জিলা শিক্ষা আৰু প্ৰশিক্ষণ প্ৰতিষ্ঠান,
চৰাইদেউ , সোণাৰি

DISTRICT INSTITUTE OF EDUCATION & TRAINING, CHARAIDEO
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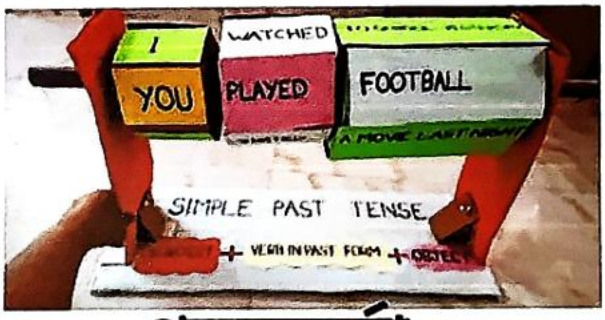
District Institute of Education & Training
Estd. 1996
Charaideo, Sonari

TLM ৰ হাতপুথি









প্ৰস্তুতকৰ্তা :-

পদ্ম কুমাৰী বৰুৱা বালিকা উচ্চতৰ মাধ্যমিক বিদ্যালয়ৰ সমূহ শিক্ষক প্ৰশিক্ষাৰ্থী

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We also thank our fellow interns, mentors and all those who contributed directly or indirectly to the development of this TLM handbook. This experience has deepened our understanding of how creative and low-cost materials can make learning more effective and joyful for children.

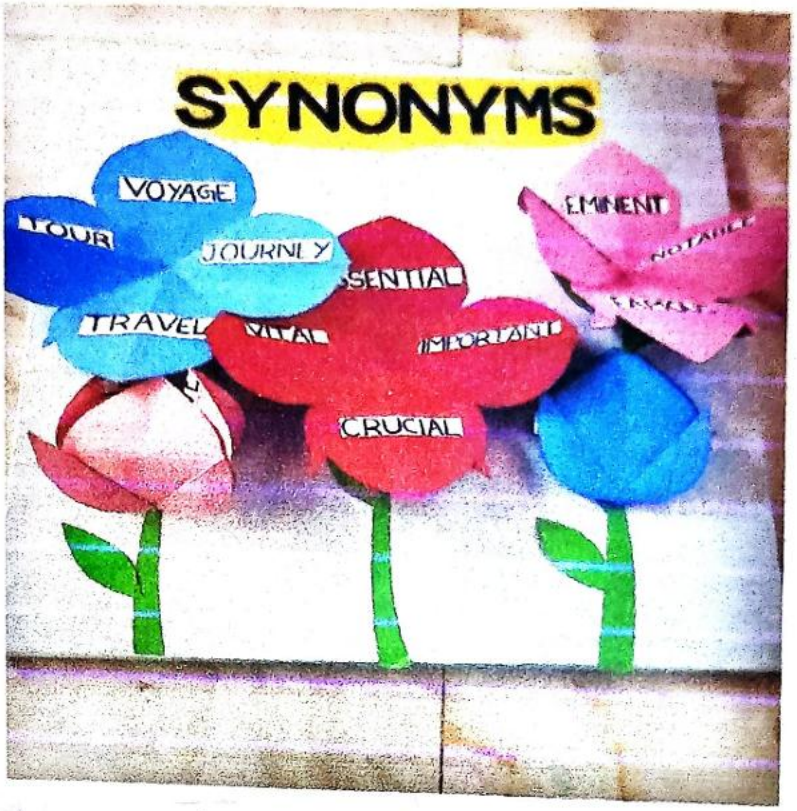
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INTRODUCTION

This TLM Handbook is a compilation of innovative and low-cost teaching-learning materials to enhance the teaching process and make learning more effective and enjoyable. The materials included are designed to simplify complex concepts, promote active students participation, and support diverse learning styles. Each TLM comes with clear instructions, objectives and suggestions for classroom use, making it a practical resource for teachers. This hand-book aims to encourage creative and meaningful teaching practices that foster better understanding and retention among learners.

1 Synonyms



TLM for class - 6

Subject - English

Topic - Synonyms

Brief description: This TLM is a model with colorful 3D flower petals, each flower representing a word and each petal displaying its synonyms.

Examples: The blue flower includes: Journey, voyage, Tour, Travel

The red flowers shows: Important, vital, Essential, Crucial

The pink flowers shows: Famous, Eminent, Notable

Other concepts that can be taught using this TLM:

This TLM can be used to teach synonyms and words with similar meaning to enhance students stock of vocabulary.

Materials used:

Colored papers (for flowers, petals and background), cardboard base, markers pens, glue, scissors.

Cost of the material used for making TLM: ₹ 50

How to make:

1. Take a chart paper base and cover it with light colored paper for contrast.
2. Cut petals out of colored paper and write synonyms on each.
3. Arrange 4-5 petals in a circular flower pattern around a central word.
4. Stick the base of each petal only, so it can be lifted or moved.
5. Add green stems and leaves for a complete flower look.
6. Label the top with a bold heading like 'Synonyms'.

How to use this TLM:

1) Start by introducing the concept 'Synonyms'.
2) Show the model and explain that each flower represent synonyms of one word.
3) Take one flower and read the center word aloud. Ask students to read the words on the petals one by one.
4) This enhances pronounciation, vocabulary and confidence.

2. Simple Past Tense Spinner



TLM for class - 8

subject - English

Topic - Simple Past Tense

Brief description: This is a 3D rotating TLM designed to help students form and practice sentences in the Simple Past Tense. It uses three rotating cubes:

1) First cube: Subject
2) Second cube: Past tense verb
3) Third cube: Object

Other concepts that can be taught using this TLM:

This rotating cube TLM is a very versatile and can be reused to teach many other grammar and language concepts by simply changing the content on the cubes.

Materials used: CardBoard, coloured paper, glue, scissors, marker pens, a wooden stick, Base Board etc.

Cost of the materials used for making TLM: ₹ 50

How to make:

1. Create three cardBoard Hexagon. Each should rotate around a rod.
2. Cover each hexagon with coloured paper.

   Cube 1: write different subjects (I, you, he, she, etc.)

   Cube 2: write past form verbs (played, watched, visited etc)

   Cube 3: write objects/ time phrase (football, a movie last night etc)

3. Attach all hexagon to a horizontal rod so they can spin.
4. Make a base and side holders using cardBoard or thermocol to hold the rod.

5. On the Base, paste a grammar rule:
Subject + verb in past form + Object

6. Decorate and label it: "Simple Past Tense"

How to use this TLM:

1) Begin by explaining the tense or grammar rule. (e.g Simple past Tense)

2) Show the structure chart of the Base of the TLM:
Subject + verb (past form) + object

3) Ask the students to come and spin the wheel to form sentences. The students will identify the subject, verb and object.

4) Write the sentences in their notebooks.

3. "Verb 'To Be' Hanging Tree"



TLM for class - 6

Subject : English

Topic : Verb 'to Be'

Brief description: This TLM is a creative and attractive hanging model designed to teach forms of the verb 'to Be' - am, is, are - through subject-verb matching. It uses a tree branch with hanging buckets and flowers to visually represent which subject goes with which form of the verb 'to Be'.

Other concepts that can be taught using this TLM:

This TLM can be used to teach nouns, types of sentences and persons.

Materials used:

Cardboard, colored papers (for flowers, leaves, labels), small paper cups, ribbon, markers, sketch pens, glue, scissors.

Cost of the materials used for making this TLM: ₹60

How to make:

1) Create the tree branch: cut a large shape from cardboard and decorate it with brown paper or paint.

2) Add green paper leaves on both ends for decoration.

3) Cut two rectangular pieces and label them 'verb' and 'to Be'.

4) Cut flower shapes from colored papers and write 'I', 'She', 'They' in the centers.

5) Attach paper cups or small containers below each flower using ribbon or string.

6) Inside each cup, place or label the correct form of the verb 'to Be'. I → am, She → is, They → are

7) Hang all elements from the branch using ribbons or string.

8) Ensure proper alignment so each flower corresponds to the correct verb cup.

How to use this TLM:

1) Start by explaining the concept of the verb 'to be' and how it changes with different subjects.

2) Ask students to come, pick a flower and place it in the correct cup.

3) Ask students to make sentences using the pair.

'I am a student', 'They are my friends'.

1. Geometric Shapes Model



TLM for Class - 4

Subject : Mathematics

Topic : Geometric Shapes

Brief description: This TLM is a 3d model of Basic geometric shapes, designed to help students visually and physically understand different 3D shapes and their properties. It includes common figures like a cube, cylinder, sphere, cone, cuboid, arranged neatly on a circular base with the label 'Geometric Shapes'.

Materials used: Thermocol, colored papers, glue, small plastic ball, scissors, paint, markers, cardboard etc.

Cost of the materials used for making this TLM: ₹70

How to make:

1. Cut a circular Base from the cardboard and paint it
2. Create 3D shapes using cardboard and coloured papers.
3. Colour each shape differently for visual clarity
4. Stick each shap on the Base in a circle
5. Label the model with the title, 'Geometric Shapes'
6. Decorate the Base Borders with glitters, colour or Borders papers.

How to use this TLM:

1. Let students observe and touch each shape to understand the numbers of faces, edges and vertices.
2. Ask students to identify each shape and name them.
3. Conduct a quiz or matching activity with properties of the shapes.
4. Can be used for inclusive learning By allowing tactile learning for visually impaired students.

5. Sentence Sorting Boxes



TLM for Class - 8

Subject : English

Topic : Imperative sentences

Brief description: This TLM is a Hands on activity designed to help students differentiate between orders, Requests and Commands in English grammar. It consists of 3 labeled boxes and several sentences cards. Students read each sentence and place it in the appropriate box based on its type.

Other concepts that can be taught using this TLM:

1. Teachers can teach students how tone and

the use of words like please, kindly etc. make a sentence polite or rude.

2. Students can practice intonation and expression.

Cost of the material used to make this TLM:

₹ 30

materials used: Three empty cardboard boxes (small size), colored papers, marker pens, scissors, and glue.

How to make:

1. Cover each box with different colored paper and label them as Box 1 - orders, Box 2 - Request, Box 3 - Commands.
2. Cut several rectangular cards from chart papers.
3. Write different imperative sentences on each card.
4. Laminate or reinforce the cards with tape to make them durable.

How to use:

1. Begin by explaining the difference between orders, requests and commands.
2. Ask students to come, pick a card, read it and put it in the correct Box.

6. Picture Flash cards



TLM for class - 6

subject : English

Topic : syllables

Brief description:

This TLM of hand-drawn picture flashcards featuring common objects like fruits & (Banana, watermelon) Butterfly, Ball, carrot. It is a visual learning tool for students to see and tell the name and they will tell the syllables of the word.

Other concepts that can be taught using this TLM:

1) Students can form sentences using this item.

2) students can describe the items.

Materials used: white chart paper, colour pencil, marker, scissor, glue, glitter tape, laminating sheets.

How to make this item:

1. Cut chart paper into equal size rectangles and stick it on same size cardboard.
2. Neatly draw pictures of some objects like carrot, Butterfly, Banana, watermelon etc.
3. Colour the drawings attractively using crayons or pencils.
4. Decorate the borders using glitter tape.
5. Write the name of the each object on the back of the card.

How to use this item:

1. Show a flashcard (e.g. Butterfly, Banana, Ball)
2. Ask students to come and pronounce the word.
3. Ask the students to tell how many syllables that particular word contains and clap once for each syllable.

For example- Butterfly - 3 claps
Ball - 1 clap
Banana - 3 claps

7. 3D Phases of the Moon model



TLM for class : 4

Subject : English

Topic : Oh! Look at the Moon

Brief description: This is a 3D TLM that demonstrates the 8 phases of the Moon as it orbits the Earth, using clay models and a labeled circular layout. It visually explains how the Moon's appearance changes due to its position relative to the Earth and Sun.

Other concepts that can be taught using this TLM:

1. Students learn how the Moon revolves around the Earth in about 29.5 days.
2. Demonstrate that moon phases repeat in a cycle due to this revolution.

Materials used: Black chart paper, cardboard base, clay balls (9 pieces), Acrylic colour, thermocol, marker, glue, scissor, yellow chart paper.

Cost of the materials used for making this TLM: ₹ 40

How to make it:

1. Cover the base with black chart paper.
2. Paint one ball to represent Earth.
3. Paint 8 balls showing the 8 phases of the moon.
4. Arrange the moons in a circular pattern around the Earth.
5. Add the sun illustration at the bottom.
6. Label each phase clearly.
7. Fix the moons with glue to stand out in 3D.

How to use it:

1. Explain how the moon reflects sunlight and how each part become visible from Earth.
2. Use the model to demonstrate the positions of the moon in its orbit.
3. Show how light from the sun affects the visible shape of the moon.
4. Ask students to name each phase and identify it on the model.

8. Butterfly vowel Garden



TLM for class: 3

Subject : Assamese

Topic : words ending with same vowel

Brief description: This vibrant and interactive TLM uses colorful butterfly cutouts to teach Assamese vowels. There are two sides in each butterfly and each butterfly has two words ending with same vowel.

Other concepts that can be taught using this TLM:

1. Teachers can teach consonants (ব্যঞ্জনবর্ণ) along with vowels.
2. Students can form 2-letter or 3-letter words using the vowel on the butterfly.

Materials used: Colored chart papers (various shades), Scissors, glue, A thick cardBoard, marker pen, glitter, stickers etc.

Cost of the materials used to make this TLM: ₹ 50

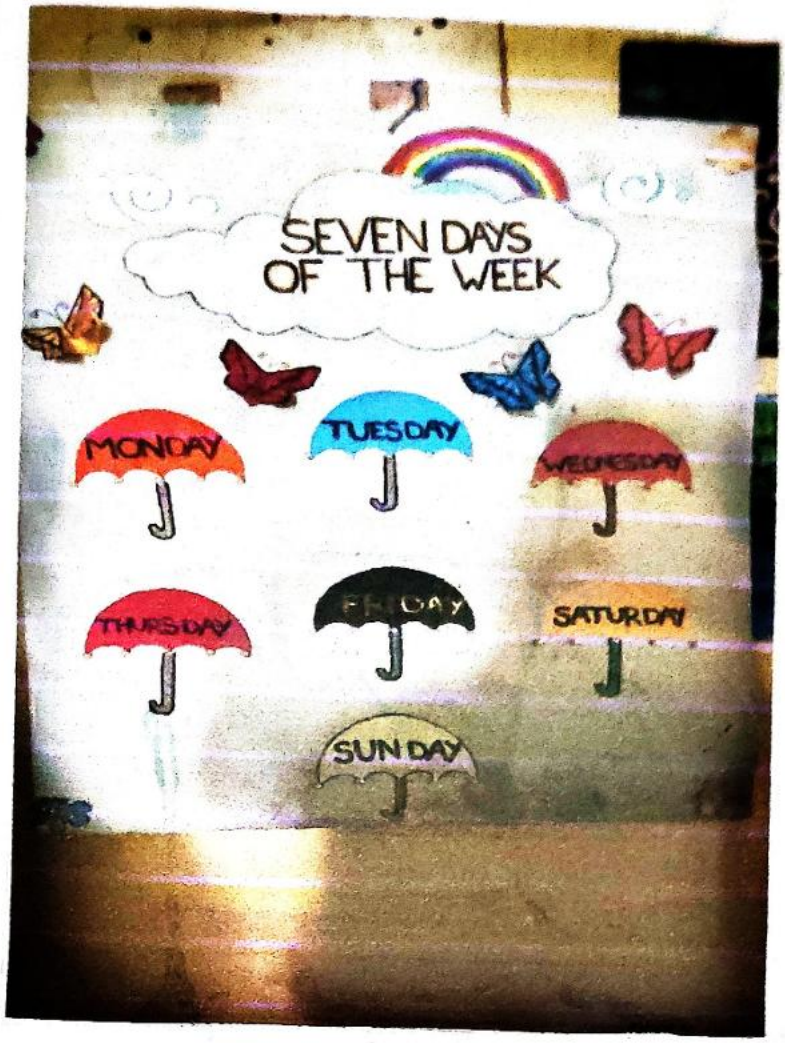
How to make it:

1. Cut out 6-10 Butterfly shapes from colored chart papers.
2. Write one Assamese vowel on one side and write another word ending with same vowel on the other side of the Butterfly.
3. Paste the Butterflies neatly on a chart Board in a garden like arrangement.
4. Label the Board with a title like 'Words ending with same vowels'.

How to use this TLM:

1. Point each Butterfly and pronounce the vowel sound. Ask students to guess the words ending with same vowel sound.
2. Let students pick a Butterfly and say a word starting with that vowel.
3. Ask students to pronounce the words for pronunciation practice.

9. Seven Days Umbrella chart



TLM for class : 1

Subject : English

Topic : Seven days of the week

Brief description: The seven days chart flan is a colorful, interactive flan that visually displays the seven of the seven. It helps young learners understand the sequence of days, their spelling and daily routines or events associated with each day.

materials used: Colorful chart paper, markers, sketch pens, scissors, glue, white Beads etc.

Cost of the materials used to make this TLM: ₹ 50

How to make it:

1. Draw 7 equal sections on chart paper.
2. Label each section with the name of a day: Monday to Sunday.
3. write name of the days on each umbrella.
4. Label the heading on a cloud as 'Seven days of the week.
5. Fix the umbrellas with glue on the chart paper.

How to use this TLM:

1. Show the chart and read aloud the days
2. Ask children to repeat after you.
3. Use the chart to talk about what happens on each day.
4. Ask students to point to 'Today', 'Tomorrow' and 'yesterday'.

10. Wheel of different forms of verbs



TLM for class -

subject - English

Topic - Forms of verb

Brief description: The verb wheel is an interactive, rotating teaching aid that displays different forms of verbs - present form and past form.

Other concepts that can be taught using this TLM:

1. Students can learn which verb form is used in different tenses:
2. Students can use verb forms to build full sentences.

Cost of the materials that are used to make this TLM:

₹ 40

Materials used: Thermocol, coloured papers (red, green, yellow, light blue), markers, sketch pen, glue, scissors etc.

How to make it:

1. Cut the thermocol into a circle.
2. Divide the circle into 8 equal sections. On each section write a based verb like visit, want, go)
3. Cut another small circle and divide into 8 equal sections and write past forms of the same verbs.
4. Cut a chartpaper into a flower design and place it on top of the wheel. Ensure the bottom wheel spins smoothly under the top one.
5. cut papers in rectangular shapes and write present form and past form and stick it on the top of the verb wheel.

How to use this TLM:

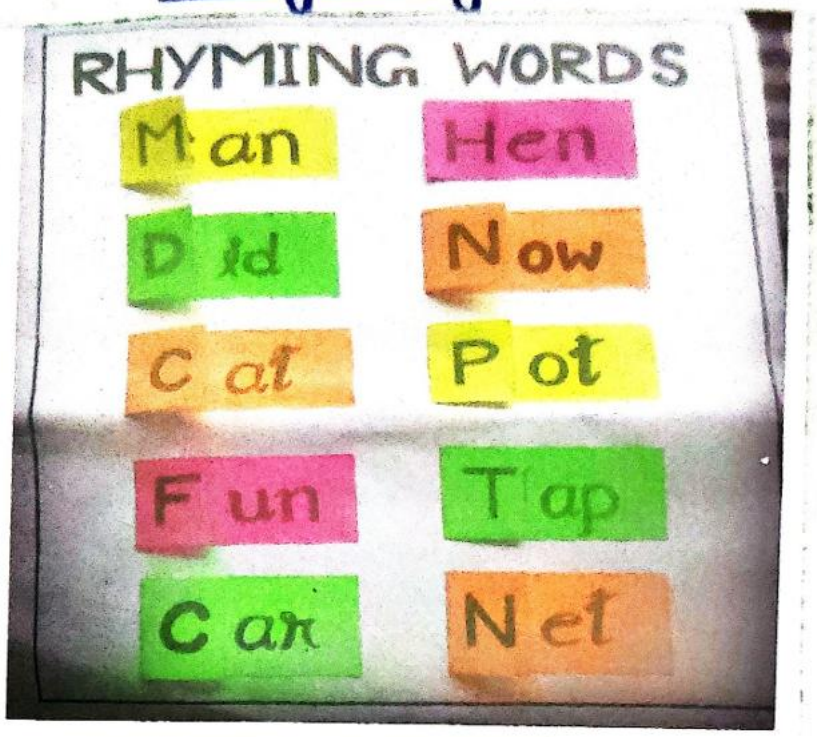
1. Use the wheel to show one verb at a time and its two forms.

2. Example: Spin the wheel to land on 'go' and then reveal: go - went.

3 Ask students to spin and read aloud the verb forms.

4. Divide students into teams. One spins, the other gives the correct verb forms or uses them in sentences.

Rhyming Word



TLM for class - III

Subject - English

Topic - Rhyming Word

Brief Description:- This TLM is a colorful Rhyming word chart, creatively designed using flip cards to help children learn and identify rhyming words. Each word is presented with a different colored starting letter to engage learners and make learning fun.

Concept That Can Be Taught Using TLM:

Phonemic sounds, Rhyming word, Vocabulary building, Spelling, pronunciation.

Materials Used: Chart Paper, Glue, Marker Pen

Cost of the TLM : 20 rs

How to Make :

1. Use a large chart paper as the base.
2. Cut rectangles of colored paper and write rhyming word pairs on them :

   e.g. Man → Pan , Did → Bid , Cat → Bat
3. Fold one side to make a flip effect using tap or glue.
4. Label the chart " RHYMING WORDS " at the top.
5. Arrange words in two vertical columns.

How to Use :-

1. Introduce the concept of rhyming with examples.
2. Ask students to read both columns and match rhyming pairs.
3. Use flaps to hide and reveal rhymes interactively.
4. Conduct group activity, " Find a word that rhymes with ..... "
5. Let students create their own rhyming pairs using the chart.

2D Shapes



TLM for class - IV

Subject - Mathematics

Topic - 2D shapes

1. Brief Description :- This TLM is a chart based model displaying four basic 2D shapes - Square, Triangle, Rectangle and circle. It is easy for Identification and is made of paper cut-outs pasted on a bright yellow chart base.

Concept that can be Taught Using TLM:-

Identification and Naming of 2D shapes, comparison between shapes. Number of Sides, Corners (vertices)

Materials Used : chart Paper, marker pen, glue pencil, Scale, Compass

Cost of the TLM To Make : 20rs

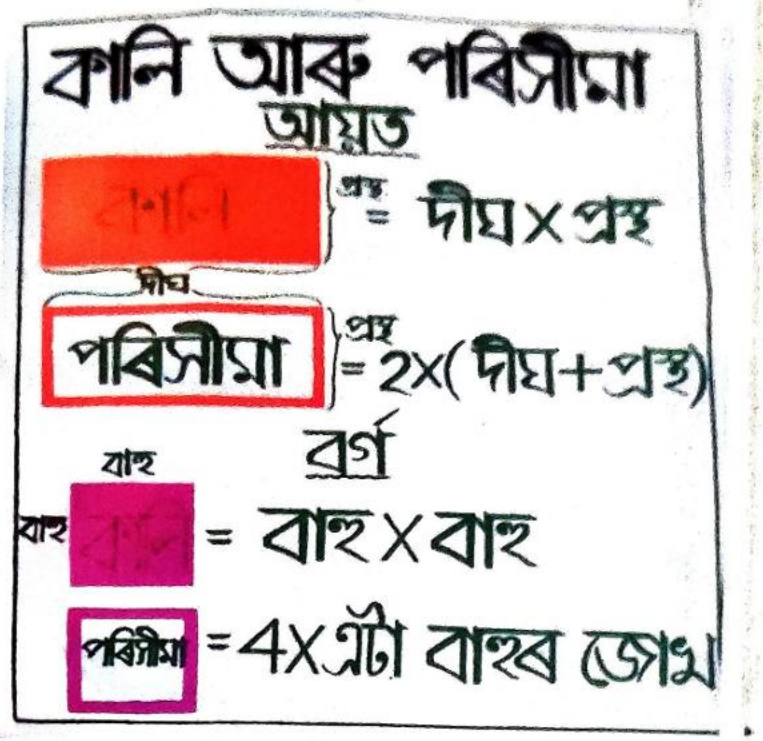
How to Make :-

1. Cut four shapes from colored Paper.
2. Paste the shapes neatly on the chart.
3. Label each shape.
4. Add a title.

How to Use :-

1. Introduce each shape and ask students to describe what they see.
2. Encourage them to count sides and corners.
3. match Real life objects.
4. Use it as a display in the math corners.

Area and Perimeter



Topic — Area & Perimeter of Squar and Rectangle

Subject — mathematics

TLM for class — V

Brief Description :- This is a chart TLM that Displays the formulas of area and perimeter for Squar and Rectangle. The Use of color coded boxes and clear Formatting makes it easier for students to Understand and remember the formula.

concept that can be taught Using TLM:

Meaning of Area and Perimeter, formulas to find area and Perimeter for Squar and Rectangle, visual and Comparative Understanding of Square vs Rectangle.

Materials Used : chart Paper, marker, glue

Cost of the TLM to make : 10 rs

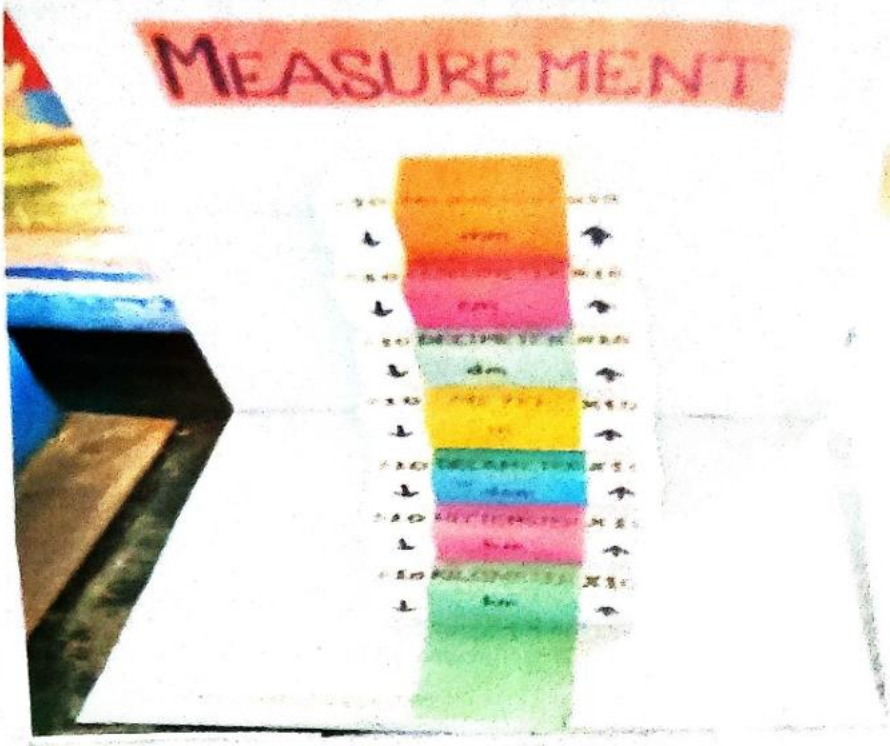
How to make :-

1. Use a chart Paper to draw boxes and sections for rectangle and square formulas.
2. Write headers in bold.
3. Use coloured paper cutouts to highlight "Area" and "Perimeter"
4. Neatly write each formula with proper mathematical Symbols.

How to Use :-

1. Introduce to the concept of area and Perimeter.
2. Use real objective to connect with rectangle / area.
3. Let student copy the formula into their notebook.
4. Refer to the chart and demonstrate using examples.
   - Find Perimeter if length = 6cm, breadth = 4 cm.
   - Find area if side of square = 5cm

MEASUREMENT



TLM for class - V (5)

Subject :- Mathematics

Topic :- Measurement conversion model

Brief Description :- This TLM is a vertical step wise conversion model showing the metric units of length from millimeter to kilomiter. It illustrates how each units is 10 times bigger or smaller than the adjacent one, making it easy for students to understand ~~how~~ unit conversion in the metric system.

Concept that can be Taught Using TLM :

Metric units of length :

mm → cm → dm → m → dam → hm → km

* Conversion between units : multiply or devide by 10
* Understand Relative values in increasing or decreasing order.

Materials Used : chart Paper, cardboard, marker pen, Scale, scissors, glue

Cost of the TLM to make : 20 Rs.

How to Make :-

1. cut 7 rectangular pieces and fold into step-boxes for each unit.
2. Label each unit names : mm, cm, dm, m, dam, hm, km
3. Attach arrows showing :
   - Divide by 10 when going up
   - Multiply by 10 when going down
4. Stick all pieces vertically in order on a strong cardboard base.
5. Add a heading - "Measurement"

How To Use :-

1. Begin by explaining the base unit : Meter(m)
2. Use the arrows to show movement Upward (÷10) or downward (×10)
3. Pose real-life questions like :
   - Convert 5000 mm in to meters.
   - How many centimeters are there in 3 meters?
4. Let students interact by pointing to Units and tracing conversions.
5. Regularly Use it to reinforce the concept of Unit Conversion.

ECOSystem



TLM for class - IV
Subject - EVS
Topic - Ecosystem.

Brief Description :- This 3D paper based eco-system model shows a simple food chain. Demonstrating how energy is transferred from one Organism to another. It highlights the relationship among grass, grasshopper, frog, Snake and with arrows indicating the direction of energy flow.

Concept that can be taught Using TLM :-

- Definition, components, Food chain, energy flow Imp. Balance in Nature etc.

Material Used :- chart paper, pictures, Sketch pen, Glue, Scissors

Cost of The TLM to make :- 30 Rs.

How to Make :-

1. Prepare a blue chart to represent the environment.
2. Cut and Paste grass, cloude, sun and animals in a Sequence from bottom to Top.
3. Add arrows to show energy transfer.
4. Label each component clearly.
5. Decorate the bottom with grass and flower

How to Use :-

1. Explain how each organism depends on the next for food.
2. Ask student to identify producers and consumers.
3. Use arrows to show How of energy from grass to eagle.
4. Discuss what happens if one Organism disappears.
5. Conduct Group discussion Using this model.

3D Shapes



TLM for - 5 (V)

Subject - Mathematics

Topic - 3D Structure

Brief Description :- This TLM displays 3D geometrical shapes (cube, cuboid, cylinder, cone, Prism, Sphere) made from colored paper arranged neatly on a board with labels. It helps primary students visually and physically understand the concept of solid shapes.

Concepts that can be Taught Using TLM :-

Identification and naming of 3D shapes. Basic properties of each shape (Faces, edges, vertices). Reallife example of each shape. Introduction to geometry in real-world objects.

Materials Used :- chart Paper, Scissors, glue, Cardboard, Marker pen,

Cost of the TLM to make :- 15 rs

How To make :

1. Used colored chart Papers to construct 3D models :

   Cube, cuboid, cylinder, cone, Prism, Sphere

2. Neatly cut and fold each shape, glue the ends to form solids.
3. Mount them on a colored chart-covered cardboard.
4. Label each shape.

How to Use :-

1. Begin the lesson by introducing solid shapes using the model.
2. Let students touch and observe each shape
3. Ask student to count.
   - Number of faces, edges, Vertices.
4. Link each shape to real life objects (eg. Cone - ice cream cone)
5. Use it in the class quizzes, group discussions, hands on activities.

Number Line



TLM for class - 6 (VI)

Subject :- mathematics

Topic : Number Line.

Brief Description :-

This is a handmade number line model made on a vertical chart, showing integers from -3 to +3 with arrows at both ends indicating extension in both directions. It serves as a visual and interactive tool to introduce the concept of positive and negative numbers. in a simple and engaging way for class 6 students.

Concepts that can be Taught Using TLM :-

Integers, positive and Negative Numbers, plot Numbers on the line, addition and Substraction

Material Used :- cardboard, chart Paper, Marker, Ruler, compass, Glue, Scissors.

Cost of the TLM to make : 20rs (Approx)

How to make :—

1. Take a rectangular cardboard piece and cover it with a bright-colored chart paper.
2. Draw a horizontal or vertical line in the center using a scale.
3. Mark equal intervals to represent integers from −3 to +3
4. Label each point clearly with bold Numbers.
5. Attach arrows on both ends of the line to show continuity.

How to Use :—

1. Begin by introducing 0 as the center point.
2. Move right to explain positive integers and left for negative integer.
3. Demonstrate how to add and substract integers using jumps. ex- start at −1 and move +2 steps = reach +1
4. Use for compairing Integers (e.g. which is greater : −2 or +1 ?)
5. Encourage students to physically point or mark answers on the line.

Probability



TLM For Class - VII

Subject - Mathematics

Topic - probability.

Brief Description :- This TLM is a rotating spinner model designed to introduce the concept of probability through an interactive and fun activity. It consists of a colorful circular spinner divided into sectors labeled with numbers or colors. when spun, it lands randomly on one sector, allowing students to visually experience random events.

Concept that can be Taught Using TLM:

concept of probability, outcomes and favorable outcomes, probability formula, Real life application of probability in games and event.

Materials Used :- chart Paper, cardboard, Glue marker Pen etc.

Cost of the TLM to make :- 30 rs

How to make :

1. Cut a circle out of cardboard.
2. Divide it into equal sections (using ruler)
3. Color each section with a different color or number.
4. Make a small hole at the center a fix a split pin with an arrow -
5. Add labels and decorate neatly.

6. How to Use :

1. Ask a student to spin the arrow.
2. Ask " what is the probability of getting a number 4 "
3. Student count favorable outcomes and total outcomes to calculate probability.
4. Let students record outcomes and make predictions, enhancing data handling skills.

Dual Bargraph

Brief Description :-



TLM for class 7 (VII)

Subject : Mathematics

Topic : Dual bar graph

Brief Description :

This is a 3D dual bar graph model used to represent marks scored by students in two subject - math and science. Each student has two bargraphs representing their marks in the two subjects. The x-axis displays student name and y axis displays marks. It is designed to make the concept of bar graphs interactive and visually appealing for middle school students.

Concept That Can Be Taught Using TLM :-

Data Handling, Interpreting Data, Comparison of Data. Understanding Scale.

Material Used :- Coloured chart paper, paper rolls, Marker pen, Scale, glue, cardboard etc.

Cost of the TLM : 40 Rs (Approx)

How to Make :-

(i) Take a sturdy cardboard base and cover it with colored chart paper.
(ii) Use another vertical cardboard piece to form the y axis.
(iii) Mark student Name on the x axis.
(iv) Stick the bars vertically against each student's name according to their marks.
(v) Label each bar with the subject and provide a key at the bottom.
(vi) Add axis labels and neat borders for clarity.

How to Use :-

(i) Introduce the topic of data Handling and ask students what the graph represent.
(ii) Explain the x axis and y axis's scale and bar heights.
(iii) Ask following questions.
    (a) Who scored Highest in science?
    (b) Compare Radhika's marks in both subjects.
    (c) Find the Average score in Math?
(iv) Engage students by letting them create their own bar graph using data from the class.

Fraction



TLM for Class – VII

Subject – Mathematics

Topic – Fraction

Brief description – This TLM consists of a set of handmade flash cards, each showing a different type of fraction – proper, improper and mixed. Each fraction is color coded and neatly bordered, designed to help students visually identify and differentiate between types of fractions as well as the numerator and denominator.

Concept That can be Taught Using TLM:

Numerator, Denominator, proper. Improper mixed fraction. conversion of improper to mixed and vice versa, comparing and Simplifying fractions.

Material Used :- chart paper, sketch pens, Scissors glue, Green paper.

Cost of the TLM to make : 20 rs.

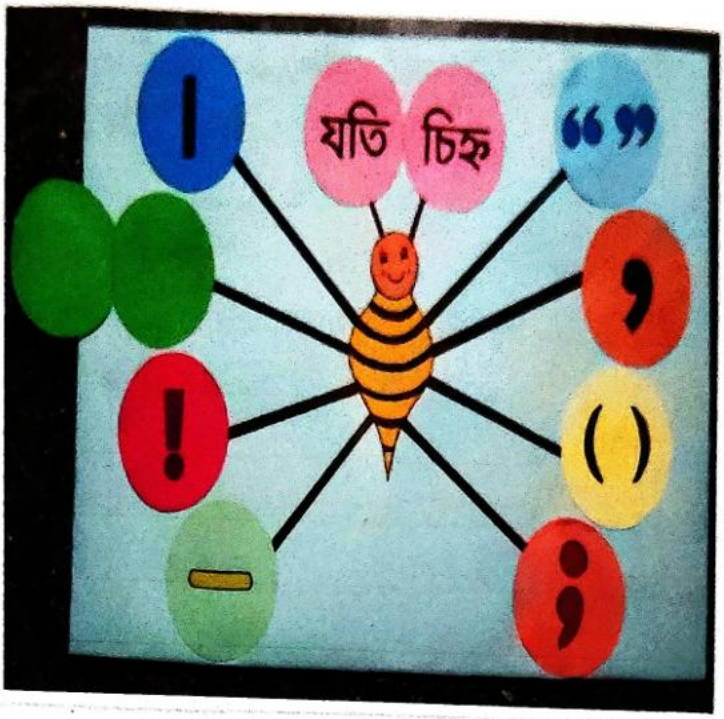
How to make :

1. cut rectangular pieces of card/chart paper for each flash card.
2. Write a fraction on each card using bold numbers and color codes:
   - Numerator in one color
   - Denominator in another.
3. Add a green border for durability.
4. Include a mix of proper, improper and mixed fractions.

How to Use -

1. Show flash card and ask students:
   * Identify numerator and denominator
   * Is it a proper, improper or mixed fraction?
2. Sort cards for three categories : Proper Improper, mixed.
3. Use for Oral drills, group games and classroom quizzes.
4. Ask students to convert improper to mixed (and vice versa)

PUNCTUATION MARKS



TLM for class :— vi

Subject :— Assamese

Topic :— Punctuation Marks (যতি-চিহ্ন)

Brief description of the TLM : This TLM is a colorful 'spider web chart' featuring various 'punctuation marks' such as – full stop (।), question mark (?), comma(,) etc. Each mark is connected to a central smiling character, making it visually engaging and memorable for students learning punctuation.

Other concepts that can be taught using this TLM : Types and functions of punctuation marks, sentence structure and tone, direct and indirect speech etc

Materials used : Card board, colored chart paper for the base, colored paper circles, sketch pens, scissors, glue, black strips for connecting lines.

Cost of the TLM : Approximately 40.

How to make :

- Take a light colored chart paper to cover the card board (base).
- Cut out colorful paper circles and write different punctuation marks on each.
- Draw the punctuation marks on the outer side of the circle and write their names on the inner side of the circle.
- Draw or paste a central figure (like the smiling bee character in the image).
- Use black lines to connect each punctuation mark to the central figure.
- Label the central title and decorate as needed.

How to use :

- Introduce each punctuation mark and explain its use with examples.
- Conduct interactive games like 'Name the mark' or 'Use it in a sentence'.
- Use as a reference during writing exercise.
- Let students take turns pointing to a mark and giving a sentence using it.

স্বৰ সন্ধি



TLM for class :– vii

Subject :– Assamese

Topic :– স্বৰ সন্ধি (Vowel combinations)

Brief description of the TLM : This TLM is a 'foldable fan-shaped model' showing examples of 'Swar Sandhi' (স্বৰ সন্ধি) in Assamese. Each flap contains a Sandhi-joined word, and when opened it reveals the original root words. This hands-on model helps students to understand how vowel (স্বৰ) forms new words.

Other concepts that can be taught using this TLM : Different types of Sandhi (সন্ধি), root word identification, word formation rules, spelling improvement etc.

Materials used : Card board, colored chart papers, white paper strips for writing, sketch pen, glue, scissors, paper box.

Cost of the TLM: 30 (approximately)

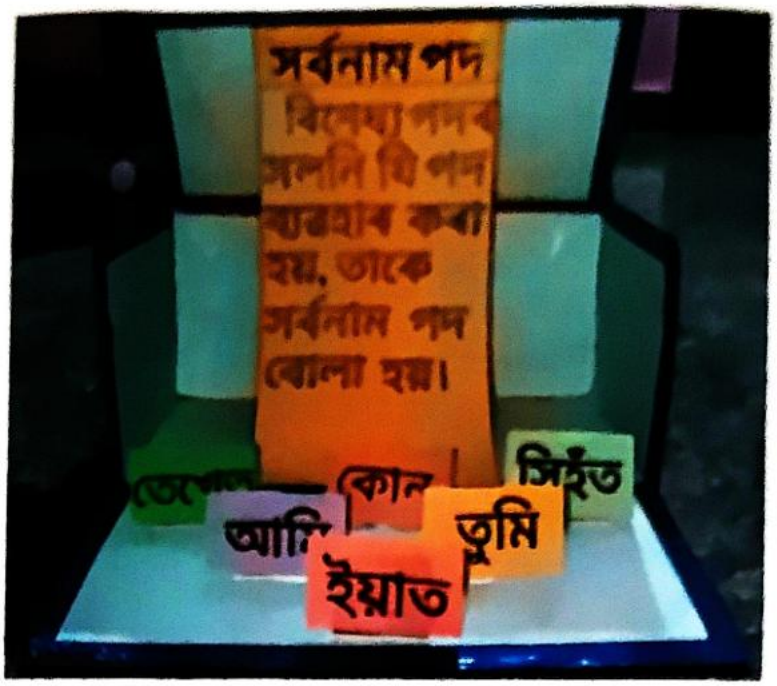
How to make:

- Cut several colored paper pieces into triangular fan shapes.
- Write Sandhi words on the outer flaps
- Under the flap or on the backside, write the separated root words.
- Attach all fan pieces together in a circular foldable format.
- Add a title label 'शब्द आहि' at the center or in a separate box.

How to use:

- Show the Sandhi word and ask students to guess the root words.
- Use as a flip-and-reveal game in classroom activities.
- Ask students to make other words using the Sandhi similar models.
- Use it to explain the concept of vowel fusion in Assamese grammar.

PRONOUN



TLM for class :- vii

Subject :- Assamese

Topic :- Pronoun (সর্বনাম পদ)

Brief description of the TLM : This TLM is a 3D foldable display box that introduces the concept of Pronouns in Assamese. It includes a clear definition of pronouns and colorful word cards (like 'আমি', 'সিহঁত', 'তুমি' etc). This visual and interactive model helps students understand how pronouns replace nouns in sentences.

Other concept that can be taught using this TLM : Types of pronouns, subject and object pronouns, difference between noun and pronoun.

Materials used : Paper box (shoes box), chart papers, cardboard, sketch pens, colored papers, glue, scissors

Cost of the TLM : Approximately 40.

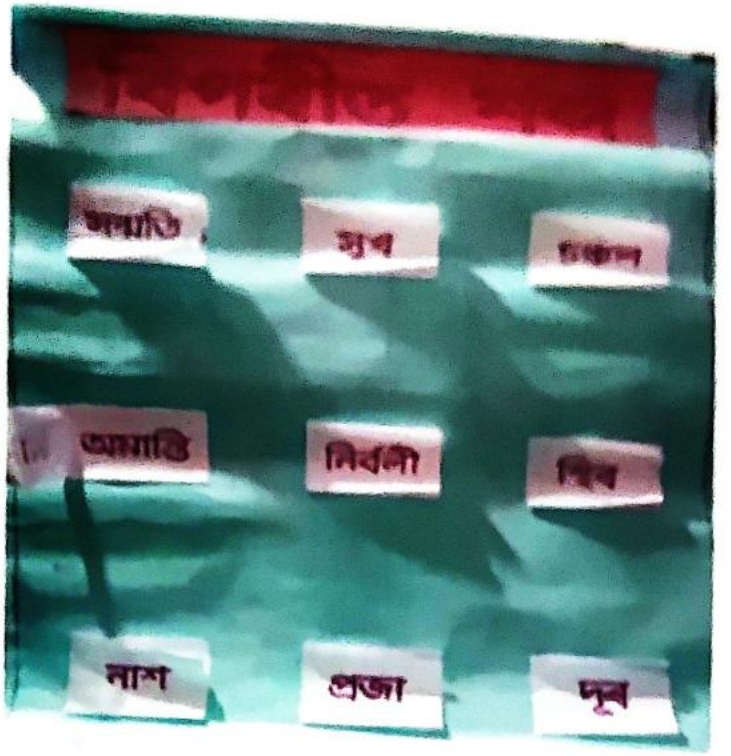
How to make :

- Cut and fold the box with papers to form a 3D box-like display that opens vertically
- Paste colored papers inside to create compartments and background.
- Write the definition of pronoun in Assamese on a central strip (as shown).
- Create small flashcards of different pronouns and paste them inside the base.
- Decorate the model for visual appeal and easy visibility

How to use :

- Begin the lesson by reading the definition aloud.
- Show each pronoun card and ask students to use them in sentences.
- Conduct group activities like matching nouns with correct pronouns.
- Encourage students to classify pronouns by type.

ANTONYMS



TLM for class :- vi

Subject :- Assamese

Topic : Antonyms (বিপৰীত শব্দ)

Brief description of the TLM : This TLM is a flap chart model designed to help students learn opposite words. Each flap has a word written on top and when lifted, it reveals its opposite word underneath. It is interactive, engaging and helps reinforce vocabulary through a hands-on approach.

Other concepts that can be taught using this TLM : Vocabulary development, word usage in context, sentence formation using antonyms etc.

Materials used : Colored chart papers (for base & flaps), white papers for word cards, sketch pens, glue.

Cost of the TLM: Approximately 20

How to make:

- Take a large chart paper and paste a heading 'ବିପରୀତ ଶବ୍ଦ'
- Cut small rectangular flaps from colored papers.
- Write one word on the visible part of each flap.
- Write the corresponding opposite word underneath the flap.
- Past all flaps on the chart in rows and columns, maintaining even spacing.

How to use:

- Ask students to guess the opposite of the visible word and then lift the flap to check.
- Use as a classroom revision activity.
- Conduct word matching games where students match words to their opposite.
- Encourage students to form sentences using both the word and its antonym.

ADJECTIVE



TLM for class :— vi

Subject :— Assamese

Topic :— Adjective (বিশেষণ পদ)

Brief description of the TLM : This TLM is a matching chart activity that helps students to identify and use adjectives (বিশেষণ) with noun (বিশেষ্য). The chart includes images (like - girl, flower, bird) and associated nouns written beside them. The students are expected to pick appropriate adjectives from a card pocket and place them in the blank yellow boxes to complete the phrases meaningfully.

Other concepts that can be taught using this TLM : Noun and adjective agreement, sentence construction using noun+adjective, vocabulary building etc.

Materials used : Chart paper (base), colored paper for cards and labels, sketch pens, hand drawn pictures, glue.

Cost of the TLM : Approximately 25

How to make :

- Take a chart paper and divide it into rows.
- Draw images representing different nouns.
- Write the corresponding noun beside each picture.
- Leave an empty box next to each noun where adjectives will be placed.
- Prepare adjective cards and keep them in a pocket at the bottom of the chart.
- Title the chart as 'আপুনি ক'ই বিশেষ্য – বিশেষণ বিশেষ্য শব্দবৃন্দ'.

How to use :

- Ask students to pick a suitable adjective card and match it with the correct noun on the chart.
- Discuss the meaning of the formed adjective - noun phrase.
- Use it as a classroom game – one student picks and another justifies the match.
- Encourage children to make full sentences using the pairs (for example – দুনীয়া চৰাইজনী ডাঙৰ(হ).

CLOCK MODEL



TLM for class :- vi

Subject :- Mathematics

Topic :- Concept of Time

Brief description of the TLM : This TLM is a colorful paper clock model designed to teach students how to read and understand time. It includes a circular face marked with hours (1-12) and minutes (5-60) using alternating red and blue petals. Movable hour and minute hands help students visually grasp the concepts of hours and minutes.

Other concepts that can be taught using this TLM : Time intervals, AM & PM understanding, duration & elapsed time, basic addition and subtraction using time.

Materials used : Thermocol, colored chart papers, sketch pens, scissors, glue, paper fasteners (to attach movable hands)

Cost of the TLM : Approximately 30

How to make :

- Cut a large circle from colored chart paper for the clock.
- Cover the thermocol with colored paper
- Mark the hours (1-12) and minutes (5-60) evenly around the edge.
- Create and paste alternating patels around the edge for minute intervals
- Cut out two arrows for hour and minute hands and attach them to the center using a paper fastener.
- Title the chard at the top as 'समय सीखें' and decorate as needed.

How to use :

- Rotate the clock hands to show different times and ask students to read them.
- Ask students to set the clock to a given time (for example - 3°15)
- Demonstrate concepts like quarter past, half past and O'clock.

NOUN & ADJECTIVE (Flash card)



TLM for class :– vii
Subject :– Assamese
Topic :– Noun & Adjective

Brief description of the TLM : This TLM uses color-coded flashcards to help students identify and differentiate between nouns (বিশেষ্য) and adjectives (বিশেষণ). Each card displays a single word of noun (পাহাৰ, অসম) and adjective (নীলা, ধুনীয়া). It promotes concept clarity through sorting and matching.

Others concepts that can be taught using this TLM : Word classification (noun vs adjective), Sentence formation using noun + adjective combinations, degrees of adjectives

Materials used : Card box, colored chart papers (two colors, sketch pen, glue, scissors

Cost of the TLM : Approximately 20.

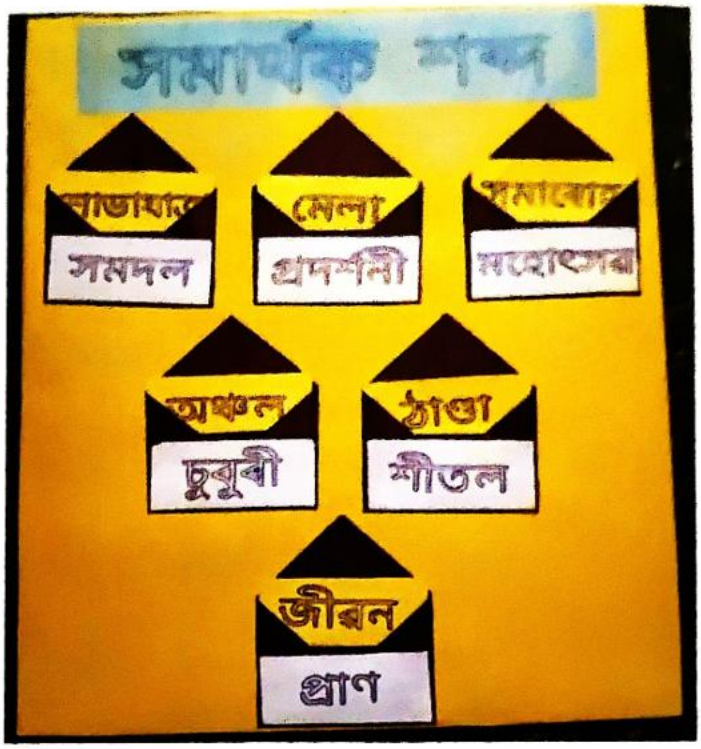
How to make :

- Cut small rectangular cards from two different coloured papers – one for nouns, one for adjectives
- Neatly write a single noun on each green card and a single adjective on each yellow card
- Outline the text with markers for visibility
- Next make two paper boxes for card to be placed

How to use :

- Mix the flashcards and ask students to sort them into nouns and adjectives.
- Conduct a matching activity, for example- pair "गीता" with "अच्छी" to form a meaningful phrase.
- Use in group games, like 'pick & match'.
- Ask students to create their own cards with new noun – adjective pairs.

SYNONYM WORD



TLM for class :- viii

Subject :- Assamese

Topic :- Synonyms word

Brief description of the TLM: This TLM is a 'pocket chart model' — displaying different Assamese words and their respective synonyms. Each pocket holds a word at the top and reveals its synonym when the flap is lifted. It helps students learn synonyms pairs effectively through hands-on exploration.

Other concepts that can be taught using this TLM: Vocabulary development, sentence construction using synonyms, word meaning and usage in context.

Materials used: Thermocol, colored chart paper, sketch pens, glue, scissors.

Cost of the TLM : Approximately 50.

How to make :

- Take a thermocol and cover it with a large colored chart papers as the base.
- Cut small envelope - shaped or pocket - like holders from contrasting colored paper.
- Write base words on the top flap.
- Write their synonyms on separate cards and insert them into the pockets.
- Paste the pockets neatly onto the base chard.
- Label the chart at the top with the theme.

How to use :

- Introduce the base words and ask students to guess their synonyms before revealing them.
- Conduct matching activities where students find correct pairs.
- Ask students to make sentences with both the original word and its synonym.
- Use it in small group discussions or language corners.

PAIRED WORDS



TLM for class :- vii

Subject :- Assamese

Topic :- Paired Words

Brief description of the TLM: This TLM is a 'matching board made with two columns of words and a ribbon with a butterfly pointer. Students match related word pairs by connectioning them with the ribbon. It helps reinforce the understanding of logically paired words in an interactive way.

Other concepts that can be taught using this TLM: Logical word association, vocabulary building, language comprehen-sion, cause-effect relationship.

Materials used : Thermocol, colored chart paper, ribbons, paper butterfly or arrows (for matching), sketch pens, glue, scissors.

Cost of the TLM (approx):

How to make:

- Take a large colored chart as the base (thermo-col.
- Create two columns of word cards on colored papers – left for the first word, right for the matching pair.
- Attach ribbons to the edge of the base with a butterfly at the end to match words.
- Make the chart attractive with neat handwriting and colors.
- Write the title.

How to use:

- Ask students to match the correct word pairs using the ribbon.
- Conduct pair-matching competition in groups.
- Ask students to explain the logic behind each pairs.
- Modify word sets to teach synonyms, antonyms, or rhyming pairs as needed.

ACTION WORD



TLM for class – viii

Subject – Assamese

Topic – Action word (ক্রিয়া পদ)

Brief Description: This TLM is a 'Action verb Wheel'– a colorful, rotating wheel displaying different action words (like – run, dance, eat, write etc) along with related pictures. It helps student understand and identify verbs through visual cues and interaction.

Other concepts that can be taught using this TLM: Sentence formation, use of verbs, tense introduction etc.

Materials Used: Cardboard, Coloring papers, sketchpens, glue, scissors, cut-out pictures of action, cardboard box.

Cost of the materials used for making TLM (approx): 50

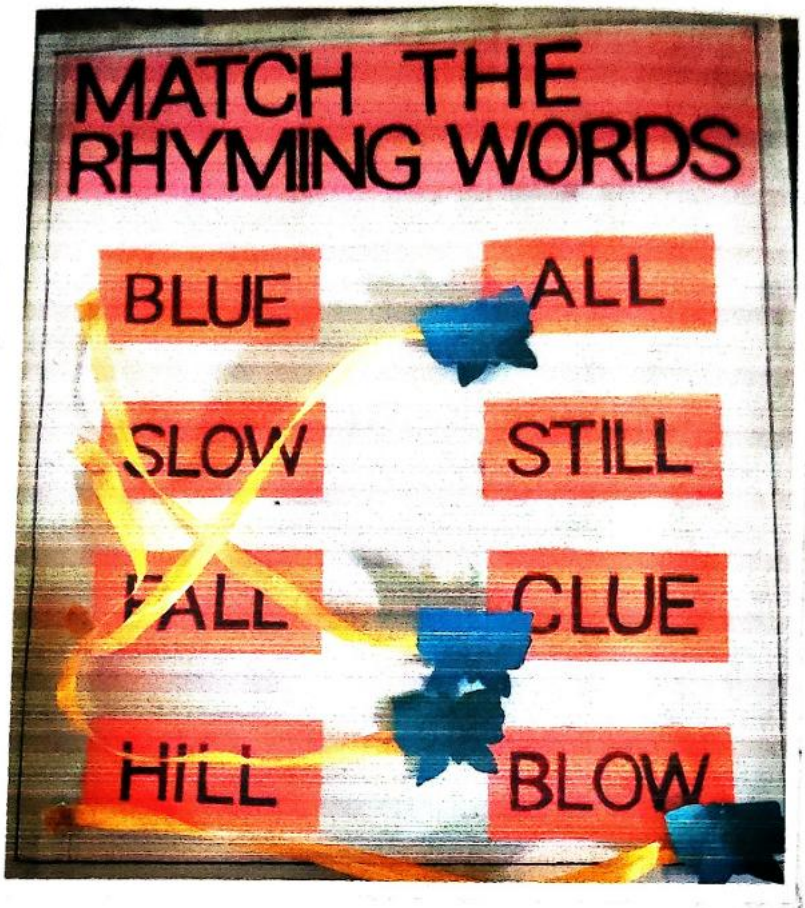
How to make :

- Cut two cardboard circles of the same size
- Divide the top circle into equal sections and cut out a window in each section.
- On the bottom circle, paste pictures of different actions and write the action words.
- Fix both circles together at the center using a brass fastener, allowing rotation.
- Decorate the wheel attractively.

How to use :

- Rotate the top wheel to reveal one action word and a picture at a time.
- Ask students to act out the action, from a picture, or identify the verb.
- Use in group activities or individual learning tasks.
- Can also be used in English or regional language classes.

Rhyming Words



TLM for class : III
Subject : English
Topic : Rhyming words.

1. Brief Description :

This is a rhyming word matching activity used to enhance phonemic awareness in early learners. Children are asked to match words that rhyme by drawing or connecting strings. The words are arranged in two columns — one for the base word and the other for its rhyming pair.

2. Other Concepts That can Be Taught Using This TLM :

- Vocabulary Building
- Simple Sentence formation

3. How to Make :

Steps to make the TLM :

- Take a chart paper or cardboard as the base.
- Divide the sheet into two columns.
- Write 4-5 base words on the left column and their rhyming pairs on the right column.
- Use bright colour paper (e.g - orange, pink) to write words and paste them on both sides.
- Attach ribbons with paper butterflies or any object (flower/star) at the ends to connect words.
- Make slits or holes to thread the ribbon from one word to its match.

4. How to Use :

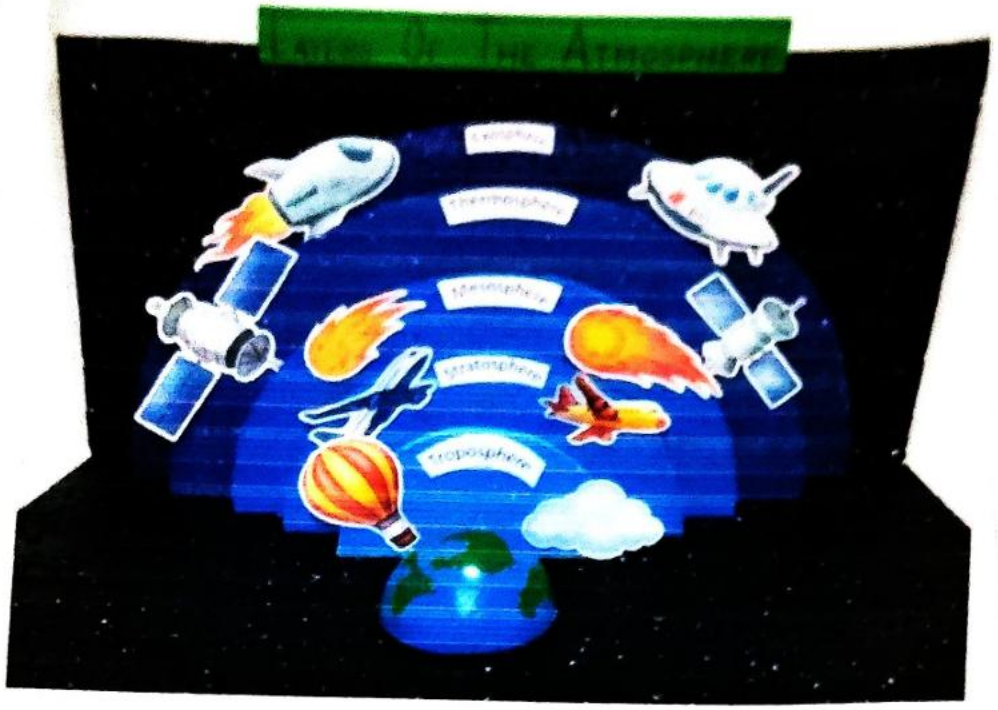
- Ask students to match rhyming words by using ribbon.
- Use it in small groups / activities or language corners.
- Turn it into games / competition where students take turns and earn points for correct matches.
- Can be used for peer learning where one student explains to another.
- For revision or informal assessment.

5. Materials Used :

- Chart paper and cardboard (base)
- Coloured papers (pink, orange)
- Marker.
- Ribbons (yellow in this case)

- Glue and both-sided tape.
- Scissors.

LAYER OF THE ATMOSPHERE



TLM for class : VII

Subject : Social Science

Topic : Layers of the Atmosphere

1. Brief Description :

This 3D model demonstrates the five (four) main layers of the Earth's atmosphere with proper labelling and relevant illustrations. Each semi-circular arch represents a different atmospheric layer with related images (e.g – hot air ballon, airplane, meteors, satellites).

2. Other Concepts That can Be Taught Using This TLM :

- Structure of the Earth's atmosphere.
- Uses / importance of each layers.
- Weather and climate zones.
- Air pressure changes by height.

- Human and scientific activities in various layers (e.g. satellites in the exosphere, aircraft in stratosphere)
- Can be integrated with geography, environmental science and space science topics.

3. How to make:

- Take a thermocol base and a background.
- Cut semi-circular arches of size with radius 24cm, 18.5 cm, 15 cm, 11.5 cm and 8cm respectively from thermocol.
- Colored the layers light to dark blue, and also base and background black.
- Attach the background and the layers to the base using glue and secure them using pins.
- In front of the layers place a half sphere to showcase it as earth. It can be made using any round ball or soft toy, colored it. So, that it can be displayed as earth.
- Labels are written in Assamese and pasted on each layers.
- Related pictures (clouds, aircraft, meteors, rockets) are dawn or printed and attached to their respetive layers.

4. How to Use:

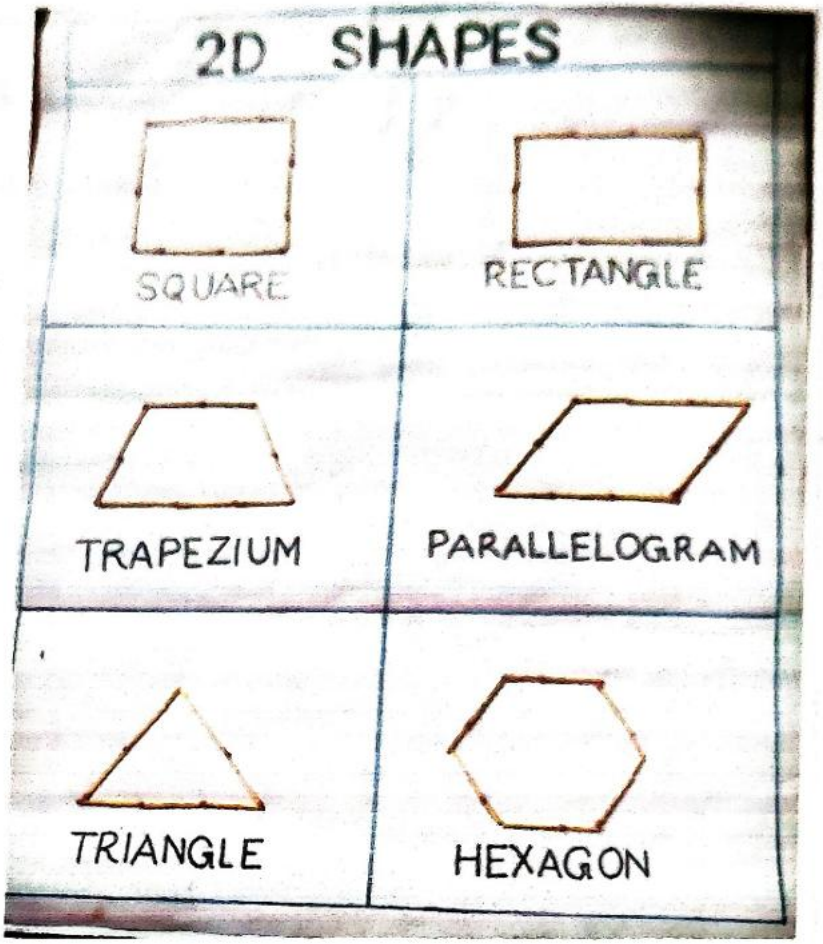
- The teacher will demonstrate this model to explain the layers of atomosphere to the students
- The teacher will explain the characters of each layers well.

• Then the teacher will ask the student to identify the layers and explain their characters.

6. Materials Used:

- Thermocol (for base and arches)
- Fabric colour, sketch pens, markers.
- Cutter and glue.
- Printed or hand drawn images.
- Labels in Assamese

2D SHAPES



TLM for class : III
Subject : Mathematics.
Topic : 2D shape.

1. Brief Description:

This handmade 2D shape chart showing six different geometric shapes — Square, Rectangle, Trapezium, Parallelogram, Triangle and Hexagon. Each shape is formed using matchsticks and small red dot markers on a chart paper. It is used to teach students about basic 2D geometric figure and their properties in a tactile and visual manner.

2. Other Concepts That can be Taught Using This TLM:

- Number of sides and corners (Vertices)

- Types of lines (Parallel, slanting, vertical, horizontal)
- Angles in different shapes (right, acute, obtuse)
- Symmetry (which shapes are symmetrical?)
- Perimeter calculation (by counting sides)
- Classification of polygons (triangles, quadilaterals)
- Comparing shapes (e.g - square vs rectangle)
- Real-life examples of shapes.

3. How to make :

- Take a chart paper and divide it into six equal rectangles using a ruler and marker.
- Write '2D shape' at the top as a heading.
- In each rectangle :
  - Use matchsticks to from the sides of the shape.
  - Label each shape clearly underneath (e.g; SQUARE, TRIANGLE).
- Ensure all shapes alligned and proportionate.
- Optionally laminate or cover with plastic for durability.

4. How to Use :

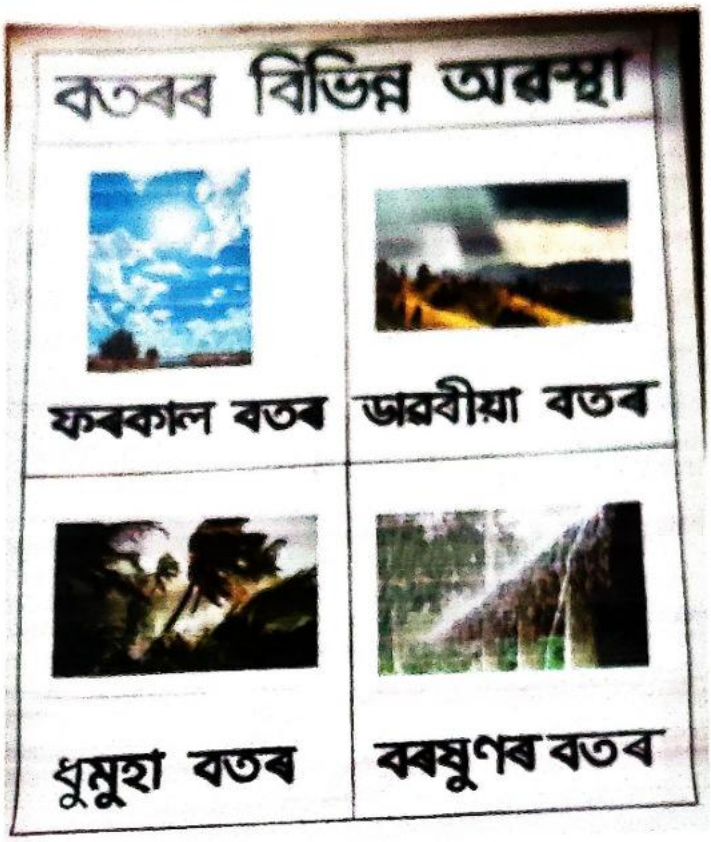
- Classroom demonstration : Teacher can point and explain number of sides and corners.
- Students Interaction : Students can count and touch the matchstick sides and dots to learn physically.

- Ask questions like "Which shape has 4 sides?"
- Compare two shapes (square vs rectangle : same sides vs different lengths)
- Students recreate shape with real matchsticks for group.
- Assessment : Ask student to identify or draw similar shapes in notebooks.

Materials Used :

- Chart paper.
- Matchsticks (For shape lines)
- Black marker (for writing and outlining)
- Scale and pencil (for measurement and layout)
- Glue or fevicol.

WEATHER CONDITION



TLM for class : VII
Subject : Social Science.
Topic : Weather condition.

1. Brief Description :

This TLM is a weather condition chart presented in Assamese. It shows four different types of weather conditions through pictures and matching labels. It helps students visually recognize and name weather types in their local language. Weather types shown Sunny weather, cloudy weather, stormy weather and rainy weather.

2. Other concepts that can be taught using this TLM :

- Comparision of weather types.
- Causes and effects of different weather conditions.

- Can be used EVS and Social Science classes.

3. How to make :

- Take a chart paper and divide it into four equal sections.
- Paste printed pictures of different weather conditions.
- Below each image, write the Assamese name of that weather type in bold.
- Title the chart as "বতৰৰ বিভিন্ন অৱস্থা" using a black marker.

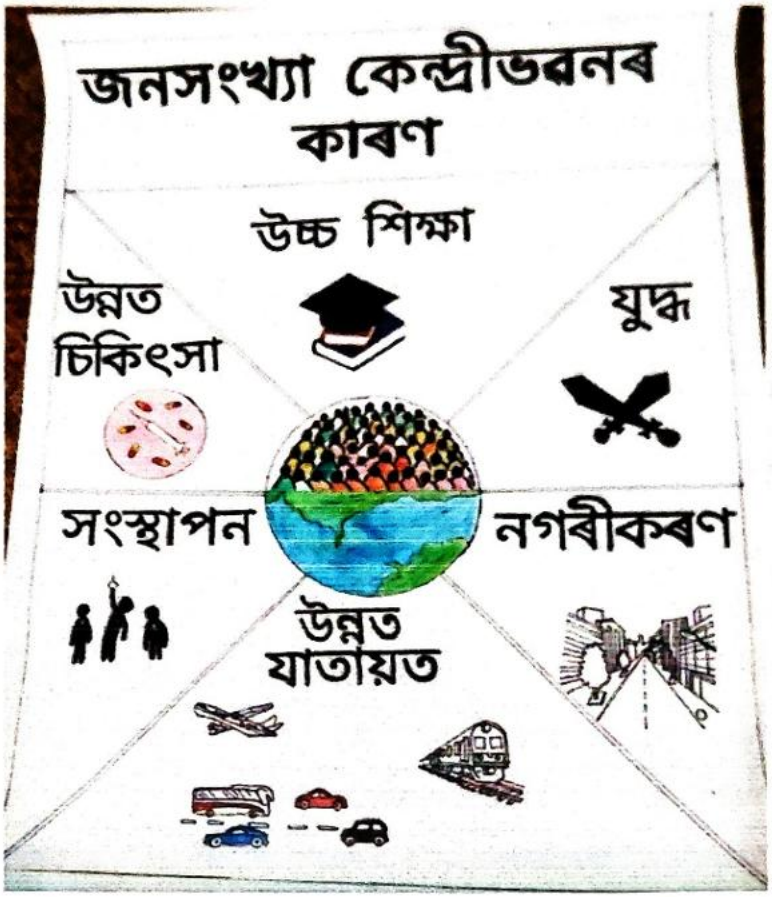
4. How to use :

- During class, show each picture and discuss its name, feature and effects.
- Ask student to identify weather based on the picture
- Can also be used for daily weather observation - students can update using symbol.

5. Materials used :

- Chart paper (for base)
- Printed photos (weather types)
- Black marker (for titles and labels)
- Fevicol.
- Ruler and pencil.
- Scissors

CAUSES OF POPULATION CONCENTRATION



TLM for class : VIII .
Subject : Social Science .
Topic : Causes of population concentration.

1. Brief Description :

This is a handmade concept chart designed to explain the main factors responsible for population concentration in a particular area. The chart is divided into six segments, each showing a different reason with a relevant hand-drawn picture and Assames labels. factors illustrate in the TLM are higher education, War, Advance Medical facilities, Improved transport etc. And center circle illustrate crowd of people over a globe — Symbolizes population concentration on Earth.

2. Other concepts that can be taught using this TLM:

- Migration.
- Push and pull factors in population shift.
- Population density in cities.
- Social and economic infrastructure.
- Can be integrated with Geography and Economics.

- How to make:

- Take a chart paper and divide it into six triangular sectors from the center.
- Draw a globe with people in the center.
- In each section, draw pictures representing one cause. (e.g- education, health)
- Label each section in Assamese with bold, clear letters.
- Use coloring and borders to make it visually appealing.

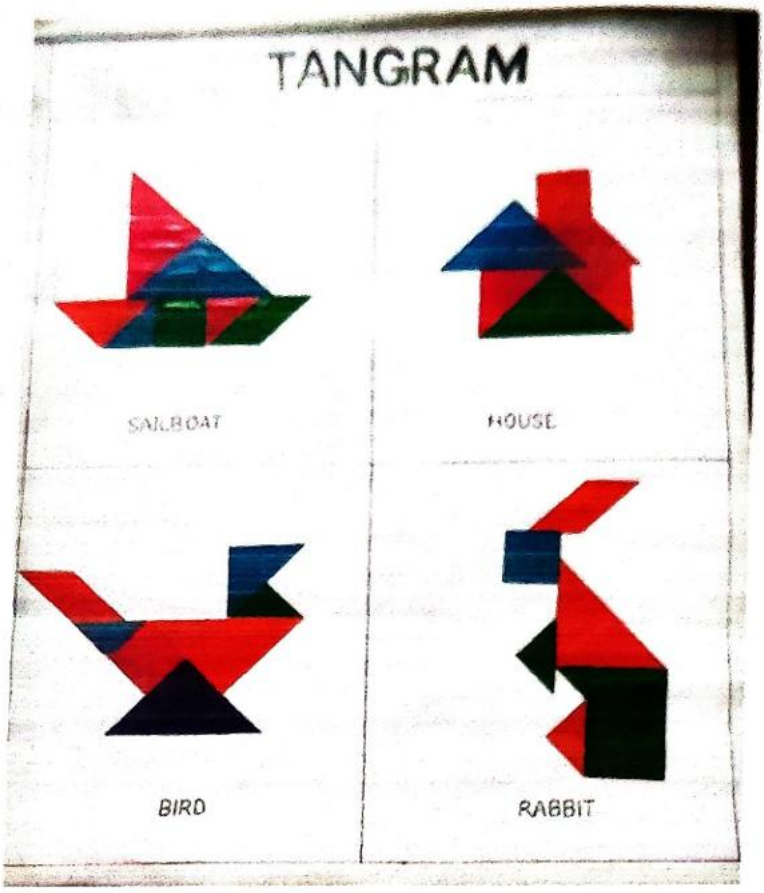
4. How to use:

- During a topic population concentration, display and explain each reason one by one.
- Conduct question-answer sessions — ask student to give real-life examples of such places.
- Use it for revision and classroom display.

5. Materials used :

- White chart paper.
- Pencil and Black marker.
- Ruler, compass.
- Eraser, glue.

TANGRAM



TLM for class : III
Subject : Mathematics
Topic : Tangram

1. Brief description :

This is a Tangram - based visual TLM that creatively uses 7 geomatric shapes (called tans) to form different recognizable figures. The chart is divided into four parts, each displaying a different Tangram formation : Sailboat, House, Bird, Rabbit.

Tangrams are a mathematical puzzle made of seven flat shapes : 2 large triangles, 1 medium triangle, 2 small triangles, 1 square and 1 parallelogram.

2. Other concepts that can be taught using this TLM:

- Basic Geometry: shapes, sides, angles.
- Creative thinking and Art- integration.
- Problem solving and logical reasoning.

3. How to make:

- Take a chart paper and divide it into four sections.
- Choose 4 tangram figures to construct (like bird, house, boat, rabbit)
- Cut the 7 geomatric (shapes) pieces from colored paper.
- Assemble the tans on each sections to form a figure.
- Paste them neatly and label each shape below.
- Write the heading "TANGRAM" clearly at the top.

4. How to use:

- Demonstrate tangram rules: All 7 pieces must be used without overlapping.
- Use it as a math art integration activity.
- Allow children to create their own design and name them.
- Use it to introduce geometry in a fun, engaging way.

5. Materials used :

- Chart paper.
- Color papers.
- Black marker.
- Ruler, pencil, scissors.
- Glue.

OPPOSITE WORD.



TLM for Class : IV
Subject : English
Topic : Opposite word

1. Brief Description :

. This is an interactive flip-card style TLM designed to teach opposite words. It consists of brightly colored flaps with words like Day, Up, Big on the left and Hot ; Yes, on on the right. The opposite words are likely written underneath each flap ; creating an engaging and interactive learning experience for young learner.

2. Other concept that can be taught using this TLM:

• Grender (Boy-girl)

- Vocabulary enhancement.
- Sentence construction using opposites.

3. How to make:

- Take a colored chart paper as the base.
- Divide into two columns using a scale and marker.
- Cut colored rectangular strips (used as flaps)
- Write one word on the top of each flap.
- Underneath each flap, write the opposite word.
- Paste only the top edge of each flap so it can lift up easily.
- Add the title "OPPOSITE WORD" at the top.

4. How to use:

- Show students the word on the flap and ask them to guess its opposite.
- Lift the flap to reveal the correct answer.
- Ask students to write sentences using both words.

5. Material Used:

- Chart paper (base)
- Color papers (for flaps – yellow, green, orange)
- Marker.
- Scale and pencil.
- Scissors and glue.

THE DENSELY POPULATED REGIONS OF THE WORLD



TLM for Class :- VIII

Subject :- Social Science

Topic :- Population concentration

1. Brief Description :

This is a world map-based chart in Assamese highlighting the densely populated regions of the Earth. The map has been hand-colored, and key regions are marked in green. The corresponding names are listed in Assamese at the bottom, identifying specific high-density population zones globally.

2. Other concepts that can be taught using this TLM :

- World geography.
- Continents identification.

3. How to make :

- Draw a world map on chart paper.
- Use watercolor and marker to highlight selected densely populated regions.
- label them clearly in Assamese.
- Create a key at the bottom with bullet points and matching labels (ক. ৰ, ৰা, ৰ)
- Add a direction compass to teach navigation.
- Neatly tittle the chart as " পৃথিৱীৰ ঘনবসতিপূৰ্ণ অঞ্চল " |

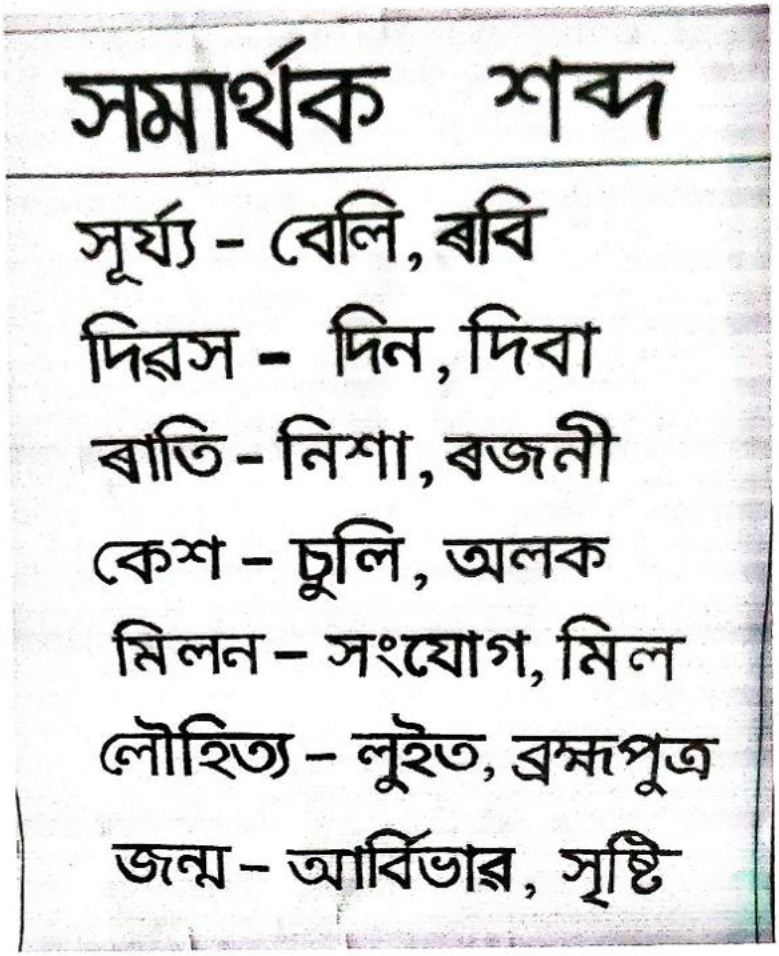
4. How to use :

- During lessons on population, geography, or climate, point to each region.
- Ask students to identify reasons for population concentration in those places.
- Conduct map reading exercises.
- Use the compass to practice direction skills.

5. Materials used :

- Chart paper.
- Outline of the world map.
- Watercolors and black marker pen.
- Pencil, eraser, ruler.

SYNONYMS



TLM for class : V
Subject : Assamese
Topic : Synonyms

1. Brief Description :

This chart displays Assamese synonyms for commonly used words. It helps learners enrich their vocabulary by knowing alternative words with the same or similar meanings. The list includes 8 base word and their synonyms.

2. Other concepts that can be taught using this TLM :

- Word formation

- Vocabulary enrichment.
- Sentence formation using synonyms.

4. How to make:

- Take a chart paper and write the title in bold letters at the top: "সমাৰ্থক শব্দ".
- List commonly used Assamese words on the left side.
- Beside each, write 2-3 synonyms.
- Highlighting base words and synonyms differently.

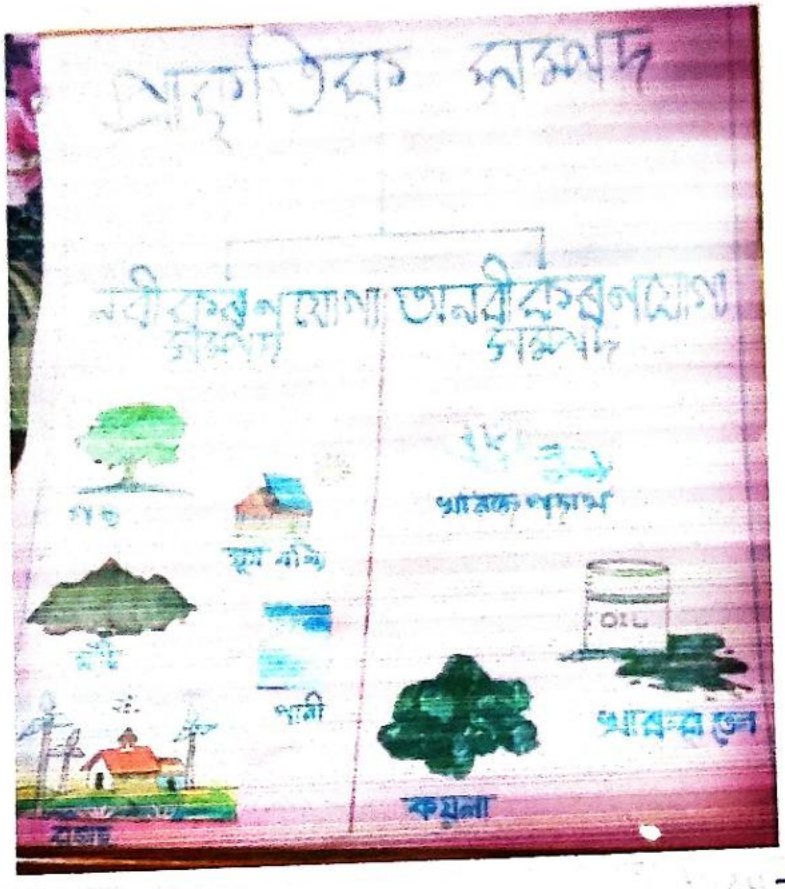
5. How to use:

- Introduce one base word daily and ask students to tell or write its synonyms.
- Ask students to use synonyms in sentences.
- Display it as a wall chart for everyday reference.

6. Materials used:

- Chart paper.
- Black marker.
- Pencil and ruler.
- Eraser.

NATURAL RESOURCE



TLM for class : VII
Subject : Social science.
Topic : Natural Resources.

1. Brief Description :

This TLM explains the concept of Natural Resources, which are divided into two categories :

(a) Renewable Resources : These resources can be replenished naturally over time. Example shown : Tree, Solar energy, soil, water, wind energy.

(b) Non-renewable Resources : These are resources that cannot be replenished quickly or once used, are gone forever. Example shown : Minerals, Petroleum/oil, Coal.

2. Other Concepts That can Be Taught Using this TLM :

- Basic geography and environmental science concepts.
- Conservation of natural resources.
- Sustainable development.
- Reduce, reuse and recycle.

3. How to Make :

- Take a chart paper.
- Write the title 'প্রাকৃতিক সম্পদ' (Natural Resources) at the top.
- Divide the chart into two sections :
  - → Renewable Resources.
  - → Non-renewable Resources.
- Draw and paste relevant pictures under each category.
- Label all images clearly in Assamese.
- Use colors to make the chart visually attractive for students.

4. How to Use :

- Use it during classroom introduction to 'Natural Resources'.
- Teachers can explain the difference between renewable and non-renewable resources with examples.
- Students can be asked to identify and classify resources from the chart.

5. Materials Used :

- Chart paper
- Colored pencil / sketch pen.
- Scissor.
- glue.

OUR FAMILY



TLM for class : III
Subject : Social Science
Topic : Our family

1. Brief Description :

The TLM is titled "Our family" and it shows two types of families :

a. Nuclear family :
   (i) shows on the left
   (ii) Includes father, mother and one child.
   (iii) Activities like mother helping child and father doing household chores are shown.

(b) joint family :

(i) Shown on the right.

(ii) Includes grandparents, parents and children.

(iii) Activities like caring for a baby, interaction among multiple members are shown.

2. Other Concepts that can be taught using this TLM :

(a) Family Roles and Responsibilities :

who does what in the family - cooking, helping in studies, child care, etc.

b. Values in family life :

Love, respect, sharing, caring, cooperation.

c. Generation in a family :

Explaining terms like grandparents, parents siblings, etc.

3. How to make :

Steps to make the TLM :

- Take a white chart paper or flex.
- Divide it into two equal sections.
- Sketch two family types - nuclear and joint.
- Use watercolors or sketch pens to colour.
- Label the sections :

  Left side : Nuclear family

  Ride side : joint family

  Title : Our family

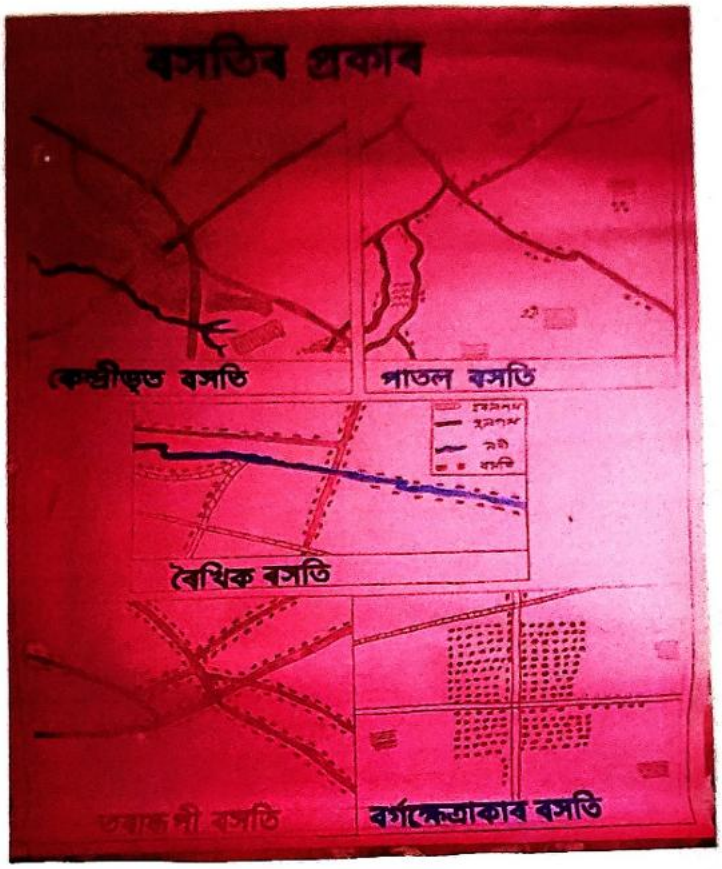
4. How to use :

- Use during Social science class while introducing the topic "My family".
- Ask students to observe and describe the picture.
- Initiate comparison discussion : How many members? what activities?
- Use it in storytelling or role-play to act as members of different family types.

5. Materials Used :

- Chart paper
- Pencil
- Black Marker
- watercolour or sketch

SETTLEMENT TYPE



TLM for class : VIII
Subject : Social Science
Topic : Settlement

1. Brief description :

This TLM shows different types of human settlements through hand-drawn maps. There are five main types illustrated :

a. Centralized Settlement :

Houses are grouped close together, often around water sources or roads.

b. Dispersed Settlement :

Houses are spread out over a large area, often in rural or hilly regions.

c. Linear Settlements :

Houses are arranged in a line, typically along a river, road or railway.

d. Radial Settlement :

Roads or paths spread out from a central point like spokes of a wheel, and houses are along those roads.

e. Rectangular Settlement :

Houses are planned and built in straight lines forming square or rectangular shapes, often found in plain or urban areas.

2. Other Concepts then can be Taught Using this TLM :

- Understanding roads, rivers, and directions
- Geographical factors affecting human settlements
- Differences between rural and urban settlements
- How natural resources influence settlement patterns.

3. How To make :

- Take a chart paper.
- Divide it into five sections using a pencil and ruler.
- Draw each type of settlement using markers or colour pencils.
- Label each type clearly : Clustered, Dispersed, Linear, Radial, Rectangular.
- Add a legend To explain map symbols like river, road, and houses.

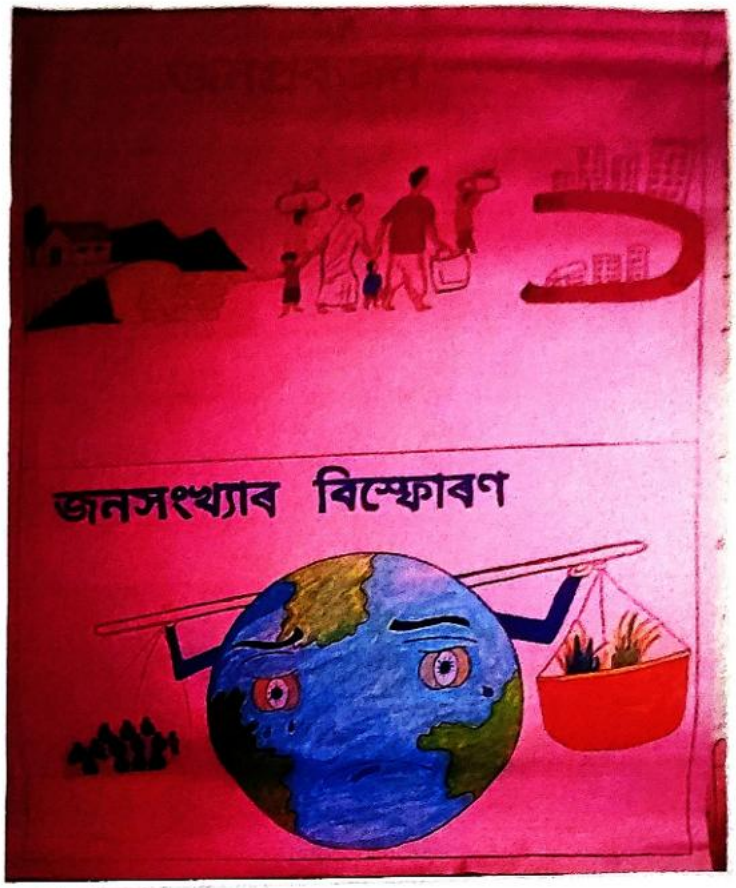
4. How to use :

- Explain each settlement type using the corresponding map.
- Ask students to identify types of settlements based on features.
- Conduct group discussions on quizzes using the chart.
- Assign students to draw their own settlement maps for practice.

5. Material used :

- Chart paper
- Pencil, ruler
- Colour pencil
- Black marker pens
- Glue

MIGRATION AND POPULATION EXPLOSION



TLM for class : VIII
Subject : Social Science
Topic : Migration and Population Explosion

1. Brief Description :

A. Migration :

B. Population Growth

- The upper part of the chart shows migration – a family moving from a rural area to an urban area.
- It depicts the "Push and pull factors" of migration.
- The lower part shows population Explosion using a creative visual :
- Earth is shown crying and burdened, carrying an unbalanced scale.

- One side has overcrowding
- The other side has scare resources (like, food, land, and water)
- The reflects how overpopulation causes imbalance and stress on Earth.

2. Other Concepts That can be Taught using This TLM :

- Causes and effects of migration
- Push and pull factors of migration
- Problems caused by overpopulation.
- Need for population control and sustainable development.
- Impact of population growth on environment and economy.

3. How To make :

- Take a chart paper.
- Divide it into two sections : upper for migration lower for population explosion.
- Draw pictures of :
  - A migration family
  - Earth carrying an unbalanced scale
- Use sketch pens or coloured pencils for bright visuals.
- write clear titles

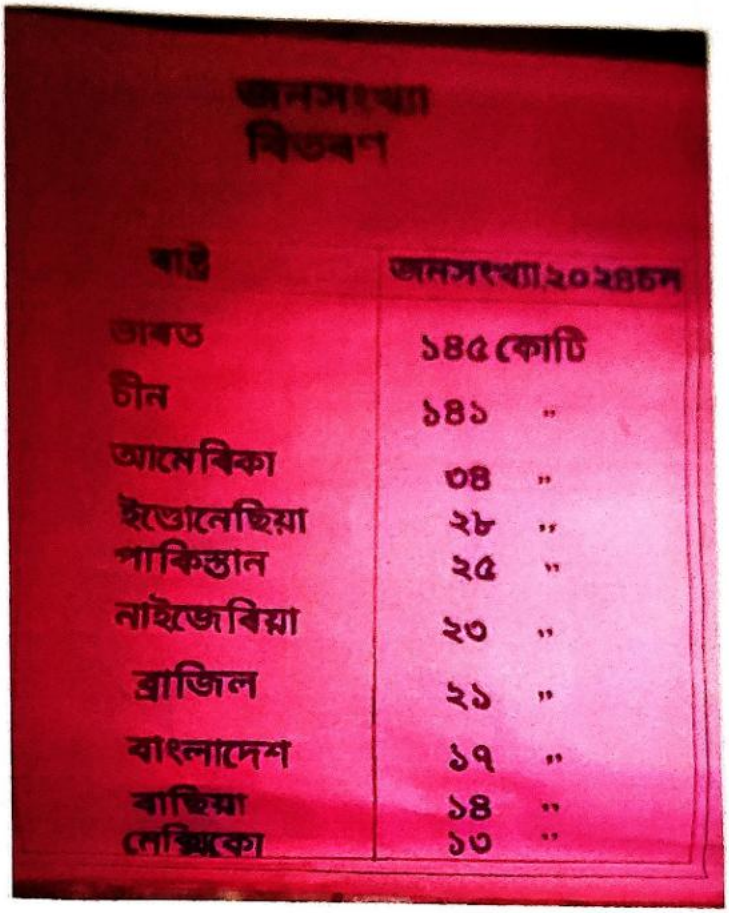
4. How To Use :

- Use during lessons on migration, population, or social issues.
- Encourage discussion : "Why do people migrate ?" "What happens when population grows too much ?"
- Ask students To identify symbols.

5. Materials Used :

- Chart paper
- Pencil, ruler
- Colour pencil,
- Black marker for borders and writing

POPULATION DISTRIBUTION



জনসংখ্যা
বিতরণ

রাষ্ট্র	জনসংখ্যা ২০২৪ চল
ভারত	১৪৫ কোটি
চীন	১৪১ "
আমেরিকা	৩৪ "
ইন্ডোনেশিয়া	২৮ "
পাকিস্তান	২৫ "
নাইজেরিয়া	২৩ "
ব্রাজিল	২১ "
বাংলাদেশ	১৭ "
রাশিয়া	১৪ "
মেক্সিকো	১৩ "

TLM for class : VIII
Subject : Social Science
Topic : Population Distribution

1. Brief description :

This TLM represents the population distribution in different countries based on the 2024 estimate.

- Title : Population Distribution
- Table Columns
  - Country
  - Population

2. Other Concepts that can be Taught using this TLM :

- World's most populous countries

- Global population Trends
- Comparative population analysis
- Factors influencing population size
- Overpopulation and its effects
- Population and development.

3. How To make :

- Take a chart paper
- Draw a neat Table with lines dividing country names and population.
- Write headings clearly at the Top.
- List country names
- Write population numbers in bold for easy visibility.

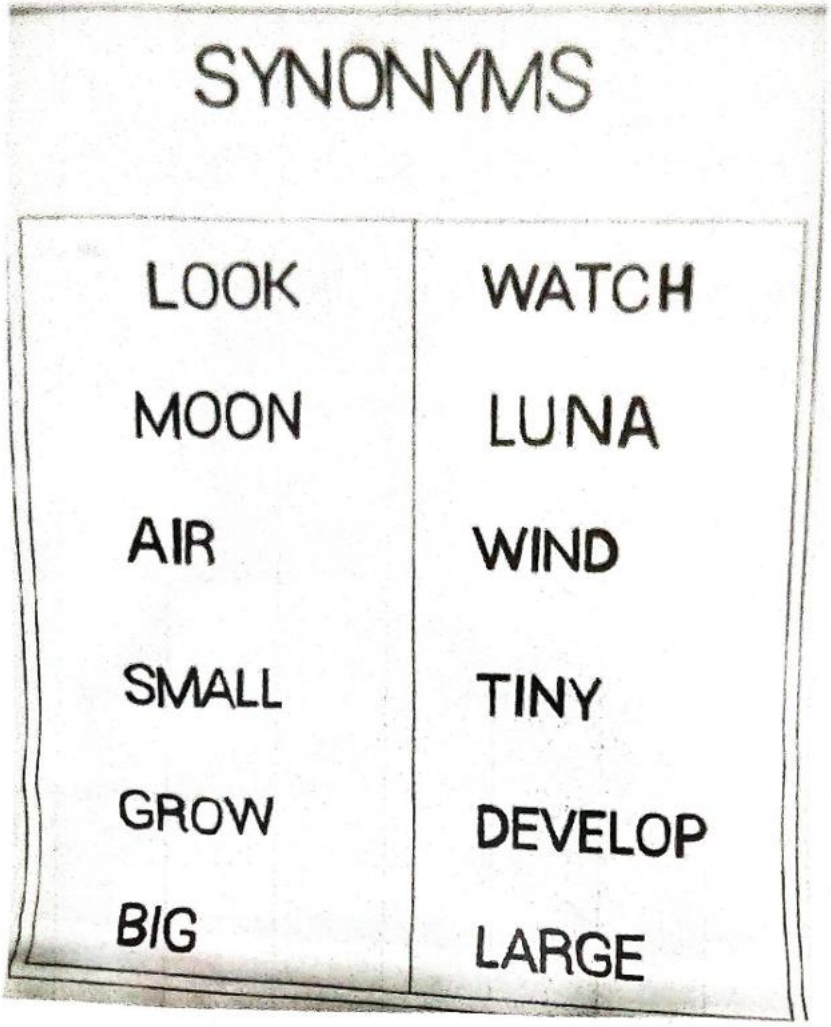
4. How To Use :

- Display the TLM while Teaching world population.
- Ask students questions like :
  - Which country has the largest populations ?"
  - what is the population of China ?

5. Materials Used :

- Chart paper
- Ruler
- Pencil
- sketch pens
- Eraser and sharpner

SYNONYMS



TLM for class : IV
Subject : English
Topic : OH! Look at the moon

1. Brief Description :

This TLM presents a simple chart of synonyms - word that have similar or the same meanings.

- Each word on the left column has a matching synonyms on the right.
- It helps students build vocabulary by learning word pairs with similar meanings.

2. Other concepts that can be Taught using this TLM :

- Vocabulary building
- Sentence construction using synonyms

- Word usage in different contexts
- English grammar : adjectives, verbs, and nouns

3. How To make :

- Use a white chart paper.
- Write the title "SYNONYMS" at the top using bold letters.
- Divide the page into two columns using a ruler.
- List common english words on the left side and their synonyms on the right.
- Use bold or coloured markers for clarity.

4. How To use :

- Introduce each pair one by one with examples in sentences.
- Ask students to make their own synonyms pairs.
- Use it during vocabulary or grammar lessons.
- Conduct matching activities
- Encourage students to come to the board and read aloud.

5. Materials Used :

- Chart paper.
- Pencil and ruler.
- Black marker
- Coloured markers for highlighting.

ENVIRONMENTAL ISSUE



TLM for class : V

Subject : Social Science

Topic : Environment

1. Brief description :

This TLM is a hand-drawn poster that highlights the contrast between positive and negative human impact on the environment. The image is divided into two halves :

- Left Side : Shows a healthy environment with greenery, a person planting a tree, and clear skies - emphasizing the message "Plant Tree."
- Right Side : Shows environmental degration due to deforestation, cracked dry land, pollution from

factories – emphasizing "stop pollution."

2. Other Concepts that can be Taught using this TLM:

- Causes and effects of pollution.
- Deforestation vs. Afforestation.
- Climate change and global warming
- Human responsibility towards environment
- Sustainable development.
- Air and water quality

3. How To make:

- Draw a big circle in the center of a chart paper
- Divide it vertically and horizontally into four quadrants.
- Sketch:
  - One side with greenery, clean water, and tree plantation.
  - The opposite side with deforestation, pollution, dry land, and smoke.
- Add messages: "PLANT TREE" on the green side and "STOP POLLUTION" on the polluted side.
- Use bright poster or watercolours to differentiate the contrast.

4. How To use:

- Use this chart while Teaching Environmental science.
- Ask students To identify what's wrong on the polluted side and what's right on the green side.
- Organize group discussions on "How To protect the Environment."

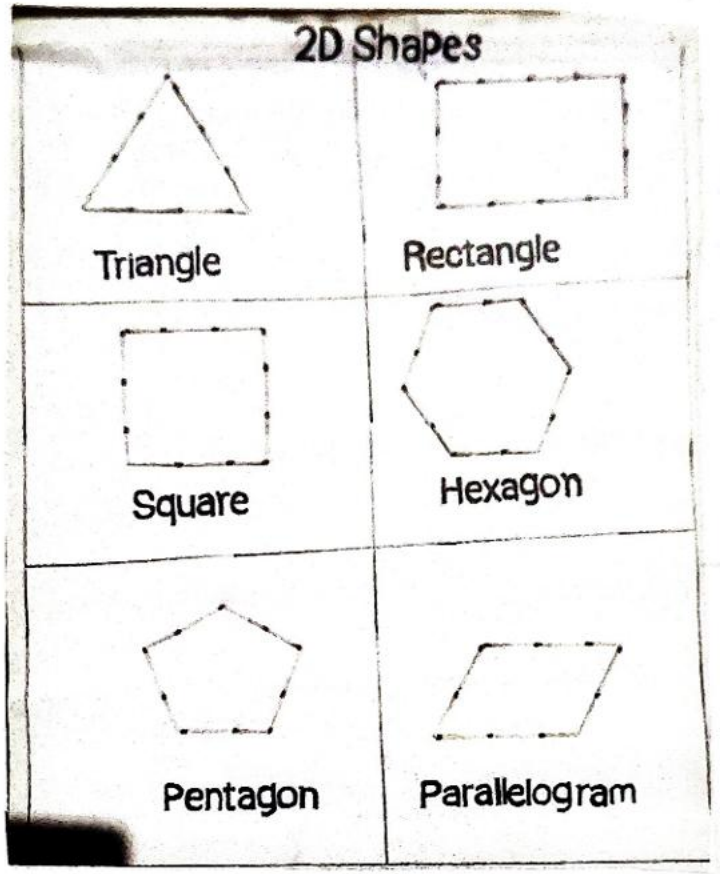
- Encourage students to make similar posters and present solutions for real-life environmental problems.

5. Materials Used:

- Chart paper
- Pencil and eraser
- Ruler
- Watercolour
- Paintbrushes
- Black marker

1. D

2D SHAPE



TLM for class : IV

Subject : Mathematics

Topic : 2D Shapes

1. Brief Description :

This is a 2D shapes chart displaying six basic geometric shapes:

- Triangle
- Rectangle
- Square
- Hexagon
- Pentagon
- Parallelogram

Each shape is outlined using thread or wool attached to pins or dots, making the shapes tactile and visually clear for students. It helps

children identify and understand the properties of flat shapes.

2. Other concepts that can be taught using this TLM:

- Number of sides and corners
- Types of angles.
- Symmetry in shapes.
- Comparing and contrasting shapes
- Perimeter and area.
- Real-life examples of shapes.

3. How to make:

- Take a large chart paper
- Divide into sections, create 6 boxes.
- Draw shapes
- Pin small dots at the corners of the shapes to show vertices.
- Label each shape clearly below it.

4. How to use:

- Ask students to count sides and vertices.
- Let students trace shapes with fingers or string.
- Give students strings or straws to recreate shapes.

5. Materials used:

- Chart paper
- Sketch pens / markers
- Ruler and pencil
- Glue

HUMAN RESOURCES AND MAN-MADE RESOURCES



TLM for Class : VII
Subject : Social Science
Topic : Human resources and Man-man resources

1. Brief Description:

- Left side : shows people in different professions such as doctor, engineer, worker, police and farmer - representing skilled human beings who contribute to development.
- Right side : Depicts man-made infrastructure like buildings, roads, vehicles, airplane - things created by humans for convenience and progress.

2. Other concepts that can be taught using this TLM:

- Types of resources : Natural vs Human vs Man-made

- Occupations and their importance
- Urban development and infrastructure
- Community helpers
- Interdependence between human and man-made Resources.
- Education and skill development

3. How to make :

- Take a large chart paper
- Divide it into two sections with bold lines and headings :
    - Human resources
    - Man - made resources
- On the left side, draw or paste images of professionals like doctor, farmers, engineers, workers etc.
- On the right side, draw or paste pictures of buildings, roads, vehicles, airplanes, etc.
- Use colored sketch pens to highlight differences.
- Ensure neat labeling for each section.

4. How to use in classroom :

- Introduction : Use the chart to introduce the topic "Resources" in social science.
- Interactive session :
    - Ask students to identify and differences between human and man-made resources.
    - Encourage them to name other examples.
- Group Activity :
    - Students can be divided into two groups to list more items under each category.

5. Materials used :

- Chart paper
- Sketch pens
- Pencil and eraser

RURAL AND URBAN SETTLEMENTS



TLM for class : VIII
Subject : Social Science
Topic : settlement

1. Brief Description :

This is a 3D model that shows the difference between rural and urban settlements :

- Urban settlement : Tall buildings, concrete roads, and modern infrastructure representing city life.
- Rural settlement : small huts, greenery, trees, and pond representing village life.

To help students visually understand the physical layout and features of urban and rural settlements.

2. Other concepts that can be taught using this TLM:

- Difference between Urban and Rural life.
- Types of human settlements
- Housing patterns.
- Transport and roads in village vs. city
- Occupation in rural and urban areas.
- Natural and man-made environment.

3. How to make:

- Use a thermocol board as the base.
- Use small boxes, paper rolls, to make huts and buildings.
- Use colored paper to create slanted roofs for village huts.
- Make a black paper road with white strips for divider lines.
- Use green paper for leaves and sticks for tree trunks.
- Draw a pond shape and color it blue.

4. How to use in classroom.

- Use it to introduce a lesson on "Types of settlements" in social science.
- Explain the features of urban and rural life using each part of the model.
- Ask students to compare and contrast both areas.
- Use for projects, exhibitions or class demonstration.

5. Materials Used:

- Thermocol
- Colored paper
- Glue, scissors, sketch pens
- Sticks for trees
- White paper for labels

CROP TYPE



TLM for class : VII

Subject : Social Science

Topic : CROP TYPE

1. Brief Description

This 3D model represents different types of seasonal crops:

- Zaid crops – Crops grown in summer
- Rabi crops – Grown in winter
- Kharif crops – Grown during the monsoon.

2. Concepts that can be Taught using this Model:

- Types of crops
- Seasons of cultivation
- Tools and Techniques used in Traditional farming

- Role of farmers in society
- Irrigation and natural resources in agriculture
- Importance of agriculture in rural economy

3. How to make :
- Use a thermocol sheet
- Use brown and green colored paper to represent soil and crops
- cut leaf shapes from green paper and paste them in rows.
- Draw images of a farmer and bullocks, color and stick them on cardboard to stand upright.
- ~~Use~~ blue paper color to represent wet fields.

4. How to use it in the classroom :
- Use during social science lessons on agriculture.
- Explain the seasonal crop of India.
- Demonstrate the importance of farmers and Traditional Tools.
- Can be used in exhibitions, practicals, and project Presentations.

5. Materials used :
- Thermocol.
- Colored papers
- Glue,
- Sketch pens.

TYPES OF SEEDS



TLM for Class - VI

Subject - Science

Topic - Types of seeds (monocot and dicot)

Brief description :- This TLM shows real samples of various seeds displayed in small plastic packets on a chart. Each seed is labeled in Assamese helping students recognize and differentiate seeds based on appearance and name.

Concepts that can be taught using this TLM :- Identification of commonly used seeds in agriculture, classification of seeds, difference between monocot and dicot seeds.

Materials used :- white chart paper, small plastic packets, various types of seeds, marker, glue.

Cost of the TLM :- 50 Rs.

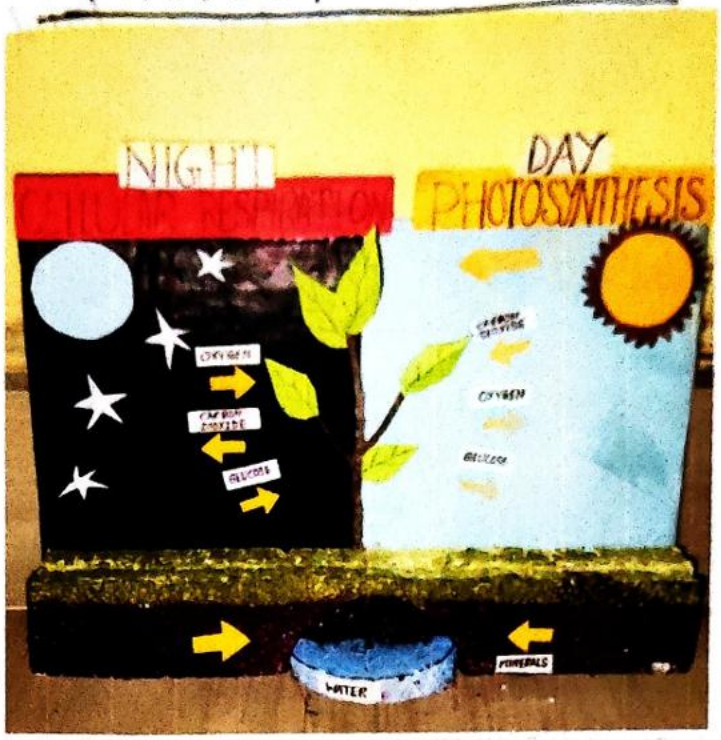
How to make :-

① Take a chart paper and divide it into grids.
② Collect the seeds and place them in small transparent packets.
③ Label each section with the name of seed.
④ Stick each packets in the correct section.

How to use :-

① Introduce students to each seed name and allow them to see the real sample.
② Discuss how each seed grows.
③ Explain monocot and dicot characteristics using real seeds (e.g- Paddy - Monocot, Bean - dicot).
④ [illegible] discuss the features like number of cotyledons, leaf patterns and germination.

PHOTOSYNTHESIS



TLM for class – VI
Subject – Science
Topic – Photosynthesis in plants.

Brief description :– This is a 3D model showing what happens inside a plant during the day and night. On the daytime side, the model explains photosynthesis (sunlight, CO_2, O_2 and glucose). On the nighttime side, it shows cellular respiration. The base shows roots absorbing water and minerals.

Concepts that can be taught using this TLM :–

(i) Photosynthesis
(ii) Cellular respiration
(iii) Difference between day and night processes in plant.

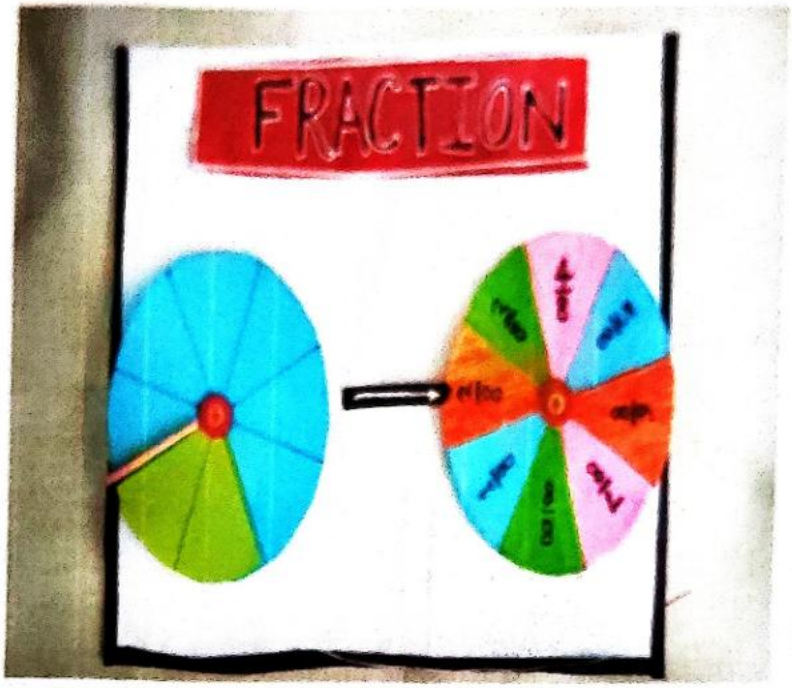
Materials used :- Thermocol sheets, colour paper, labels, Tree made from twigs and paper leaves, Paint or colour pens, roots, Blue, etc.

Estimated cost :- Approx. 100 Rs

How to make :- ① Take a large thermocol base and background board.
② Divide the background into two halves - left for night, right for day.
③ Paint or decorate the night side with moon and stars and day side with sun and blue sky.
④ Place a tree which is made from the twigs in the middle with leaves extending to both sides.
⑤ Use arrows and labels to show gas exchange.
⑥ At the bottom, show soil, roots and arrows for water and minerals.

How to use :-
① Explain how plants make food in the daytime and use it at night.
② Point to each part to discuss what goes in and out of the plant.
③ Engage students with questions like - "why do plants need sunlight?, what do plants do at night?".

FRACTION



TLM for class – V
Subject – Mathematics
Topic – Fraction

Brief description :- This TLM is a "Fraction spinner Model" designed to make learning fractions fun and interactive. It includes two colorful spinning wheels:-
① One wheel shows fractions in numbers (like 1/4, 3/8)
② The other shows shaded parts of a whole circle representing those fractions visually.

Concepts that can be taught using this TLM :-
① what are fractions.
② Numerator and denominator

Materials used :- chart paper, colours paper, sketch pens or markers, glue, Button (centre of spinner), stick, compass or scissors to draw circles.

Estimated cost of the TLM :- 50

How to make :- ① Draw and cut two equal sized circles from chart paper.

② Divide both circles into 8 equal parts using a scale.

③. On one wheel, shade the parts using different colours to represent fractions.

④ On the second wheel, write the fractions in numbers.

⑤ Attach a button or pin in the centre so that wheel can spin.

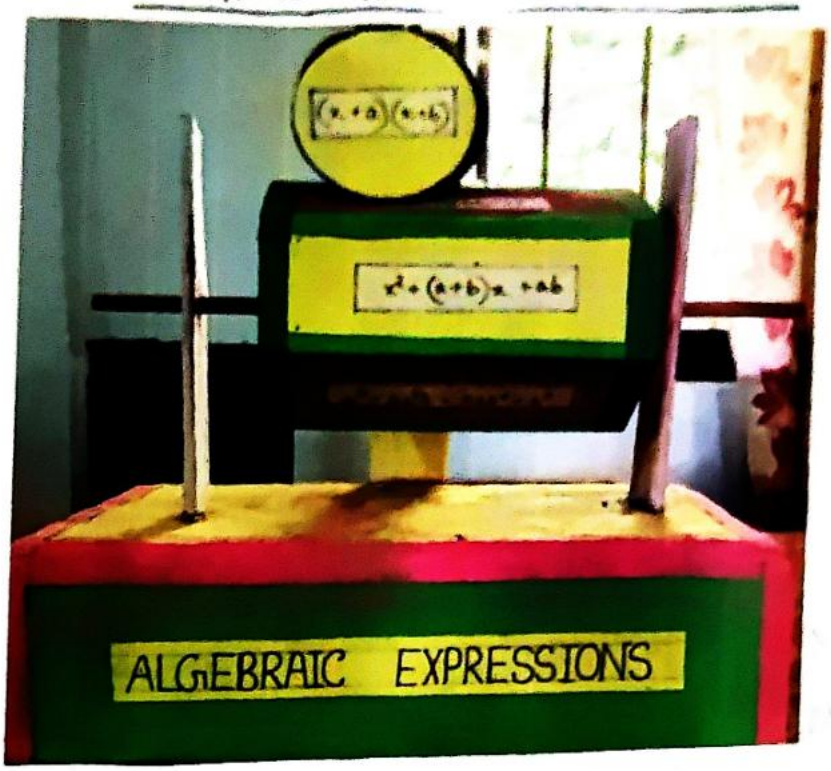
⑥ Add an arrow pointer to each wheel using a straw or thick paper.

How To use :-

① Spin the number wheel and ask the student to match it with the shaded visual on the second wheel.

② Conduct a game - "Spin and Tell" - spin and ask the student to name the fractions or compare it with another.

ALGEBRAIC EXPRESSIONS



TLM for class - VIII
Subject - Mathematics
Topic - Algebric expressions.

Brief description :- This is a rotating 3D working model that demonstrates the expansion of algebric expressions. It displays formulas like $(x+a)(x+b)$ and their expanded forms such as $x^2+(a+b)x+a$.

Concepts that can be taught using this TLM :-

(i) Understanding algebraic expressions.
(ii) Expanding identities like -
  (a) $(x+a)(x+b) = x^2+(a+b)x+ab$
  (b) $(a+b)^3 = a^3+3a^2b+3ab^2+b^3$

Materials used :- Cardboard boxes and rolls, colour paper, Algebraic labels, wooden sticks, glue, markers

Estimated cost of the TLM :- 50 Rs.

How To make :-

① Take a box for the base and wrap it in colourful chart paper.
② Take a small rectangular box, paste colour paper on all sides to decorate. On different sides paste algebraic identities like - $(x+a)(x+b)$, $x^2+(a+b)x+b^2$ etc.
③ Cut 2 circles from cardboard, Paste one on each side of the rotating box. Insert a wooden stick through the centre of the circles and the box.
④ Use two cardboard sticks as vertical supports.
⑤ Make small holes in both to hold the rotating stick.
⑥ Mount them on both sides of the base so the rotating box can spin freely.

How to use :-

① Rotate the model to show different forms of the same expression.
② Let students read, compare and explain each identity.
③ Use it to practice expanding brackets and simplifying terms.

PLANTS AND ANIMALS



TLM for class – VI

Subject – Science

Topic – Plants and Animals

Brief description :- This TLM is a visual aid made up of picture flashcards mounted on sticks, each showing a plant or an animal. The pictures include a cactus, pine tree, water lily, crab, tiger, camel, deer. This material is designed to help students easily identify and differentiate between various plants and animals and their habitats.

Concept that can be taught using TLM :- Classification - land animals, water animals and types of plants, Locate-

-Standing animal habitats.

Materials used :- printed pictures of plants and animals, ~~chart~~ cardboard, Glue, wooden sticks, sketch pens.

Cost of the TLM :- 20 Rs.

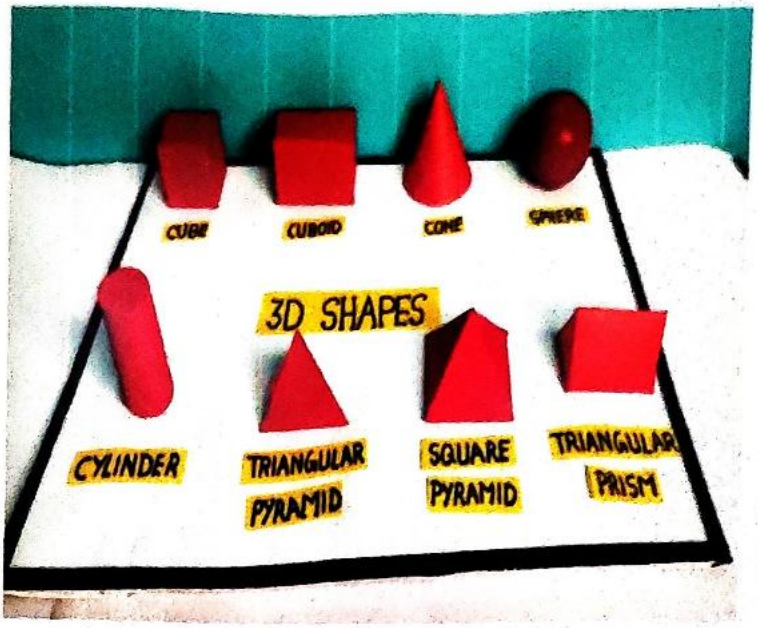
How To make :-

① Print or cut out pictures of common plants and animals.
② Paste each picture on a rectangular piece of cardboard.
③ Outline the edges with sketch pens.
④ Attach a stick to each card using glue to make them easy to hold.

How to use :-

① Begin by introducing the topic of plants and animals.
② Show each picture to the class and ask students to identify what it is.
③ Further discussion can be done about their habitats (eg: land, water, forest, desert).

3D SHAPES



TLM for class - VI
Subject — Mathematics
Topic — 3D shapes.

Brief description :- This is a 3D shapes model display that includes common solid shapes like cube, cuboid, cone, sphere, cylinder, pyramids and prism. Each shape is made from coloured paper and arranged clearly with name labels. It helps students to see, touch and understand the basic features of 3D objects.

Concepts that can be taught using this TLM :- Identification of 3D shapes, properties of solid shapes, differences between 2D and 3D shapes.

Materials used :- Coloured chart paper, glue or trivol, black marker, labels, cardboard base, etc.

Estimated cost of the TLM :- 40 Rs

How to make :- ① Use coloured craft/chart paper to cut and fold each shape → cube & cuboid - made from square, cone → made by rolling a sector of a circle, Sphere - use a small ball or roll paper into a ball shape, cylinder - cut a rectangle (for the side) and two equal circles (for the top & bottom) Roll the rectangle into a cylinder and glue the circles at both ends, Triangular pyramid - cut out a base triangle and 3 triangle faces. Glue them together to make pyramid.

② Label each shape clearly with bold names.

③ Mount all shapes neatly on a cardboard base titled "3D Shapes".

How To use in class :-

① Show each shape and ask students to touch and observe.

② Ask questions like - which one has curved surface, which shape looks like an ice cream?

③ Let students match shapes with real life objects. (e.g. dice = Cube, ball - Sphere).

④ Explain properties of all the shapes, Eg -

① Cube has 6 faces, 8 corners, 12 edges.

② Sphere has no edge or corner, etc.

TYPES OF MARKETS



TLM for class - VI
Subject - Soial Science
Topic - Tyes of markets.

Brief description :- This chart shows six Types of markets with real photographs and names. It helps visually identify and understand the purpose of different marketplaces in daily life.

Concepts that can be taught using this TLM :- Daily vs Weekly markets Difference between retail and wholesale markets. Concepts of shopping mall and ~~markets~~ complexes.

Materials used :- chart paper, printed market image, scale, glue, markers.

Cost of TLM :- 20 Rs.

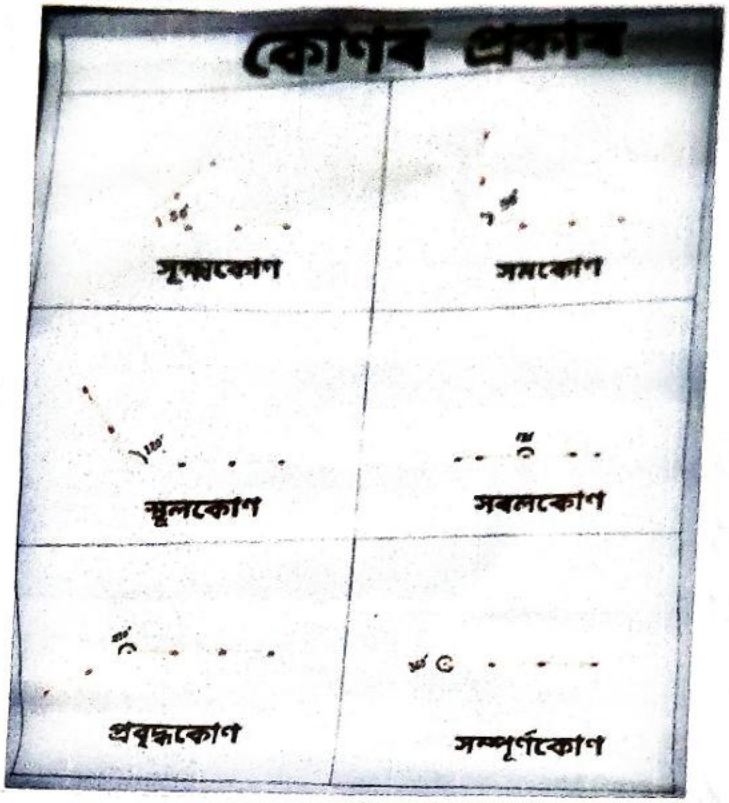
How to make :-

① Divide a chart into six equal sections.
② Paste photos of each type of market.
③ Label each photo clearly.
④ Title the chart "Types of Market".

How to use in class :-

① Explain each maket type with the photo.
② Ask students where they or their family shop from.
③ Assign students to visit or describe a local market.
④ Encourage students to classify nearby shops.

TYPES OF ANGLES



TLM for class – VI

Subject – Mathematics

Topic – Types of angles

Brief description :- This is a chart-based TLM displaying six types of angles with diagrams. It shows the classification of angles based on degree measurement.

Concept that can be taught using this TLM :- Identification of angles, Names and definitions of angles, Measurement of angles in degrees.

Materials used :- Chart paper, Scale, protractor, compass, colour markers, Matchsticks, Glue, Black markers.

Cost of TLM :- 20 Rs.

How To make :-

① Divide a chart paper into six equal boxes.
② In each box, draw one angle using compass and matchsticks.
③ Use a protractor to mark the correct angle.
④ Label each angle.
⑤ Title the chart "Types of Angle".

How to use :-

① Use during geometry lessons to show angle types visually.
② Ask students to identify angles and match real life examples.
③ Give protractors and ask students to draw each type of angle in their notebook.
④ Match classroom objects. (clock corners, fan blades, clock etc)

PARTS OF A PLANT



TLM for the class - VI

Subject - Science

Topic - Different parts of a plant.

Brief description :- This is a 3D paper model of a plant showing all the main parts - roots, stem, leaves, fruit, and flower. Each part is neatly labeled and the model stands upright on a base, allowing students to view and interact with it during the lesson.

Concept that can be taught using TLM :- Identification of basic parts of a plant, Functions of

each plant part (root stem, leaf, flower, fruit)

Materials used :- Coloured chart papers, glue, Marker, cardboard, Labels made from paper, Rolled paper tube.

Cost of the TLM :- 40 Rs

How to make :-

① Cut a square from cardboard and cover it with coloured paper.

② Cut out a brown mound to represent soil and roots from paper.

③ Use a roll strip of white paper into a tube and glue it vertically on the base.

④ Cut leaves and a small red circle (fruit) from chart paper and attach to the stem.

⑤ Write names of plant parts on white paper, cut and paste.

How To Use :-

① Introduce the topic by showing the model and asking students to identify each parts.

② Discuss the functions of each part while pointing to the model.

③ Use it as a visual aid while explaining plant growth and life cycle.

④ ~~Use~~ Ask students to label a plant diagram using the model as reference.

COMPONENTS OF FOOD



TLM for class – VI
Subject – Science
Topic – Components of food and their functions.

Brief description :– This TLM displays a 3D paper model showing different food components like vitamins and carbohydrates along with sources. The model also explains the functions of each food components.

Concepts that can be taught using this TLM :– Major components of food, sources of vitamins, carbohydrates, functions etc.

Materials used:- Chart paper, Printed images of food items, Glue, cardboard etc.

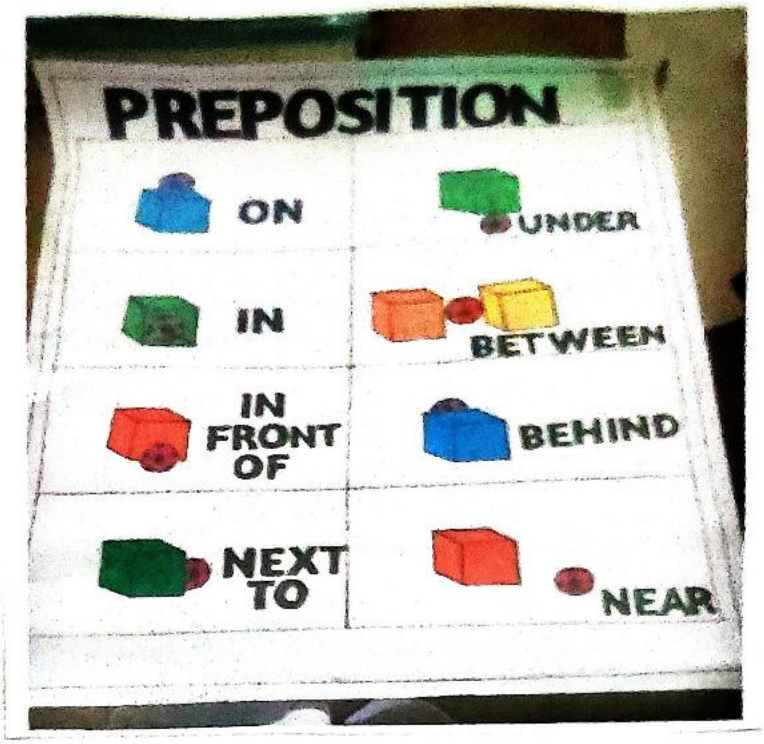
Cost of the TLM:- Rs. 50

How to make:-

1. Take a cardboard base and create three paper walls for display.
2. On each side, label the nutrient (eg- vitamins, carbohydrates)
3. Write the functions of each nutrient.
4. Paste images of food images under each category.
5. Label each image clearly.

How to use:-

1. Begin by explaining the major food nutrients and their roles.
2. Show real images to help visual learning.
3. Point to each food and ask "Which nutrient does this give"?
4. Discuss why a balanced diet is important.
5. Ask students to name foods they eat daily and classify them.



TLM for class — V
Subject — English
Topic — preposition

1. Brief Description :—

This TLM is a visual chart designed to teach students about prepositions of place. it includes colorful drawings showing the position of a ball in relation to a box. Each visual Example is labeled with the corresponding preposition: on, under, in, between in front of, behind, Next to, near. The chart helps in understanding spatial relationships in an engaging and

interactive way.

2. other concepts that can be taught using this TLM :— spatial awareness and vocabulary, colors and shapes, sentence formation, opposites etc.

3. Materials used :—
chart paper or drawing sheet, color markers / sketch pens, scale, pencil and eraser, Black marker for headings and labels, crayons or color pens for filling objects.

4. cost of the material used for making TLM :—
* chart paper : Rs 10 - 20
* color markers / sketch pens : Rs. 30
* pencil, eraser, scale : 20 - 30
* Black marker : Rs. 10 - 20

5. How to Make :—

1. Take a chart paper and divide it into 8 equal sections using a ruler.
2. Write the heading "PREPOSITION" at the top using a black marker.
3. In each section, draw a box and a ball in different relative positions.
4. Label each picture with the appropriate

preposition : "on", "under" etc.
5. color the drawings with sketch pens or crayons for visual appeal.
6. outline the images and labels with a black marker for clarity.

6. How to Use :-

(i) Introduce the concept of prepositions using the chart.
(ii) Explain each position using the ball and box visuals.
(iii) Ask students to describe what they see using preposition words.
(iv) Use physical objects (like a ball and a box) to demonstrate real-time positions.
(v) Conduct interactive activities where students match objects and prepositions.
(vi) Can be used as a wall display for continous reinforcement.



TLM for class — IV

Subject — Assamese

Topic — Consonant conjunct formation chart

1. Brief Description :—

This TLM is a consonant conjunct formation chart in Assamese. It shows how two Assamese consonants (ব্যঞ্জনবর্ণ) combine to form conjunct consonants (যুক্তা ব্যঞ্জনবর্ণ). It is arranged in a grid where consonants on the top row and first column combine, demonstrating the resulting conjunct characters.

2. other concepts that can be taught using this TLM :—
consonant-vowel combinations, pronunciation and phonetic sound patterns, identification of complex letters in reading passages, syllable breaking and word formation.

3. Materials used :—
chart paper, Black marker or sketch pen, scale for drawing the grid, Lamination (optional for durability).

4. Cost of the TLM :— Rs. 50.

5. How to make :—
1. Take a chart paper of standard size.
2. Draw a neat grid using a pencil and scale.
3. Write down selected Assamese consonants on the top row and left column.
4. Fill in the inner grid by writing their respective conjunct forms.
5. Use a marker for bold visibility.
6. optional : Laminate the chart for long term use.

6. How to use :-

(i) Hang or display it in the classroom.

(ii) show how individual consonants combine to form conjunct characters.

(iii) Let students identify and read the conjuncts aloud.

(iv) Use a pointer or pen to demonstrate row-column matching.

(v) Conduct games or quizzes using the chart.

(vi) provide practice work-sheets based on the combinations.



TLM for class :- VII

Subject :- Assamese

Topic :- Synonyms (সমাৰ্থক শব্দ)

1. Brief Description :—

This teaching learning material is designed to help students learning Synonyms (সমাৰ্থক শব্দ) in Assamese. The TLM consists of two columns of word cards — each card has a word, and its matching synonym card is placed in the opposite column. For example - 'মিঠা' (sweet) is matched with 'মধুৰ' (pleasant/sweet). This interactive matching tool

enhances vocabulary through a fun, hands-on approach.

2. other concepts that can be taught using this TLM :—

Antonyms (বিপরীত শব্দ), Gender (লিঙ্গ পরিবর্তন), Singular and plural (একবচন - বহুবচন), word meaning (শব্দের অর্থ).

3. Materials used :—

Colored chart paper, cardboard or thick paper for base, sketch pens/markers, scissors, Glue.

4. Cost of the TLM — Rs. 30

5. How to Make :—

(I) cut colored chart papers into oval or round shapes for word cards.

(II) Write pairs of Synonyms on each card using bright sketch pens.

(III) create a rectangular frame and attach two pockets / slots to hold the cards.

(IV) Label the top with the theme - "সমার্থক শব্দ".

(V) Arrange cards in each slot such that students can draw and match them.

6. How to Use :—

(i) Ask students to pick a word from the left set (e.g - 'खुश').

(ii) Let them find the corresponding synonym from the right set (e.g - 'प्रसन्न').

(iii) Use it as a group activity, quiz, or competition to reinforce vocabulary learning.

(iv) Teachers can shuffle or replace word sets to revise multiple synonym pairs.



TLM for class :- II
Subject :- mathematics
Topic :- Number counting

1. Brief Description :-

This TLM is a colorful number counting chart using different shapes. Each row represents a number from 1 to 10, and the number of shapes in each row corresponds to that Number. The chart helps children visually understand counting, quantity, and Numeral recognition through hands-on interaction with shapes.

2. other Concepts that can be Taught Using this TLM :—
Basic Geometry, colors Recognition, pattern Recognition, Number comparison.

3. Materials Used :—
chart paper or cardboard, colored paper or sketch pens, scissors, Glue, marker pens.

4. Cost of the TLM :— Rs. 20.

5. How to Make :—

(I) Take a large chart paper or cardboard.

(II) Draw horizontal rows and vertical columns with a ruler.

(III) Write Numbers 1 to 10 vertically on the left side.

(IV) Draw and cut out different geometric shapes in various colors.

(V) Paste the exact number of shapes in each row to match the Number.

(VI) optionally, laminate the chart for long-term use.

6. How to Use :—

(i) Show children each row and ask them to count the number of shapes.

(ii) Let them match the Numeral with the quantity.

(iii) Ask them to identify shapes and colors.

(iv) Use it to introduce the concepts of addition or subtraction by adding / removing shapes.

(v) Encourage interactive activities like tracing shapes or coloring similar ones.



TLM for class — V

subject — Assamese

topic — suffix

1. Brief Description :—

This TLM displays the formation of adjectives using suffixes (প্রত্যয়) in Assamese. It shows how adding the suffix (ষ্ণিক) to different root words like (সমাজ, ইতিহাস, বিজ্ঞান) forms new meaningful adjectives such as সামাজিক, ঐতিহাসিক, বৈজ্ঞানিক, etc. It helps students understand the structure and pattern of word formation using suffixes.

2. other concepts that can be taught using this TLM :—

Types of suffixes (প্রত্যয়) – ইং প্রত্যয়, অন্য প্রত্যয়, prefix and suffix differences, formation of Nouns and verbs, Grammar lessons on parts of speech, Synonyms and antonyms based on root words, word usage in sentences.

3. Materials used :—

chart paper or cardboard, colored markers or sketch pens, scale for alignment, Glue/tape, Laminating sheet

4. Cost of the TLM :— Rs. 30

5. How to make :—

(I) Take a clean chart paper.

(II) Divide it into two columns : one for root words with suffixes and one for the resulting word.

(III) Write the root word + suffix on the left and the resulting word on the right.

(IV) Use different colored pens to highlight the suffix.

(V) Make the headings bold and visible.

6. How to Use :—

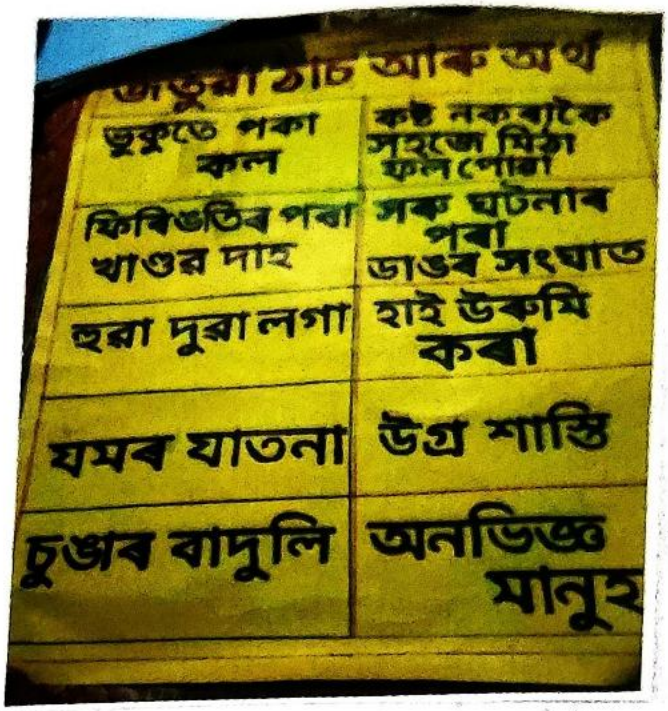
(I) Use it during Assamese grammar lessons while introducing suffixes.

(II) Ask students to form new words using different root words.

(III) Conduct matching or fill-in-the-blank activities.

(IV) Allow Students to come up and read or explain each word.

(V) Encourage group discussion or word games based on this chart.



TLM for class — 7th

Subject — Assamese Grammar

Topic — (Idioms and their meanings) জহঁৱা ঠাঁচ আৰু অৰ্থ ।

1. Brief Description :—

This TLM is a colourful chart displaying a list of Assamese idioms (জহঁৱা ঠাঁচ) along with their corresponding meanings. It helps students understand common idiomatic expressions in Assamese language and enhances their vocabulary and comprehension skills.

2. other concepts that can be taught using this TLM :—

Synonyms and antonyms, sentence formation using idioms, Figurative vs. literal meanings, creative writing and story-telling using idioms.

3. Materials Used :—

chart paper, sketch pens or markers, scale and pencil for alignment.

4. Cost of the TLM :— ₹20

5. How to make :—

(i) Take a large coloured chart paper

(ii) Divide it into columns and rows using a ruler and pencil.

(iii) In the first column, write different idioms clearly in Assamese.

(iv) In the second column, write the meaning of each Idiom.

(v) Use red ink for headings and black for main content to differentiate.

(vi) Neatly outline the boxes and text for clarity.

6. How to use :—

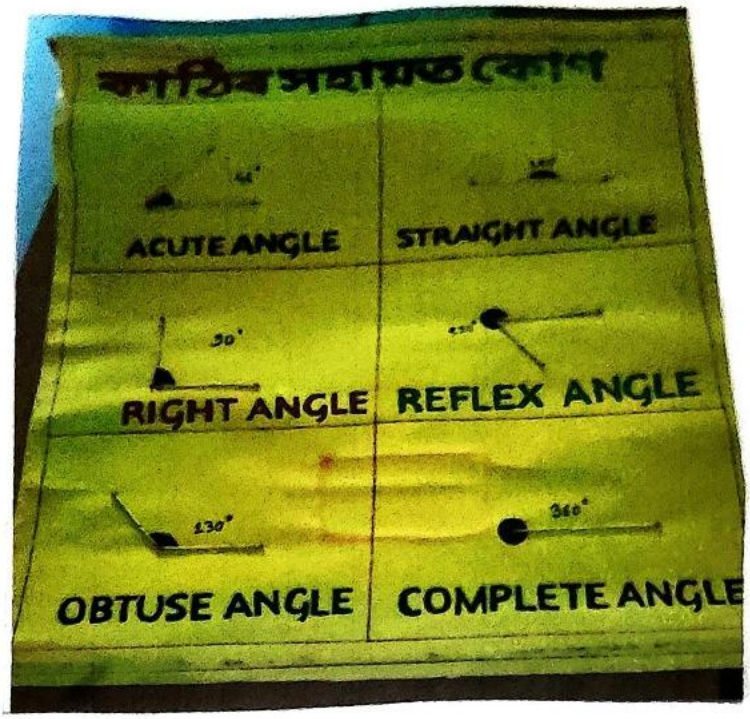
(I) Display the chart in the classroom where students can see it.

(II) Read aloud each gdiom and its meaning, then discuss its usage in context.

(III) Ask students to use each gdiom in a sentence.

(IV) Conduct quiz or games like "Guess the meaning" or "match the gdioms with meanings".

(V) Can be used as a reference during Assamese language lessons.



TLM for class — IV

Subject — Mathematics

Topic — Angles

1. Brief Description :—

This TLM is a handmade chart that demonstrates different types of Angles in geometry. It is titled "কাঠির সহায়ক কোণ" (Angles with the help of sticks) and includes six types of Angles :-

* Acute Angle (46°)
* Right Angle (90°)
* Obtuse Angle (130°)
* straight Angle (180°)
* Reflex Angle (230°)
* Complete Angle (360°)

Each Angle is created using matchsticks

Each angle that are movable and fixed on a base, allowing students to visually and practically understand angle types.

2. other concepts that can Be Taught using this TLM :— Angle measurement using a protractor, classification of Angles (based on degrees), concept of rotation and turns, Adjacent and supplementary angles etc.

3. Materials Used :— Colored chart paper or cardboard, Matchsticks, split pins or drawing pins, Black marker pens for labeling, protractor (for accurate angle marking) color pens for visual appeal.

4. Cost of the TLM :— Rs. 40

5. How to make :—

(i) Take a thick chart paper or cardboard as a base.

(ii) Divide it into six equal sections.

(iii) Draw and label each section with one type of Angle.

(iv) Use a protractor to mark the Angles correctly.

(v) Mark the Angle in degrees with a pen.

(VI) Attach two matchsticks or sticks using a split pin at the vertex of each angle so they can rotate.

6. How to Use °—

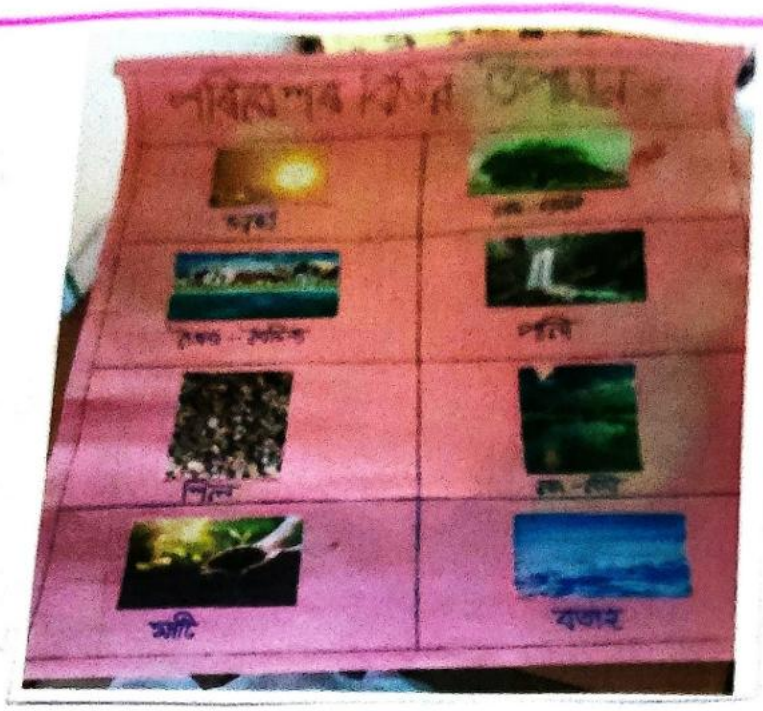
(I) Use during a geometry lesson to introduce or reinforce the concept of angles.

(II) Rotate the sticks to demonstrate different angle types.

(III) Ask students to identify or measure the Angles using a protractor.

(IV) Engage students in hands-on Activities by letting them move the sticks and match the Angle type.

(V) Use as a display material in classrooms for continous reference.



TLM for class — IV

Subject :- Science

Topic :— Natural Elements

1. Brief Description :—

This TLM is a visual chart showing various components of Nature like soil, stones, water, sunlight, trees, air, forest, animals, etc. It is designed to help students understand different elements of the natural environment through pictures and labels written in Assamese.

2. other Concepts that can be taught using this TLM :—

Components of the Environment, Natural and Man-made resources, Importance

of trees. water, sunlight, etc, Types of ecosystems, Living and Non-living things. Environmental conservation.

3. Materials Used :-
chart paper, printed images, Marker pens for labels and outlines, Glue for pasting pictures, scale/ruler.

4. Cost of the TLM :- Rs. 20

5. How to Make :-

(I) Take a chart paper and divide it into equal sections using a ruler and pen.
(II) select and print color images representing different natural components.
(III) paste the images in each section neatly.
(IV) Label each image in Assamese using a marker.
(V) Title the chart at the top to indicate the topic.

6. How to Use :-

(I) Display the chart during environmental science lessons.
(II) Explain each Natural element and its importance.
(III) Encourage students to identify and classify Natural and Non-Natural components.



TLM for class — VII

Subject — Assamese

Topic — opposite word (বিপৰীত শব্দ)

1. Brief Description :—

This is a colorful rotating wheel TLM used to teach opposite words (বিপৰীত শব্দ) in Assamese. The wheel contains multiple circles with commonly used words like দিন (Day) - ৰাতি (Night), জনম (birth) - মৃত্যু (death) etc. A pointer in the center can be rotated to select any word, and the student is asked to find and tell its opposite.

2. other concepts that can be taught using this TLM :—
Synonyms, vocabulary building, word — category identification - (Noun, verb, adjective), Sentence formation using a word, spelling practice.

3. Materials used :—
colorful chart paper or cardboard, Scissors, Glue, marker pens or glitter pens, paper fastener (for rotating pointer) Thermocal or hard board base.

4. Cost of the TLM :— Rs. 30

5. How to Make :—

(i) Take a circular base using chart paper or cardboard.
(ii) cut out 10-12 small ~~ela~~ calard circles and write different words in Assamese.
(iii) write the oppasite word of each on the back or keep it on a reference card.
(iv) Make a small pointer with cardboard and attach it to the center using a paper fastener.

(v) Decorate the wheel using glitter pens and colored paper.

6. How to Use :—

(i) Rotate the pointer and let it stop at a random word.

(ii) Ask the pointer to read the word and say or find its opposite.

(iii) Use in group activities or individual learning sessions.

(iv) Can also be used as a quiz tool or word game to enhance vocabulary.



TLM for class :— III

Subject :— English

TOPIC :— Rhyming words

1. Brief Description :—

This is a colorful spining wheel designed to help students identify and practice rhyming words. Each segment of the wheel containes a different word. children spin the wheel and are prompted to think of words that rhyme with the selected word. It makes the learning of phonics and rhymes fun and interactive.

2. other Concepts that can be Taught Using This TLM :—
Vocabulary building, phonemic awareness, pronunciation practice, word family recognition, spelling practice.

3. Materials Used :—
chart paper or thick cardboard, sketch pens or markers, A split pin/ thumb pin, scissors, Glue.

4. Cost of the TLM :— Rs. 30.

5. How to make :—
(I) cut a circular shape from thick cardboard or chart paper.
(II) Divide the circle into equal sagments
(III) write a different word in each segment that can have rhyming pairs.
(IV) Decarate the wheel with bright colors to attract attention.
(V) Attach a pointer using a split pin in the center to allow spinning.
(VI) Label the middle with a theme. (e.g. - "Rhyming Words").

6. How to Use :-

(i) The child spins the wheel.

(ii) When the painter stops at a word (e.g- 'class') the child is asked to say a word that rhyms with it (e.g- "Glass").

(iii) This can be done in groups or individually as a game.

(iv) Can be used as a warm-up Activity in English language lessons.