.LO4.1** Identifies and makes 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc.	**6.M.LO12.2** Demonstrates an understanding of line symmetry by creating symmetrical 2-D shapes
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.LO2.1** Identifies half, one-fourth, three-fourths of a whole in a given picture by paper folding and also in a collection of objects **4.M.LO2.2** Represents the fractions as half, one fourth and three-fourths by using numbers **5.M.LO2.2** Identifies and forms equivalent fractions of a given fraction	**6.M.LO5** Uses fractions and decimals in different situations which involve money, length, temperature etc.

Main Menu

CM IMPACT
Meghalaya Class Readiness Programme

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

SCIENCE

Main Menu

WEEK 1 : DAY 1

Activity 1 Plant Explorers Challenge

35 mins

Learning Objective

At the end of this activity, students will be able to observe and identify the natural (insects, plants, birds, animals, geographical features, sun and moon, stars, planets, natural resources) and social (houses, relationships) components in their immediate environment.

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

[Need Resources: Plant parts (leaves, flowers, seeds), plant identification cards, magnifying glasses, blank charts & markers]

- Divide the class into 4-5 groups and assign each group as a plant research team.
- Provide materials like plant parts (leaves, flowers, seeds), plant identification cards, magnifying glasses, blank charts, and markers to each group.
- Take students for a short nature walk around the school to observe and collect samples of plants (optional if feasible and safe).
- Ask each group to carefully observe and identify plants using the identification cards and their features.
- Encourage groups to classify plants into categories such as trees, shrubs, herbs, or climbers, based on their observations.
- Each group will document their findings on a chart, including plant names, distinguishing features, and any known uses.
- Groups will present their charts to the class, explaining how they identified the plants and sharing key characteristics.
- Conclude with a discussion on the importance of observing plants and recognising biodiversity in the environment.

WEEK 1 : DAY 1

Activity 2 Plant Discovery Expedition

35 mins

Learning Objective

At the end of this activity, students will be able to observe and identify the natural (insects, plants, birds, animals, geographical features, sun and moon, stars, planets, natural resources) and social (houses, relationships) components in their immediate environment.

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

[Need Resources: Plant parts (leaves, flowers, fruits) Plant identification cards, Magnifying glasses, Blank charts, Markers]

- **Make a group of 4-5 students.**
- **Provide each group with:**
  - A list of common plants found in Meghalaya (or a plant identification chart).
  - A magnifying glass to observe plant features closely.
  - Paper and pens for recording their findings.
- **Task 1: Observe plants in the school compound or surrounding area:**
  - Each group will be assigned a specific area to observe different plants.
  - They will identify plants based on observable features such as:
    - Leaf shape, size, and colour.
    - Aroma (if flowers or leaves have a distinct smell).
    - Texture of the leaves and bark.
    - Flower or fruit type (if present).
    - Overall appearance and structure (tree, shrub, herb).
- **Task 2: Record observations:**
  - For each plant, students will:
    - Note down the plant's features.
    - Draw a sketch or take a photo (if possible).
    - Record if the plant has any notable functions (e.g., medicinal, edible, ornamental).

- **Task 3: Categorise plants:**
  - Students categorise the plants into groups based on the features they observed (e.g., flowering vs. non-flowering, medicinal vs. non-medicinal).
- **Wrap-up Discussion:**
  - Each group will share their findings with the class.
  - Discuss how different features help in identifying plants and their roles in the local environment.
  - Emphasise the importance of plants in Meghalaya's ecosystem and culture.

WEEK 1 : DAY 2

Activity 1 Latitudes and Longitudes

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Teachers can either arrange the listed materials or ask students to bring them a day in advance

[Need Resources: Checklist of common animals and birds (dogs, cows, squirrels, crows, sparrows, eagles), Binoculars, Notebooks or paper, Pens or pencils]

- **Form** groups of students, ensuring a mix of skills and interests in each team.
- **Provide** each group with a checklist of common animals and birds, such as dogs, cows, squirrels, crows, sparrows, or eagles.
- **Distribute** binoculars (if available) and notebooks or paper to help students observe and record their findings.
- **Explore** the school yard, park, or a nearby open space to find animals and birds in their natural environment.
- **Observe** key features of each animal or bird, such as:
    - **Size:** Small, medium, or large.
    - **Colour:** Specific colours or patterns.
    - **Shape:** Body shape, wingspan, etc.
    - **Fur or Feathers:** Type, texture, or appearance.
    - **Movement:** How they walk, run, fly, or interact with their surroundings.

- **Record** observations in notebooks or on the provided paper, using the checklist to identify the animals and birds.
- **Share** findings with the class by presenting details about the observed animals and birds' physical features, behaviour, and habitats.
- **Discuss** the importance of animals and birds in maintaining ecological balance and reflect on ways to respect and protect wildlife.

WEEK 1 : DAY 2

Activity 2 Plant Discovery Quest

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

[Need Resources: Sketching paper, Pencils and erasers, Colour pencils or crayons, Magnifying glasses, Plant observation worksheet]

- **Observe** the plants in your surroundings, such as in the school yard, park, or garden. Pay close attention to trees, shrubs, flowers, and grasses.
- **Identify** at least three plants by noting their features:

  Shape, size, and colour of leaves.

  Height of the plant (short, medium, or tall).

  Presence of flowers, fruits, or seeds.

- **Sketch** one plant that catches your attention. Label its parts, including leaves, stem, flowers, fruits, or roots.
- **Compare** your observations with your classmates. Discuss similarities and differences in the plants you observed.
- **Present** one plant to the class, describing what makes it unique and interesting, such as its appearance, function, or uses.
- **Reflect** on why plants are important for the environment and share one way you can help protect and nurture them.

WEEK 1 : DAY 3

Activity 1 Animal Life Cycle Study

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Teachers can either arrange the listed materials or ask students to bring them a day in advance

- **Form** small groups of 4–5 students and assign each group an animal to study, such as a butterfly, frog, hen, or cow.
- **Provide** visual aids like charts, flashcards, or images illustrating the animal's life cycle stages: birth, growth, reproduction, and maturity.
- **Create** a visual representation of the chosen animal's life cycle using drawings, crafts, or models (e.g., clay figures, paper cutouts). Include the animal's needs at each stage, such as food, habitat, and care.
- **Observe** animals in their different life stages by visiting a nearby field, farm, or through a video presentation. Relate your observations to the life cycle stages being studied.
- **Present** your life cycle projects to the class, explaining:
  - Each stage of the life cycle.
  - The animal's role in the ecosystem.
  - Its importance in daily life.
- **Discuss** the impact of human actions (like deforestation or pollution) on animal life cycles. Brainstorm practical ways to protect and conserve animal habitats.

WEEK 1 : DAY 3

Activity 2 Water Cycle Study

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- Divide the class into different groups.
- Provide each group with a worksheet that includes information about the local water supply system (e.g., sources like rivers, lakes, or groundwater in Meghalaya, and how water is treated and distributed).
- Have each group research and discuss the journey of water from its source to the home, using books, online resources, or teacher-provided materials.
- Ask the students to create a flowchart or diagram showing how water is sourced, treated, and delivered to households (they can include steps like water collection, treatment, storage, and distribution).
- Each group should also include observations on the importance of conserving water and its uses in daily life (e.g., drinking, cleaning, agriculture).
- To enhance the activity, students can predict what might happen if the water supply system was disrupted or polluted, and how it would impact their daily lives.
- After completion, each group will present their flowchart and findings to the class.
- Conclude with a class discussion on the importance of water conservation and the role of the community in maintaining the water supply system.

WEEK 1 : DAY 4

Activity 1 Journey of Water

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

- Create small working groups.
- Provide each group with a worksheet and materials like paper, markers, and a diagram of the water cycle.
- Ask each group to research the stages of the water cycle (evaporation, condensation, precipitation, and collection) using provided materials, books, or online resources.
- Have students draw and label the water cycle diagram, showing how water moves through the environment, including examples of local water sources (rivers, lakes, or rain).
- Instruct students to observe their surroundings (e.g., the weather, rainfall, or any visible bodies of water) and discuss how these contribute to the local water cycle.
- Encourage students to predict how the water cycle affects their daily lives, such as the role of rain in farming or the importance of water conservation.
- Each group will present their diagram and findings to the class, explaining each stage of the water cycle and its importance.
- Conclude with a discussion on how human activities can impact the water cycle (e.g., pollution or deforestation) and the importance of maintaining the balance of natural water systems.

WEEK 1 : DAY 4

Activity 2 The Snowman

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- **Organise** students in small teams and provide each group with seeds (e.g., beans), pots, soil, and water.
- **Plant** the seeds in the pots and ask students to observe their growth over a week, recording daily changes in a notebook.
- **Match** their observations to diagrams or images of a plant's life cycle stages (seed, sprout, seedling, mature plant, flower, fruit) provided by the teacher.
- **Identify** and discuss the resources plants need at each stage of growth, such as water, sunlight, and nutrients.
- **Present** findings in a classroom discussion where groups explain how the plant life cycle supports human life by providing food, oxygen, and other resources.
- **Conclude** with a discussion on practical ways to care for plants and promote growth in the local environment, emphasising the

WEEK 1 : DAY 5

Assessment 1

35 mins

Competency

C-1.1 Observes and identifies the natural (insects, plants, birds, animals, geographical features, sun and moon, stars, planets, natural resources) and social (houses, relationships) components in their immediate environment.

1. **Identifying Plants**
   a. Question 1:
      i. Name two plants you see around your school or home.
      ii. What type of plant it is (tree, bush, flower, etc.)?
      iii. One feature of the plant (e.g., leaf colour, flower, or size).
   b. Question 2:
      i. Describe one plant you like:
      ii. What does it look like? (colour, size, leaves, or flowers).
      iii. Where do you usually find it (in a garden, by the road, etc.)?
2. **Identifying Animals and Birds**
   c. Question 3:
      i. Name two animals or birds that live near you. For each:
      ii. Write the name of the animal or bird.
      iii. Describe what it looks like (colour, size).
      iv. Where you usually find it (in the trees, near the water, etc.).

WEEK 1 : DAY 5

Assessment 2

35 mins

Competency

C-2.1 Identifies natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Write the following questions on the board and ask the students to answer them on their copies.

1. Life Cycle of a Plant:
   a. Draw the life cycle of a plant, labelling the key stages (seed, germination, growth, flowering, and seed production).
   b. Describe in a few sentences how a plant grows from a seed to a mature plant.
2. Life Cycle of an Animal:
   a. Choose an animal (e.g., frog, butterfly, or hen) and draw its life cycle. Label each stage.
   b. Explain the significance of each stage in the animal's development.

Sample Learning Level Tracker

(Teachers are suggested to maintain this tracker at the end of each week)

LEARNING LEVEL TRACKER

About the Traker: Keep a record of weekly assessment results in the traker. As you conduct assessment based on the activities suggested.

Put a tick mark as per the following:
Level 1 (Needs support): Not able to solve problems and having difficulty comprehending the problem
Level 2 (Satisfactory): Solves most of the problems with external support
Level 3 (Excellent): Solves problems independently with minimum external support

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

Roll No.	Name of the Student	Week 1					
		4.E. L04			5.E. L08		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

Main Menu

WEEK 2 : DAY 1

Activity 1 Nature Walk

35 mins

Learning Objective

At the end of this activity, students will be able to observe and describe diversity among plants, and birds and animals in their immediate environment (shape, sounds, food habits, growth, habitat).

- Divide the class into 4-5 groups and assign each group a specific area around the school or nearby locality to explore.
- Provide materials like notebooks, pencils, coloured pencils, cameras (if available), and a list of categories to observe for each plant.
- Assign tasks to each group:
  - **Group 1:** Identify and classify plants into different categories (trees, shrubs, herbs, climbers, etc.). Describe their physical features (leaf shape, size, and colour).
  - **Group 2:** Observe the growth patterns of the plants. For example, how do the plants grow (tall, bushy, spread out)? Record if the plants are flowering or fruiting.
  - **Group 3:** Identify any sounds associated with plants. Are there any plants that make noise when the wind blows, such as rustling leaves or shaking branches?
  - **Group 4:** Observe and describe the plants' interaction with animals. Are any plants attracting insects, birds, or other animals? Record what these interactions might be (e.g., a flower attracting bees or birds eating fruits).
- Ask students to draw or take notes on the plants they observe, focusing on key features like shape, sounds, growth patterns, and the habitat of the plant.
- Create a simple presentation on the board or chart paper where each group shares their findings. They can either draw their observations or present a short description, highlighting:
  - The diversity of plant types.
  - Growth habits and habitats.

- Sounds or food habits related to the plants.
- Interaction with animals (such as pollination, feeding).

- Conclude with a class discussion on the importance of plant diversity in the local environment of Meghalaya. Discuss how the various types of plants play different roles in the ecosystem, such as providing food, shelter, and oxygen.

WEEK 2 : DAY 1

Activity 2 Design Your Transport System

35 mins

Learning Objective

At the end of this activity, students will be able to observe and describe diversity among plants, and birds and animals in their immediate environment (shape, sounds, food habits, growth, habitat).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- Divide the class into small groups of 4-5 students.
- Distribute A4 sheets, coloured markers, and cut-out pictures of various transport modes (e.g., boats, bicycles, trains, aeroplanes).
- Assign each group a scenario: "Imagine you live in a town surrounded by rivers, hills, and plains. Design a transport system that connects these areas efficiently. Consider both natural and human-made systems."
- **Design the Transport System:**
  - Instruct the groups to draw a map of their town on the A4 sheet.
  - Ask them to plan routes and modes of transport suitable for different terrains. For example, use boats for rivers, cable cars for hills, and roads for plains.
  - Encourage them to include labels and short notes explaining their choices.
- **Have each group present their transport system to the class, explaining:**
  - How they utilised natural systems (e.g., rivers for boat routes).
  - The human-made infrastructure they added (e.g., bridges, tunnels).
  - Why they selected specific modes of transport for different areas.
- **Class Discussion:**
  - Facilitate a discussion comparing the transport systems.
  - Highlight key factors such as efficiency, environmental impact, and adaptability to natural features.
- Conclude by discussing the importance of integrating natural and human-made systems in designing sustainable transport solutions.

WEEK 2 : DAY 2

Activity 1 Plant and Habitat Explorers

35 mins

Learning Objective

At the end of this activity, students will be able to observe and describe diversity among plants, and birds and animals in their immediate environment (shape, sounds, food habits, growth, habitat).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- **Explore** your surroundings, such as the school yard, park, or nearby open spaces, to observe at least three birds and three animals. Focus on their size, shape, and movements.
- **Record** your observations in a table with the following headings:
  - Shape and size: Describe their appearance.
  - Sounds: Note the types of sounds they make.
  - Food habits: Observe or infer what they eat.
  - Habitat: Identify where they are commonly found.
- **Classify** the observed birds and animals based on similarities and differences. Use categories such as “Flying vs. Non-Flying,” “Carnivore vs. Herbivore,” or “Tree vs. Land Habitat.”
- **Create** a colourful chart or booklet displaying your findings. Include drawings, labels, and short descriptions for each bird and animal.
- **Present** your chart or booklet to the class, explaining one unique feature of each bird or animal and how they adapt to their habitat or food habits.
- **Reflect** on the importance of biodiversity and discuss ways to protect the habitats of birds and animals in your environment.

WEEK 2 : DAY 2

Activity 2 Communication System Collage

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- Form groups of 4-5 students. Distribute A4-sized sheets, scissors, glue, and magazines or printed images showcasing various communication systems.
- Assign roles to group members: a 'collector' (gathers images), a 'planner' (arranges the layout), and 'presenters' (explain the collage).
- Instruct students to create a collage categorising natural and human-made communication systems. Label each image and write a one-sentence description explaining its function.
- Guide group presentations where each group explains their collage. Ask them to highlight the differences between natural and human-made communication systems.
- Facilitate a discussion on how these systems impact their daily lives. Focus on the role of human-made systems in enhancing global connectivity and the limitations of natural systems.
- Conclude by summarising key points and encouraging students to think of innovative ways to improve communication in their community.

WEEK 2 : DAY 3

Activity 1 Biodiversity Habitat Quest

35 mins

Learning Objective

At the end of this activity, students will be able to observe and describe diversity among plants, and birds and animals in their immediate environment (shape, sounds, food habits, growth, habitat).

- Divide the class into 4-5 groups, assigning each group a specific habitat to focus on. The habitats can include:
  - **Group 1:** Forest habitat
  - **Group 2:** Wetland habitat (e.g., near rivers or ponds)
  - **Group 3:** Grassland habitat (e.g., meadows, plains)
  - **Group 4:** Urban habitat (e.g., town parks, roadsides)
  - **Group 5:** Mountain habitat (e.g., hills, high altitudes)
- Provide each group with a large chart paper and drawing materials (coloured pencils, markers, etc.).
- **Tasks for each group:**
  - Identify the animals and birds that live in the assigned habitat. Research their shape, size, food habits, growth, and any unique features.
  - Draw the habitat on the chart paper. Include key features such as trees, water bodies, plants, and any other important elements that make the habitat unique.
  - Draw the animals or birds that are found in that habitat. For each species, note its shape, size, colour, and any food sources or behaviours (such as migration, feeding habits, etc.).
  - Label the animals and features of the habitat on the chart, clearly showing the different species and how they relate to their environment.
- **Presentations:**
  - Each group will present their habitat chart to the class, explaining:
  - The key animals and birds found in the habitat.

- How these animals and birds are adapted to the habitat (e.g., what they eat, where they live, any special features they have).
- How the habitat supports the biodiversity of species.

- **Class Discussion:**
  - After the presentations, hold a class discussion on:
  - The different types of habitats and how each supports specific animals and birds.
  - The importance of preserving these habitats in Meghalaya.
  - How human activities impact the habitats and the animals living there.

WEEK 2 : DAY 3

Activity 2 Home Electricity Detective

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- Divide the class into small groups of 4-5 students.
- **Provide each group with:**
  - A diagram of a home electrical system (simplified, showing circuits, switches, and appliances).
  - A set of cards labelled with items such as “light bulb,” “fan,” “television,” “fuse,” and “circuit breaker.”
- **Assign Tasks:**
  - Ask each group to place the cards on the correct spots in the diagram where the components are used.
  - Instruct students to connect the components using string or markers to show how electricity flows through the system.
- Guide groups to identify safety features in the diagram (e.g., fuse or circuit breaker) and discuss their importance in preventing electrical accidents.
- Encourage each group to discuss how they use electricity at home and identify one way to reduce energy consumption in their daily activities.
- Have each group present their completed diagrams and reflections to the class.
- Conclude with a class discussion on the significance of electricity in homes and how responsible usage benefits both individuals and the environment.

WEEK 2 : DAY 4

Activity 1 Species Conservation Blueprint

35 mins

Learning Objective

At the end of this activity, students will be able to identify needs of plants, birds, and animals, and how they can be supported (water, soil, food, care).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- **Form** few groups and assign each group a specific species commonly found in Meghalaya:
  - **Group 1:** Local plants (e.g., orchids, bamboo, medicinal plants)
  - **Group 2:** Local birds (e.g., sunbirds, kingfishers, hornbills)
  - **Group 3:** Local animals (e.g., elephants, deer, monkeys)
  - **Group 4:** Endangered species or those impacted by human activity.
- **Provide** each group with a large sheet of paper, markers, and pictures related to their assigned species to help with visualisation and creativity.
- **Identify** the basic needs of the assigned species, including:
  - Food, water, shelter, and space.
  - Special care or conditions they require for survival.
- **Create** a support plan that includes:
  - How the species' natural habitat can be preserved or restored.
  - The impact of human activities (e.g., farming, pollution, deforestation) on their survival.
  - Practical actions humans can take to protect the species, such as reforestation, habitat conservation, or reducing harmful activities.
- **Draw** or map the habitat of the assigned species, showing key elements needed for their survival, like food sources, shelter, and water bodies.
- **Present** your findings and habitat map to the class, explaining how the species can be supported and why protecting them is important for the environment in Meghalaya.

WEEK 2 : DAY 4

Activity 2 The Snowman

35 mins

Learning Objective

At the end of this activity, students will be able to identify natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- Divide the class into groups of 4-5 students. Each group will represent one season.
- **Assign each group a specific task:**
  - **Researcher:** Gathers information on natural changes in the season.
  - **Recorder:** Notes how the season affects daily human activities (e.g., clothing, festivals, farming).
  - **Presenter:** Prepares and delivers the findings.
  - **Designer:** Creates a visual representation using craft materials.
- Supply each group with A4 paper, coloured pens, and access to materials like magazines, newspapers, or books to cut out relevant pictures. Alternatively, allow them to draw and colour their representations.
- **Encourage each group to:**
  - Identify key natural systems influenced by their assigned season (e.g., water cycle changes in monsoon, life cycles of animals in spring).
  - Discuss how human systems adapt (e.g., heating systems in winter, transport adjustments during rain).
- **Ask groups to create a visual chart showcasing:**
  - Natural phenomena during their season.
  - Impact on plants, animals, and humans. Present their chart to the class, explaining the connections between their season and its systems.
- **Facilitate a class discussion to summarise:**
  - The interplay between natural and human-made systems across seasons.
  - The importance of adapting to seasonal changes for survival and sustainability.

WEEK 2 : DAY 5

Assessment 1

35 mins

Competency

C-4.1 Observes and describes diversity among plants, and birds and animals in their immediate environment (shape, sounds, food habits, growth, habitat).

1. Divide the students into groups of 4-5.
2. Assign each group a local plant, bird, or animal species that is common in Meghalaya (e.g., bamboo, sunbird, elephant, or hornbill).
3. Provide each group with chart paper, markers, and research materials (books, internet access, etc.).
4. **Each group will:**
   a. Research their assigned species to identify its key needs (food, water, shelter, space, care).
   b. Identify the natural habitat of the species and any threats to its needs (e.g., habitat destruction, climate change).
   c. Design a "Support Plan" that includes:
      i. What can be done to support the species in its habitat? (e.g., planting native trees, setting up bird feeders, ensuring clean water sources).
      ii. How can the community or government help? (e.g., protected areas, awareness campaigns).
5. Groups will then present their support plan to the class, explaining how they identified the species' needs and the actions people can take to support it.

WEEK 2 : DAY 5

Assessment 2

35 mins

Competency

C-2.1 Identifies natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home).

1. Divide students into 4-5 groups:
2. Distribute each group a “What-If” scenario to discuss among themselves.
3. Scenarios like:
   Group 1- What if there was no rainfall for a year?
   Group 2- What if transport systems stopped for a day?
   Group 3- What if a river in your area dries up completely?
   Group 4- What if seasons become unpredictable (e.g., summer in December, winter in July)?
   Group 5- What if all mobile networks fail in your area?
4. Encourage groups to work on it for at least 20 minutes.
5. After that each group will present their discussion using chart papers
6. Facilitate and help students to think critically based on their daily life experience.

Sample Learning Level Tracker

(Teachers are suggested to maintain this tracker at the end of each week)

LEARNING LEVEL TRACKER

About the Traker: Keep a record of weekly assessment results in the traker. As you conduct assessment based on the activities suggested.

Put a tick mark as per the following:
Level 1 (Needs support): Not able to solve problems and having difficulty comprehending the problem
Level 2 (Satisfactory): Solves most of the problems with external support
Level 3 (Excellent): Solves problems independently with minimum external support

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

Roll No.	Name of the Student	Week 2					
		4.E. L04			5.E. L08		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

Main Menu

WEEK 3 : DAY 1

Activity 1 Food Chain Explorers

35 mins

Learning Objective

At the end of this activity, students will be able to ask questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

- **Observe:** Take the students to the schoolyard, garden, or park. Ask them to identify plants, animals, and insects around them, focusing on who eats what (e.g., grass → insect → bird).
- **Record:** Provide each student or small group with a notebook to document their observations. They should:
  - List the organisms they observe.
  - Categorise them as producers, herbivores, or carnivores.
  - Sketch or describe a simple food chain based on their findings.
- **Predict:** Ask students to make predictions based on these questions:
  - What would happen if the population of one organism (e.g., grass or insects) increased or decreased?
  - How would this change affect other organisms in the food chain?
  - What role does each organism play in maintaining balance?
- **Create:** Have students draw their food chain on chart paper, showing the flow of energy from one organism to another. Include their predictions as a short explanation below the diagram.
- **Ask Questions:** Encourage students to think critically and ask:
  - Why is balance important in a food chain?
  - What might cause changes in population (e.g., weather, human activity)?
- **Present and Reflect:** Each group presents their food chain and predictions to the class. Facilitate a discussion on ow observing and predicting patterns helps us understand and protect ecosystems.

WEEK 3 : DAY 1

Activity 2 The Shape Detective

35 mins

Learning Objective

At the end of this activity, students will be able to ask questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- Divide students into pairs.
- Distribute a worksheet to each pair with sections for drawing, observing, and predicting (template includes spaces for sketches and observations).
- Take students outside to a nearby green space or provide pictures of various trees and plants. Assign each pair a tree or plant to study.
- Ask students to observe and sketch their assigned tree or plant. Encourage them to note the shape of the canopy, trunk, and arrangement of branches.
- Have pairs discuss and answer questions like:
  - Why might this tree have this shape?
  - What environment do you think it thrives in (e.g., open fields, dense forests)?
  - How might the shape help it survive (e.g., collecting sunlight, resisting wind)?
- Instruct students to predict what changes might occur to the tree's shape over time (e.g., in different seasons or if planted in a different environment).
- Return to the classroom and let each pair present their sketches, observations, and predictions.
- Conclude with a class-wide discussion about the diversity of tree shapes, how they relate to their environments, and the importance of observing these patterns.

WEEK 3 : DAY 2

Activity 1 Seasonal Change Explorers

35 mins

Learning Objective

At the end of this activity, students will be able to ask questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

- Divide the class into 4-5 groups.
- Provide each group with a notebook and a worksheet with prompts (e.g., changes in weather, plant growth, flowering patterns, animal behaviour).
  - Ask students to explore the schoolyard or nearby areas to observe:
  - Seasonal changes in plants (e.g., new leaves, flowers, dried leaves).
  - Signs of animal activities (e.g., migration, hibernation, nesting).
  - Weather indicators (e.g., clouds, temperature changes, wind patterns).
- Groups record their observations and compare them to previous knowledge or experiences (e.g., What happens to certain trees or animals during this season?).
- Based on their findings, each group predicts:
  - What changes might occur in the coming weeks or months?
  - How these changes might affect plants, animals, and humans in the area?
- Groups present their observations and predictions to the class.

WEEK 3 : DAY 2

Activity 2 Pattern Detectives: Shapes of leaves and flowers

35 mins

Learning Objective

At the end of this activity, students will be able to ask questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- Begin by presenting a variety of leaves and flowers to the class. Use real specimens or printed visuals to showcase differences in shapes (e.g., oval, heart-shaped, star-shaped leaves; symmetrical and asymmetrical flowers).
- Divide students into groups of 4-5. Provide each group with a magnifying glass, observation sheets, and colouring pencils.
- Instruct each group to examine the leaves and flowers closely. Ask them to note down patterns in shape, symmetry, or size and sketch what they see.
- Ask students, “What could be the reason for the different shapes and sizes of leaves and flowers? How might these shapes help the plant?”
- Request groups to predict how specific shapes (e.g., large broad leaves or tubular flowers) might be advantageous for the plant (e.g., large leaves for more sunlight absorption or tubular flowers for attracting specific pollinators).
- Bring the class together and have each group present their findings and predictions. Encourage peers to ask clarifying questions or add their insights.
- Conclude the activity by highlighting the role of patterns in adaptation and survival, such as how certain flower shapes attract pollinators or how leaf shapes optimise photosynthesis.

WEEK 3 : DAY 3

Activity 1 Moon Cycle Trackers

35 mins

Learning Objective

At the end of this activity, students will be able to ask questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

- Introduce the concept of moon phases and provide a simple diagram of the lunar cycle.
- Divide the class into small groups.
- Provide each group with a notebook and a moon observation chart showing the different phases (new moon, crescent, half, gibbous, full moon).
- Assign each group the task of observing the moon for two weeks, noting:
  - Shape of the moon.
  - Position in the sky (if visible).
  - Approximate time of visibility.
- Encourage groups to draw or photograph the moon each night (if possible).
- After the observation period, ask groups to identify:
  - Patterns in the moon's shape changes over the two weeks.
  - Predict the shape of the moon for the following week based on their observations

WEEK 3 : DAY 3

Activity 2 Exploring patterns in Rituals

35 mins

Learning Objective

At the end of this activity, students will be able to ask questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

Teachers can either arrange the listed materials or ask students to bring them a day in advance.

- Divide the students into groups of 4-5. Provide each group with a chart outlining common rituals or celebrations observed in their community (e.g., Christmas, New Year celebrations, harvest festivals, or any local traditions).
- Provide each group with blank sheets, coloured markers, and pre-prepared cue cards listing elements of rituals, such as timing, key activities, symbols, and associated natural patterns (e.g., moon phases for a lunar calendar festival).
- Instruct each group to categorise rituals by identifying repeated elements or cycles (e.g., annual timing, phases of the moon, seasonal changes).
- Ask students to use the observed patterns to predict:
  - When the next occurrence of the ritual might be.
  - Possible changes if the natural or social environment shifts (e.g., how celebrations might adapt to a weather anomaly).
- Each group presents their predictions and explains the reasoning behind them. Encourage peer questions for clarity and deeper thinking.
- Lead a discussion on how understanding patterns in rituals helps in appreciating cultural practices and their connection to the environment.

WEEK 3 : DAY 4

Activity 1 Cosmic Explorers

35 mins

Learning Objective

At the end of this activity, students will be able to ask questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

- Divide students into small groups.
- Use a multimedia presentation to explain basic patterns of star constellations and planetary movement in the night sky.
- Distribute star maps or printed guides showing major constellations and planets visible in the night sky.
- Set up a classroom or schoolyard stargazing session using a simple telescope or binoculars.
- Instruct students to locate specific stars (e.g., Polaris) and visible planets (e.g., Venus, Jupiter) based on the star map.
- Encourage students to observe differences in brightness, position, and apparent movement of celestial objects during the session.
- Provide each group with paper and coloured pencils to draw the star patterns or constellations they observed.
- Ask groups to make predictions about where the planets might move based on their observed alignment with stars.
- Have each group present their drawings and predictions to the class.
- Conclude by discussing why planets appear to move differently from stars, linking it to Earth's rotation and revolution.

WEEK 3 : DAY 4

Activity 2 Predicting Celebration patterns

35 mins

Learning Objective

At the end of this activity, students will be able to ask questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

- Initiate discussion by asking students to name celebrations or festivals they observe throughout the year. Note their responses on the board.
- Provide context by explaining how certain celebrations are linked to seasons, natural cycles, or cultural traditions (e.g., harvest festivals in autumn, new year celebrations in January).
- Group students into small teams of 4-5 members each.
- Distribute a calendar template to each group, along with printed pictures or names of celebrations (e.g., Diwali, Christmas, Ramadan, Lunar New Year, Harvest Festivals).
- Instruct the teams to arrange the celebrations on the calendar based on when they think they occur during the year.
- Encourage questions and predictions by asking:
  - Why do you think this celebration happens in this season?
  - Can you predict any patterns about celebrations and seasons?
- Guide teams to explain their reasoning for each placement.
- Facilitate a class discussion by comparing the groups' calendars and highlighting commonalities and differences.
- Conclude the session by summarising how celebrations often follow natural and cultural patterns, encouraging students to explore more about their significance.

WEEK 3 : DAY 5

Assessment 1 Understanding and Predicting Simple Patterns

70 mins

Competency

C-1.3 Asks questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.

1. **Food Chain:**
   a. Provide students with a diagram showing different animals, plants, and insects (e.g., grass, grasshopper, frog, snake, and eagle). Ask students to:
   b. Ask them to arrange these organisms into a food chain.
   c. Ask them to predict what might happen if one organism (e.g., frogs) disappears from the chain.
2. **Season Change:**
   a. Show pictures of the same tree in different seasons (spring, summer, autumn, winter). Ask students to:
   b. Ask them to identify which picture corresponds to each season.
   c. Ask them to predict how the tree might look in the next season and explain why.
3. **Phases of the Moon:**
   a. Provide cut-outs or images of different moon phases. Ask students to:
   b. Ask them to arrange the phases in the correct sequence.
   c. Ask them to predict which phase would be visible in the next three nights based on the given current phase.
4. **Movement of Stars and Planets:**
   a. Use a diagram showing the positions of stars and planets at a specific time.
5. **Ask students to:**
   a. Ask them to identify which objects are stars and which are planets.
   b. Ask them to predict the direction a visible planet might move in the sky after a week.

Sample Learning Level Tracker

(Teachers are suggested to maintain this tracker at the end of each week)

LEARNING LEVEL TRACKER

About the Traker: Keep a record of weekly assessment results in the traker. As you conduct assessment based on the activities suggested.

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

Roll No.	Name of the Student	Week 3					
		4.E. L04			5.E. L08		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3

Main Menu

CM IMPACT

Meghalaya Class Readiness Programme

SCIENCE

APPENDIX

Main Menu

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

The following table outlines the Learning Stage and the competency included in the CRP, designed to effectively support the understanding of the grade-level concepts that students will encounter.

Learning Stage	Grades	Pre-requisite Competency
Preparatory Stage	Class 3-5	**C-1.1** Observes and identifies the natural (insects, plants, birds, animals, geographical features, sun and moon, stars, planets, natural resources) and social (houses, relationships) components in their immediate environment.
		C-1.3 Asks questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment.
		C-2.1 Identifies natural and human-made systems that support their lives (household items, electricity in the home).
		C-4.1 Observes and describes diversity among plants, and birds and animals in their immediate environment (shape, sounds, food habits, growth, habitat).
		C-4.5 Identifies needs of plants, birds, and animals, and how they can be supported (water, soil, food, care).

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