

KINDERGARTEN

MY LEARNING TRAIN

**WORLD OF
NUMBERS**
AN INTERACTIVE ACTIVITY-BASED COURSE

TEACHING GUIDE

Complimentary Copy—Not For Sale



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Note for the teachers

Please note that pages 2–9 are same throughout the teaching guides. Pages 10 onwards the content pertains to the relevant student’s book.

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INTRODUCTION

My Learning Train is a complete activity-based interactive pre-primary series comprising of 18 books across three levels—Pre-Nursery, Nursery, and Kindergarten with an inbuilt self-training programme for teachers and a comprehensive set of tools for the learners. This series has been designed to guide the children through their first steps of learning to make learning enjoyable through a variety of activities, and aid cognitive and overall development through a wide range of experiences and activities.

My Learning Train – Pre-Nursery, Nursery, and Kindergarten

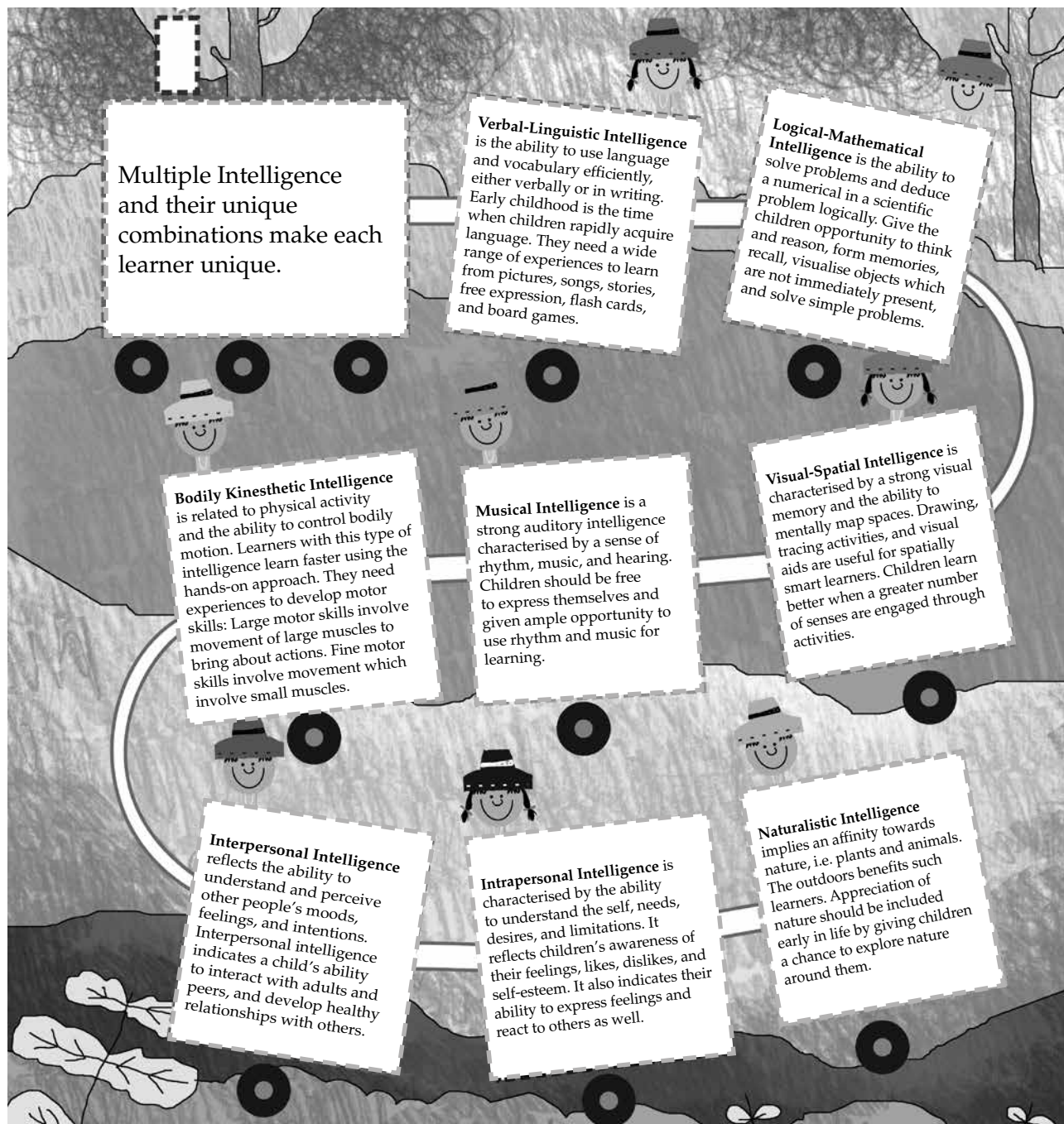
- **World of Letters:** Supported by a Stories and Reading Skills Reader and Activity Guide for Parents.
The series is based on a simple activity based programme to help the little learners understand the sound-symbol association and develop spelling and reading skills.
- **World of Numbers:** Supported by practice/assessment worksheets booklet and Activity Guide for Parents.
- **World Around Me:** Supported by an inbuilt comprehensive easy-to-do life skill activity list in the books itself, practice worksheets booklet, and Activity Guide for Parents.

Components of the Series


Student's Book	Teaching Guide
<ul style="list-style-type: none">• Detailed Table of Contents with activity suggestions for each lesson.• Flash cards and stickers• Practice exercises• Parents Activity Guide• Worksheets/Supplementary Readers	<ul style="list-style-type: none">• Suggestions for activity settings• Weekly planning guide• Activity map• Detailed activity guidelines

Multiple Intelligence and Learning

Each individual has a unique combination of intelligences and needs the opportunity to develop it through different experiences. Children have different styles, needs, and interests. They should be given the space to perform according to their individual abilities. Development generally follows a pattern and the stages are the same, though the rate of development varies from one child to another even within the same age group. To help teachers facilitate the children, a large bank of activities has been given to choose from. All activities are not mandatory.




Ideas for the Classroom




Why do children need activities for learning?


Children develop skills by social interaction.




Pair Working



Small Group Working











Team Working



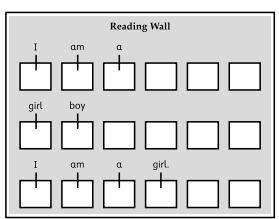
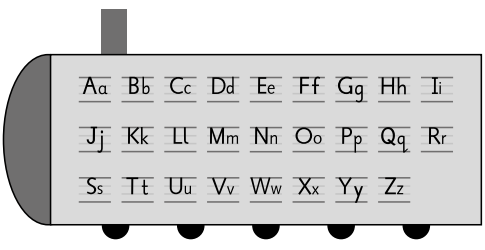
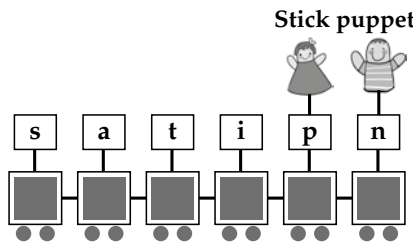


Large Group Working

Children learn through different kinds of experiences.

 <p>Play</p>	 <p>Sensorial and Tactile Activities</p>	 <p>Imitation and Practice</p>	 <p>Exploring and Experimenting</p>
 <p>Drawing, Painting, Colouring</p>	 <p>Learning through Different Mediums</p>	 <p>Responsibility and Discipline</p>	 <p>Citizenship and Environmental Awareness</p>

Children learn through different resources.

 <p>Flash cards</p>	 <p>Stories and Rhymes</p>	 <p>Reading Wall</p>
 <p>Alphabet Frieze</p>		 <p>Stick puppets Pocket Train</p>

GET SET GO! ON MY LEARNING TRAIN

Activity Based Environment—Checklist for Teachers and Coordinators

Planning Time for Activities

My Learning Train is designed as a series for children and as a tool for teachers.

- The books and resources help teachers to create an interactive activity based learning environment.
- The Activity Guide for Parents included in the supplementary readers/worksheets facilitate the parents to do the same at home. *My Learning Train* facilitates teachers in creating a student-centric classroom.

Get Yourself Ready—Learn, Practise, Prepare, Choose, Plan, and Execute






Tick off the tasks as you complete them.

TEAM HEADS AND TEACHERS GET READY!		I am ready!
1.	Know the books (design and content in detail)	
2.	Know the tools given in the student's books: Walk-through to understand how the book is designed (Table of Contents and flash cards).	
3.	Know the Teaching Guide (TG): Details of the activities given in the 'Contents and Activity Guide' pages of the student's books are mentioned here. You can plan accordingly. Refer to the 'Weekly Planning Guide' section in the TG.	
4.	Read the Table of Contents in detail: Choose the most suitable activities for your children from the given activity list.	
5.	Include activity time: Make sure to add introductory and conclusive activities as an essential part of the lesson planning.	
6.	Plan and prepare: Activities have to be planned and resources prepared well before.	
GET YOUR CLASSROOM READY!		I am ready!
1.	Get your health and safety arrangements ready: Safety of play area, identity cards, teaching aids, class first aid kit etc.	
2.	Get your activity kit ready: Have 10 cm x 10 cm card sheets and 10 cm x 20 cm card sheets cut and ready. Refer to section 'Activity Kit and Resource Center' in the TG.	
3.	Get the Pocket Trains ready and put them at a level where the children can reach with ease. Refer to section 'Creating Classroom Resources' in the TG.	
4.	Make pocket theme boards and use them with stick puppets to make them dynamic and activity based.	
5.	Get a duty chart ready with pockets where you can put the names, and picture puppets according to the classroom duties assigned to students. (You can follow the instructions of making a Learning Train to make a similar duty chart.)	

6.	Introduce a kindness chart in the beginning of the session. Put up names of children who do acts of kindness. Talk about the importance of being kind.	
7.	Make a 'Good Habits Bear'. Refer to section 'Creating Classroom Resources' in the <i>World Around Us</i> TG.	
8.	Get the Alphabet Frieze ready. Refer to section 'Creating Classroom Resources' in the <i>World of Letters</i> TG.	
9.	Pull out and number all the flash card sets from the books: Pull out from perforation and not the binding. (Number each complete set with a number. For example, set 1: all the flash cards will have number 1)	
10.	Plan and practise short simple instructions: Ask children to repeat the instruction with the speaking fingers where they make a fist and open one finger at a time repeating the instructions. Refer to the section 'Class Division/Settings for Activities' in the TG.	
11.	Talk about classroom rules with the children. They can be written on a chart and put up in the class. Refer to them regularly.	
GET READY FOR THE PARENTS!		I am ready!
1.	Send a note to the parents saying, 'Please cover the books with a transparent sheet, for books to be identifiable by their colours.'	
2.	Arrange an orientation session for parents where you explain to them why activities are important. Demonstrate a few activities from the book in front of the parents. Explain the importance of communication between parents and teachers.	
3.	Pull out the Activity Guide for Parents from the worksheets/readers booklets: Give parents the handout at the orientation session and explain how to use them.	
4.	Discuss health and safety norms with parents: Request them to respond to your queries and concerns at the earliest.	
5.	Hold regular Parent-Teacher Meetings (PTM) as per school schedule: A platform to share information not only about the children but the changes required and happening in the school system.	
6.	Invite the parents, with school administration's permission, to attend a few regular storytelling and activity lessons as participants.	
7.	Plan and organise a small presentation by the class for the parents in a few PTMs during the academic sessions.	
8.	Burn a CD of the songs/rhymes/storytelling by the children. Give it to the parents at the end of the year.	
9.	Develop and maintain students' profiles. Collect information about their habits, etc.	

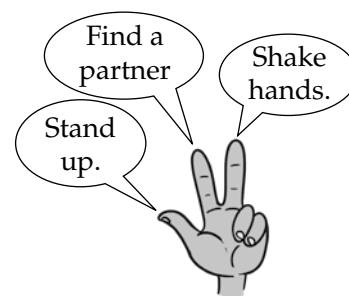
Class Division/Settings for Activities

In the classroom, teachers can interact with learners in different ways. Using the most appropriate interactive activity is a fundamental factor in the success of any lesson. Here are five suggested interactive strategies for various activities proposed in the book:

 <p>Large Group Activities</p>	<p>Children form part of a big group (in the shape of a circle/square/rectangle) with the teacher. The teacher can play the tambourine, ring a bell, or sing a song with the students for the class activity.</p>	 <p>Pair Activities</p>	<p>Here the learners work in pairs at their desks/ activity space.</p>
 <p>Small Group Activities</p>	<p>Children can be divided into groups of 4/6 depending on the activity, and all the groups are to carry out the activity simultaneously. The group starts the particular activity together and they are facilitated by the teacher. The teacher can use colour-coded cards or cut-outs to divide the class into groups.</p>		
 <p>Individual Activities</p>	<p>Here children work by themselves. Teachers should facilitate the students.</p>	 <p>Team Activities</p>	<p>Here the class is divided into two teams for activity time.</p>

Present below are a few suggestions for helping children understand the settings in which the activities need to be conducted.

- Plan the settings and instructions that you will tell children for each activity beforehand.
- Keep the instructions short and precise.
- Plan 2–3 instructions for Pre-Nursery and Nursery, and not more than 4–5 instructions at a time for Kindergarten.
- Talking Hand: Instead of teachers repeating the instructions, ask the children to listen and repeat the instructions by closing their left fist self-facing, opening one finger at a time, and repeating the instructions a few times before the activity.
- The Talking Hand will later be used for blending and segmenting sounds in words and counting syllables as the children progress.
- Rhymes such as ‘Good Morning’ from the student’s book, *World Around Me Kindergarten* (page 2) can be used for a pair activity where the children find a partner and say, ‘Good Morning’.



Activity Kit and Resource Centre

A simple hands-on Activity Kit can help the teachers conduct a large number of activities. Activities can mostly be made with 10 cm x 10 cm cards, stationery, and daily tools that are easily accessible to teachers. The following tools have been suggested after keeping in mind the general availability of material across regions and schools.

Essential Materials Required for the Activity Kit

Material required	Approx. Quantity	Material required	Approx. Quantity
Flash cards–5 different colours 10 cm x 10 cm	100 cards each colour	Scissors	2
Flash cards–White 10 cm x 20 cm	100 cards	Paper cutter	1
Ice cream sticks	500	Stationery—pencil, eraser, sharpener, short scale, long scale	1 each
Bowls	Minimum 10 per class	Poster colours and paintbrushes of different thickness	1 set
Bags for storing resources (Recycle and reuse as much as possible)	As per requirement	Crayons	1 set
Flat tipped, thick sketch pens (black, red, blue) (As they are more effective to use than the round tipped markers)	10 each	Lamination tape–Packing transparent tape–5 cm width	2 rolls
Normal sketch pens	1 set	Stapler and pins	1
Adhesive	2 refillable bottles	Hole punch	1
Small and medium sized rubber bands	As per requirement	Drawing pins	1 set
Sandpaper	6 sheets	Chart paper	As per requirement

Additional Resources for Resource Centre

❖ class library with books of short stories that have bright and big illustrations ❖ wooden letters ❖ jigsaw puzzles of capital and small case letters ❖ magnetic letters/numbers/shapes and magnetic board ❖ slates and chalk ❖ mini-whiteboards and whiteboard markers ❖ sandpaper letters ❖ flash cards of letters and pictures ❖ real or toy microphone ❖ a small makeshift stage ❖ audiovisual aids ❖ picture reading charts ❖ picture puppets ❖ letter puppets ❖ effective and interactive theme boards ❖ a print rich environment ❖ prop box containing hats, umbrellas, and so on which can be used for dramatisation ❖ mirrors

Resource Management

- List out all your resources and update the list regularly.
- Fill in the resource information list detailing all the resources you have created so that other teachers can share it too. Have a digital space assigned to easily conduct activities with digital resources to reduce use of attendance registers and paper.
- Always stock supplies in advance.
- Use even the smallest low-cost resource carefully and avoid any kind of wastage.
- Reuse and recycle everything you can.
- Have a place for everything and encourage children to keep everything in its place.
- Encourage proper handling by children of materials right from the beginning.
- Encourage active participation of students in class. Allot tasks to the children and encourage them to take on responsibility.

Frequently Asked Questions

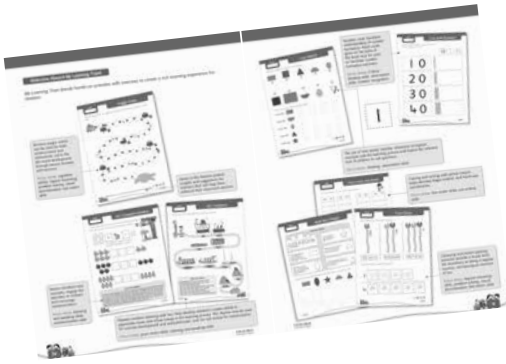
Q: How will we finish our syllabus if we conduct activities? What will the parents say? Activities and experiences are an integral part of the pre-primary syllabus. It is only after children do activities that we should guide them towards writing, following the cycle: Listening – Speaking – Reading – Writing. Activities will manifest in skills of the learners, who will be able to show parents how and what they have learnt. This series also includes activity suggestions for parents, which they can conduct at home to reinforce topics taught in schools.

Q: How can activities be conducted with a large class size? Activities can be conducted in varied settings and are designed to cater to average class sizes—very large class sizes in pre-primary must be avoided.

Q: How can we conduct all the activities within our lesson time? Doing all the activities is not mandatory. However, it should be noted that each activity suggested has been classroom tested and is designed to be short as per the attention spans of the children, so they can be easily applied in the classroom—they go hand-in-hand with the curriculum.

KNOW THE COURSE DESIGN AND RESOURCES

Resources of the Student's Books



WALK-THROUGH

Walks the teachers and parents through the features of the book with examples.

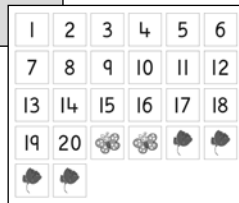


TABLE OF CONTENTS AND ACTIVITY GUIDE

Teachers can choose and plan from this list according to the needs of their classes.

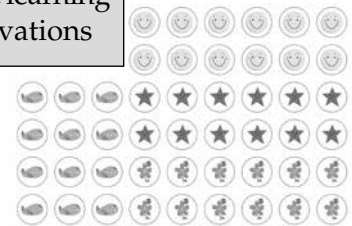
STICKERS

Sticker activities can be sent home for one to one activity time with the parents.



ASSESSMENT STICKERS

Can be used on worksheets and notebooks for the learning outcomes and observations



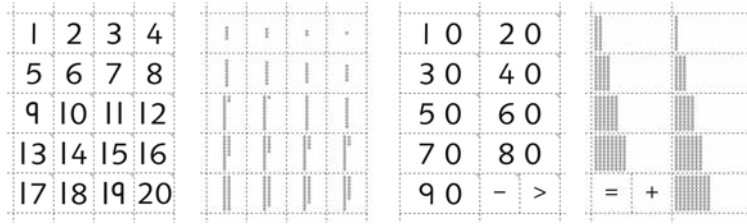
Flash cards

Flash cards are a very important teaching and learning tool. These must be given to the children at regular intervals.

- Remove the flash cards from the perforation near the binding as soon as the children bring the books to school.
- Number each complete set with one number or symbol for easy identification. For example, all the cards of the first set should be marked with the same symbol. This helps when the cards get mixed up.
- The set of flash cards sets can be used with pair/small/large group activities.
- Use flash cards for individual activities for observation and assessment of learning.
- Start by using only 10 sets of flash cards and add as required. Use the other sets to create games and stick puppets.

Managing Flash Cards – Distribution and Collection

Bring 10 bowls to the class. Write the numbers 1 to 10 on the bowls with markers. Cover the numbers written on the bowls with transparent adhesive tape. Place the flash cards according to their numbers in bowls. Children can collect the bowls number-wise and put them back in their places after an activity.



Parents Activity Guide

A pull-out activity guide for parents is added within the *World of Letters*, *World of Numbers*, and *World Around Me* readers/worksheets.

It provides detailed activity suggestions for parents to easily follow at home to help develop their child's skills and reinforce topics taught in school.

Please Note: The Activity Map and the Weekly Planning Guide will help the teacher to plan and map activities in school.

Activity Guide for Parents

Dear Parents,
Your child is smart. You will be a great friend of talent, ability, and success. Interacting with your child while teaching them, is not to become a constantly creating experience for both of you. As parents, the more time we spend on learning through activities, and the development of basic skills, better understanding of writing skills. You are your child's first teacher and the home environment is the first learning ground for every child. The first three to six years of a child's life lay the foundation of growth and development for life. This handbook is a simple tool to control the classroom and home with simple activities that may be planned at home to create a multidimensional learning environment.

Things needed for home activity sheet:

- Counting: Use small, pebbles, beans, buttons, beads, caps, and so on.
- Shapes: Use paper, dough, different shapes such as dots, cardboard, bricks, balls, pyramids, round containers, and so on.
- Measurement: Use rulers, measuring cups, spoons of different sizes, strings, large and small containers, and so on.
- Categories: Organize objects and names.
- Plans: Numbers and a magnetic board.
- Sound: Handwritten-words and objects.
- Flash card games.

How to set up an activity-based learning environment at home:

- Follow a routine-based approach to learning. A child will respond positively to order and patterns.
- Plan activities and make learning both enjoyable and effective for your child.
- Strive to be patient, but consistent in the application of these rules.
- For activities where your child is exploring, demonstrate.
- Only facilitate the process of doing the activities and do not do the activities for them.
- Start by speaking softly. This will help your child become a good listener.
- Lead by example. Your child will learn better by watching what you do, than by merely following instructions.

Let's have multiple intelligence influence the learning process of your child and keep in mind that each child will learn differently.

The development of number skills around 4 years of age must focus on the following aspects:

Follow the parents to teach basic mathematical concepts:

1. **Concrete Method:** Use resources to teach differentiation and count.
2. **Visual Method:** Use illustrations, flash cards, pictures to teach, differentiate, and count.
3. **Symbol Method:** Use the number symbols from 0 to 9.
4. **Abstract Method:** Develop the understanding of number symbols.

Please note: Activities must be done under adult supervision and all safety norms and dimensions must be repeated at regular intervals. Take care to control children not to create or put things in their nose or ears. Children must be given opportunities to watch the activities regularly.

One-to-one correspondence

A. Vocabulary Match: Find, connect, make pairs, one-to-one.

Activity 1: Give your child pairs of 4 things, all small in size and all done to match the pairs. For example, handkerchiefs, socks.

Activity 2: Use old shoe bottles/boxes to make colorful containers of different sizes. Give your child 4 1/2 bottles of the same size, remove the lids, and ask them to match each one and put the lid back on.

Activity 3: Give your child containers of different sizes, remove the lids, and ask them to match the lid to the correct boxes and close them.

B. Patterns

Activity 1: Play music and create a 4-beat pattern pattern. Put notes on the left, notes on the right, and then up, left, right, left. Repeat this pattern with your child or writing speech.

C. Vegetable printing patterns

Activity 1: Cut off the top of a bottle or make paper plates and use to print patterns. Use clay to print

ACTIVITY MAP

The following table maps the activities and the teaching guide page numbers to the pages of the student's book to help teachers see the activities at a glance and plan. All activities are not mandatory and can be done as per teacher's convenience.

Chapter and Student's Book page number	TG page number	Activity name / number as seen in the Table of Contents of the Student's Book	Suggested Interactive Strategy and approximate time
Number Train (p. 1)	p. 29	Activity 1: Counting	Individual activity (20 min)
	p. 29	Activity 2: Numbers and Values	Pair activity (20 min)
Count and Write (p. 2)	p. 29	Activity 3: Numbers from 1 to 10	Small group activity (20 min)
Let's Compare (p. 3)	p. 30	Activity 4a: Sing and Act	Large group activity (10 min)
	p. 30	Activity 4b: Many and Few	Small group activity (20 min)
	p. 30	Activity 5a: Obstacle Course	Small group activity (20 min)
	p. 30	Activity 5b: Big to Small	Small group activity (20 min)
	p. 31	Activity 5c: Tall and Short	Large group activity (15 min)
	p. 31	Activity 6a: Long and Short	Individual activity (15 min)
	p. 31	Activity 6b: Thin and Thick	Individual activity (15 min)
Big and Small (p. 4)	p. 31	Activity 8a: Big and Small	Small group activity (25 min)
	p. 32	Activity 8b: Big and Small Toys	Large group activity (10 min)
More and Less (p. 5)	p. 32	Activity 9: More and Less Shells	Small group activity (25 min)
Time to listen! (p. 6)	p. 32	Activity 10: Story Time	Large group activity (30 min)
	p. 33	Activity 11: Comparison	Large group activity (20 min)
	p. 33	Activity 12: Read and Draw	Large group activity (25 min)
	p. 33	Activity 13: Narrow and Wide	Small group activity (15 min)
	p. 33	Activity 14a: Circle Time	Large group activity (25 min)
	p. 33	Activity 14b: Big and Small Bears	Individual activity (25 min)
I Can Compare! (p. 7)	p. 34	Activity 15: Match the Pictures	Small group activity (25 min)
Time to Listen (p. 8)	p. 34	Activity 16: Jack and the Beanstalk	Large group activity (30 min)
	p. 34	Activity 17: Comparisons	Pair activity (25 min)
Meet More Shapes (pp. 9–11)	p. 34	Activity 18: Sort the Shapes	Large group activity (30 min)
	p. 35	Activity 19: Identify the Shapes	Individual activity (40 min)
	p. 35	Activity 20: Match the Shape	Large group activity (25 min)
	p. 35	Activity 21a: Fold and Find	Individual activity (10 min)

	p. 36	Activity 21b: Match the Shape	Small group activity (20 min)
	p. 36	Activity 22: Draw with Shapes	Individual activity (25 min)
	p. 36	Activity 23: Sort the Shapes	Small group activity (25 min)
	p. 37	Activity 24a: Arranging Patterns	Small group activity (25 min)
	p. 37	Activity 24b: Draw the Shape	Individual activity (30 min)
	p. 37	Activity 25: Patterns	Large group activity (25 min)
I Can Observe! (p. 12)	p. 38	Activity 26: Missing Object	Large group activity (20 min)
	p. 38	Activity 27a: More/Less	Pair activity (25 min)
	p. 38	Activity 27b: Find the Partner	Pair activity (25 min)
Let's Print (pp. 14–15)	p. 38	Activity 28: Values from 11 to 20	Small group activity (25 min)
	p. 39	Activity 29a: Numbers with Cotton Buds	Individual activity (30 min)
	p. 39	Activity 29b: Counting	Large group activity (15 min)
	p. 39	Activity 30–31a: Threading Beads and Counting in Tens	Individual activity (15 min)
	p. 39	Activity 31b: Counting with Balls	Individual activity (15 min)
	p. 40	Activity 32: Bundles of Ten	Individual activity (25 min)
I Can Fill! (p. 16)	p. 40	Activity 33a: Missing Friends	Small group activity (25 min)
	p. 40	Activity 33b: Missing Numbers	Large group activity (15 min)
Let's Meet Numbers 11–20 (pp. 17–26)	p. 40	Activity 34a: Number Line	Large group activity (20 min)
	p. 41	Activity 34b: Counting 11–20	Small group activity (30 min)
	p. 41	Activity 34c: Count the Number	Individual activity (20 min)
	p. 41	Activity 34d: Bingo	Individual Activity (25 min)
I Can Trace and Write! (p. 27)	p. 42	Practice Activity: Counting 1–20	Small group activity (25 min)
Numbers with Thumbprints (p. 28)	p. 42	Activity 35a: Caterpillar Walk	Large group activity (20 min)
	p. 42	Activity 35b: Thumbprints	Individual activity (25 min)
I Can Paste and Count! (p. 29)	p. 43	Activity 36: Numbers 1 to 20	Small group activity (30 min)
I Can Draw! (p. 30)	p. 43	Activity 37: Find the Ducklings	Small group activity (25 min)
	p. 44	Activity 38: Missing Numbers	Large group activity (20 min)
I Can Count! (p. 31)	p. 44	Practice Activity: Numbers 1–10	Large group activity (30 min)
Number Names (pp. 32–33)	p. 45	Activity 39: Number Names	Individual activity (30 min)
Birthday Fun! (p. 34)	p. 45	Practice Activity: Introducing Numbers	Large group activity (30 min)

Meet More Numbers (p. 35)	p. 45	Activity 40: Counting 21 to 30	Large group activity (30 min)
I Know More Numbers! (p. 39)	p. 46	Activity 41–42: Counting with Beads	Pair activity (20 min)
Meet More Numbers (p. 41)	p. 46	Activity 43: Number Values	Individual activity (20 min)
Let's Compare Numbers (pp. 46–48)	p. 46	Activity 44: Comparing Numbers	Large group activity (30 min)
	p. 47	Activity 45: Number Names	Pair activity (25 min)
Let's Learn to Add (p. 49)	p. 48	Activity 46: Adding 1	Individual activity (20 min)
	p. 48	Activity 47: Adding 1 More	Small group activity (25 min)
	p. 48	Activity 48a: Number Line Jumps	
	p. 49	Activity 48b: How Many Carrots Does He Have?	Large group activity (20 min)
Magic with the Numbers (pp. 50–51)	p. 49	Activity 49: And 1 More...	Large group activity (30 min)
	p. 50	Activity 50: Number Line	Large group activity (15 min)
	p. 50	Practice Activity: Add 2 Apples	Pair activity (20 min)
	p. 50	Practice Activity: Adding 2	Individual activity (20 min)
I Can Add! (pp. 52–54)	p. 51	Activity 51a: Adding Numbers	Individual activity (20 min)
	p. 51	Activity 51b: Add the Numbers	Individual activity (30 min)
Let's Learn to Subtract (pp. 56–60)	p. 52	Activity 52: How Many are Left?	Large group activity (30 min)
	p. 52	Activity 53: Subtracting 1	Individual activity (20 min)
	p. 53	Activity 54a: Subtraction with Sticks	Individual activity (25 min)
	p. 53	Activity 54b: Bowling Subtraction	Large group activity (20 min)
	p. 53	Activity 54c: Number Line	Large group activity (20 min)
	p. 54	Activity 54d: Subtracting Numbers	Pair activity (15 min)
	p. 54	Activity 54e: Subtraction Sums	Individual activity (20 min)
Fun with 0 (p. 61)	p. 54	Activity 55a: Introducing 0	Large group activity (20 min)
	p. 55	Activity 55b: Adding 0	Individual activity (25 min)
	p. 55	Activity 55c: Counting Pebbles	Small group activity (15 min)
	p. 56	Activity 55d: Sums	Individual activity (30 min)

Meet More Numbers (pp. 63–65)	p. 56	Activity 56a: Counting with Beads	Small group activity (25 min)
	p. 56	Activity 56b: Aim and Throw	Large group activity (20 min)
	p. 56	Activity 56c: Count the Toys	Small group activity (25 min)
	p. 57	Activity 56d: Numbers 1–50	Large group activity (15 min)
	p. 57	Activity 56e: Arrange the Toys	Large group activity (15 min)
Grandma and Grandpa (pp. 66–67)	p. 57	Activity 57a: More Numbers	Pair activity (40 min)
	p. 58	Activity 57b: Counting with Beads	Individual activity (25 min)
More Number Names (pp. 68–70)	p. 58	Practice Activity: Number Names 11–20	Large group activity (30 min)
Fun with Shapes (p. 74)	p. 59	Activity 58a: Making Figures with Shapes	Small group activity (20 min)
	p. 59	Activity 58b: Puzzles	Individual activity (20 min)
	p. 59	Activity 58c: Rebuilding Shapes	Individual activity (20 min)
More Additions (p. 75)	p. 59	Practice Activity: Number Strips	Small group activity (20 min)
	p. 59	Practice Activity: Addition with Number Strips	Individual activity (20 min)
	p. 60	Practice Activity: Adding the Same Numbers	Individual activity (20 min)
	p. 60	Practice Activity: Number Families	Pair activity (25 min)
I Can Skip and Count! (p. 77)	p. 60	Activity 59: Skip Along	Large group activity (20 min)
	p. 60	Activity 60: Skip a Block	Individual activity (20 min)
I Can Build Numbers! (pp. 86–87)	p. 60	Activity 61a: Building Numbers	Individual activity (20–25 min)
	p. 61	Activity 61b: Number Values	Small/Pair/Individual activity (20–25 min)

ACTIVITY SUGGESTIONS FOR STORIES

Please Note: Story time should be fun! Give the children enough opportunity to revisit and practise. The stories can be modified / shortened / lengthened according to the abilities of the children. The stories can be repeated in all three levels to both help the children revisit the stories to boost comprehension and the development of verbal skills. Children must not be forced to memorise or rote learn the stories without understanding them.

Mentioned below are the activities suggested for all the levels in both the *World of Numbers* and *World Around Me* books. The stories can be repeated, modified, and used in all levels and activities can be included to make them interesting.

Folk tales and storytelling: Pakistan has a large number of storytelling techniques from different parts of the country. We have compiled a few for you below to use with different stories.

<i>Nazm Kahani</i>	Tell a story using a rhythmic pattern. The voice modulation and rhythm helps the children to visualise the story and help in creative imagery.
Prop Bag	A cloth bag with objects, puppets, and dolls to narrate stories can be used for some of the stories.
Story Box	A cardboard box with different kinds of dupattas, <i>dumroo</i> , <i>dholak</i> , puppets, caps, etc. can be used to create a magic box for storytelling .
Making Scrolls	A scroll of paper with stories drawn on it can be rolled onto a stick and unrolled while narrating the story.
Making a Make-Shift Curtain	The staff (3–4 feet long) can have 3–4 feet strips of colourful cloth tied on one end. The strips can be knotted together and opened when required to make a curtain. The staff can be held horizontal and used as a backdrop or a curtain for the children to enact plays in the class or outdoors. Also, this can be used as a backdrop for recitation and individual storytelling by the children.
Dramatisation	Children can be asked to re-enact a given story. Teacher to facilitate the children.
Under the Tree	Storytelling out doors under trees creates scope for children to be close to nature, to observe small changes, feel the breeze, and simply just be outside for a change of environment.

WEEKLY PLANNING GUIDE

Please Note: The Weekly Planning Guide is just a guide and a broad outline. It can be modified to suit the learners pace and the classroom environment.

- The children can borrow the flash cards from Nursery for comparisons and sequencing activities.
- Flash cards are an important resource and children must be given an opportunity to use them regularly.

Week	Student's Book Page Numbers	Week	Student's Book Page Numbers
1	Page 2: Count and Write Page 3: Let's Compare Page 4: Big and Small Page 5: More and Less	2	Page 6: Time to Listen! (Goldilocks and the Three Bears) Page 7: I Can Compare! Page 9: Meet More Shapes Flash cards: Introduce the 1 to 20 cards.
3	Page 8: Time to Listen (Jack and the Beanstalk) Page 10: I Can Match! Page 11: I Know More Shapes!	4	Page 12: I Can Observe! Page 13: Popo, The Parrot (prepositions) Pages 14–15: Let's Print (11–20)
5	Page 16: I Can Fill! (1 to 10) Page 17: Let's Meet the Number 11 Page 18: Let's Meet the Number 12	6	Page 19: Let's Meet the Number 13 Page 20: Let's Meet the Number 14 Page 21: Let's Meet the Number 15
7	Page 22: Let's Meet the Number 16 Page 23: Let's Meet the Number 17 Page 24: Let's Meet the Number 18	8	Page 25: Let's Meet the Number 19 Page 26: Let's Meet the Number 20 Page 27: I Can Trace and Write!
9	Page 1: Number Train (Fill in the missing numbers from 1 to 20) Page 28: Numbers with Thumbprints Page 29: I Can Paste and Count! (1 to 20)	10	Page 35: Meet More Numbers (21 to 30) Page 36: I Know More Numbers! (1 to 30) Page 37: I Can Fill! (1 to 30)
11	Page 31: I Can Count! Number Names (1 to 10) reading and recognition Page 32: Number Names (1 to 5) Page 34: Birthday Fun! (1 to 10)	12	Page 30: I Can Draw! (10 to 1) Sequencing—Backwards counting
Use appropriate activities for recording learning outcomes.			

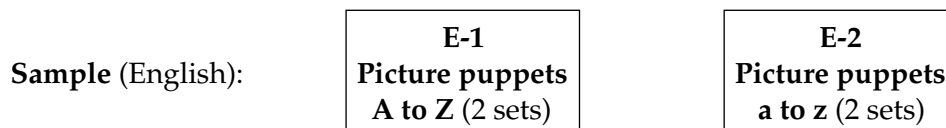
13	Page 38: Meet More Numbers (31 to 40) Page 39: I Know More Numbers! (1 to 40) Page 40: Froggy Jumps (1 to 40)	14	Page 33: Number Names (6 to 10) Recap—practice and assess the learning outcomes.
15	Page 41: Meet More Numbers (41 to 50) Page 42: I Know More Numbers! (1 to 50)	16	Page 43: Party Time! (1 to 50) Page 44: I Can Circle! Page 45: I Can Fill!
Use appropriate activities for recording learning outcomes.			
17	Page 49: Let's Learn to Add Page 50: Magic with the Number 1	18	Page 51: Magic with the Number 2 Page 52: I Can Add! Page 53: I Can Count and Write!
19	Page 54: I Can Add! Page 55: Let's Learn about Zero!	20	Pages 46–47: Let's Compare Numbers
Use appropriate activities for recording learning outcomes.			
21	Page 48: I Can Use Signs!	22	Page 56: Let's Learn to Subtract
23	Page 57: I Can Subtract! Page 58: I Can Count and Cross Out!	24	Page 59: I Can Subtract! Page 60: I Can Listen and Cross Out! Page 61: Fun with 0
Use appropriate activities for recording learning outcomes.			
25	Page 62: I Can Fill! (1 to 50)	26	Page 63: Meet More Numbers (51 to 70) Page 64: Meet More Numbers (71 to 90) Page 65: Meet More Numbers (91 to 100)
27	Pages 66–67: Grandma and Grandpa Activities with making bundles of ten using sticks/card sheets strips (use the strips from the borders of the flash cards).	28	Pages 68–70: More Number Names (11 to 20) Page 71: I Can Spot Differences! Page 72: I Can Fill!
Use appropriate activities for recording learning outcomes.			
29	Page 73: I Can Find! Page 74: Fun with Shapes Page 75: More Additions Page 76: I Can Recall!	30	Page 77: I Can Skip and Count! Page 78–80: I Can Fill in So Many Numbers! (1 to 100) Recap 1 to 100/1 to 50 as suitable to the learning levels.

31	Page 81: A Number Story (Chirpie Chip and and Her Friends) Page 82: On time! (Introduction to the clock)	32	Page 83: Numbers, Numbers, Up and Down (Ascending and descending order) Use the number strips and flash cards at the end of the book, for the activities
Use appropriate activities for recording learning outcomes.			
33	Page 84: Before, After, In Between Page 85: I Can Add and Subtract!	34	Pages 86–87: I Can Build Numbers! (Recap and practice)
35	Take them through the book and encourage them to read words or instructions.	36	Recap and Practice
37	Recap and Practice	38	Use the worksheets to record the learning outcomes of the children.

STORING AND MANAGING MATERIALS

Colour-Coding: Labels of various colours can be used to differentiate between the materials made by the teacher for different subjects. For example, an orange label can be pasted on a packet carrying material for an English activity, a purple label can be used for Maths, and a light blue label for General Knowledge.

Number-Coding: Each packet can be given its own particular alpha-numeric code to act as a reference. This way teachers can easily identify the resource later. For example, you can use 'E' to represent English, 'M' for Maths, and 'GK' for General Knowledge. Refer to the given image below to use as an example:



Recording in a Diary: The teaching resources created and used for activities should be noted down in the teacher's diary to create a database which the teacher can use in future.

The following format can be used to make entries in the teacher's diary. This will enable teachers to reuse resources easily in future.

Activity No.	Topic	Date	Aids Used
Activity 1	Picture puppets	26.3.2020	E1 A to Z (2 sets)

Saving, Reusing, and Modifying: If the materials are laminated and used carefully, they can be used in the next session.

Worksheets: Worksheets should be used together with activities mentioned in the student's books and teaching guides to reinforce topics taught at that level. Worksheets should be regularly sent to parents if children need to revisit the topic taught in school. This can be achieved if some of the worksheets are pasted in the children's notebooks.

Storing Flash Cards: Each book has been provided with a set of flash cards. This is how you can store them:

- Number the flash cards of each book (with a permanent marker) with the roll numbers of the children.
- Numbering the flash cards helps you to place the cards with the correct set if they get mixed up. Give children the opportunity to read them for a day or two as reading sheets before tearing them into flash cards.
- Get a set of transparent resealable bags to store the cards.
- You can also devise your own methods of storage as per your convenience.

CREATING CLASSROOM RESOURCES

Making 'My Learning Train' for the Classroom

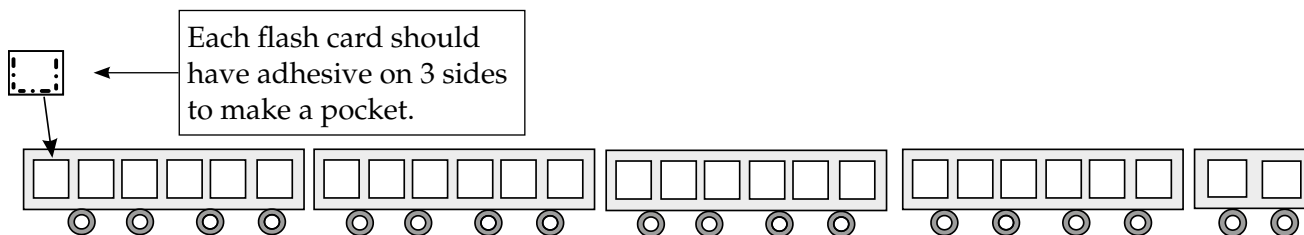
The method to create the resource known as 'My Learning Train' for classroom usage is given below. It must be placed where children can reach easily. The number of pockets in the train can vary according to the space available in the classroom.

Materials Checklist:

- Four chart paper strips of dimensions 70 cm × 19 cm
- One chart paper strip of dimensions 19 cm × 20 cm
- Twenty-six 10 cm × 10 cm flash cards of different colours
- Circles of diameter 5 cm each
- Adhesive

Instructions:

1. Place the flash cards on the chart paper strips to get the spacing right.
2. Spread adhesive on three sides of the flash cards and paste them to make pockets.
3. Put them up in a single row to make the Learning Train. Refer to the image below to use as an example:



Stick Puppets

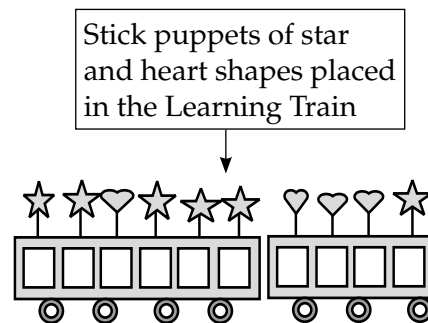
Stick puppets are a resource to be used for different activities mentioned in the 'Activity Bank' section of the teaching guide. It can be used for display and also as an interactive resource for activities.

Materials Checklist:

- 10 cm × 10 cm cards and 10 cm × 20 cm cards
- Pictures relevant to each activity (fruits, toys, etc.)
- Transparent packing tape.
- Ice cream sticks
- Adhesive
- Recycled-reusable bags for storing resources.

Instructions:

1. You can write letters, words, numbers, or draw any illustration from the books on cards to make stick puppets.
2. Paste the cards on sticks and make sets of stick puppets for the children to use. Refer to the given image.
3. Laminate with tape if required—please note that the children will be holding the material with the sticks.
4. Store in bags and label neatly.



- Add the name of the set and the teacher who made it in the diary/register used for record keeping so that all the teachers know it is there and can share, exchange, and reuse to optimise each resource.

Please Note: For word-building exercises, letters can be written on 5 cm x 10 cm cards.

Similarly, picture cards can be made by simply enlarging pictures from the student's books and pasting them on 5 cm x 10 cm cards. They can be laminated for long-term use.

Number Puppets

Stick puppets which display numbers (1, 2, 3, etc.)

Materials Checklist (for each set):

- Twenty 10 cm x 10 cm cards of any colour
- Adhesive
- Two 12 cm x 10 cm resealable transparent bags
- Twenty ice cream sticks
- Black, blue, and red markers
- Two 10 cm x 10 cm purple cards for labeling

Instructions:

- Create stick puppets with numbers 1 to 20 written on the cards. Refer to the given image to use as an example.
- Keep them in the resealable transparent bags. Place the number puppets 1 to 10 in one bag and 11 to 20 in a second bag.
- Write the activity numbers and the topics the puppets will be used in on purple cards. Staple each card outside the respective bag.

Please Note: If you are making more than one set of Number Puppets for number skills, then each set of Number Puppets should be in a different colour to help in distribution and collection.

Number Value Puppets

Stick puppets which display objects of varying quantity (2 cats, 4 smileys, etc.)

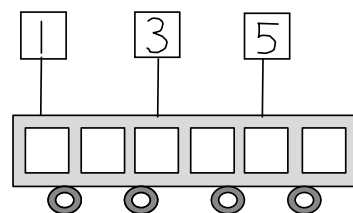
Materials Checklist (for each set):

- Twenty 10 cm x 10 cm cards of any colour
- Twenty ice cream sticks
- Adhesive
- Black, blue, and red markers
- Sketch pens/stickers
- Two 12 cm x 10 cm resealable transparent bags
- Two 10 cm x 10 cm purple cards for labeling

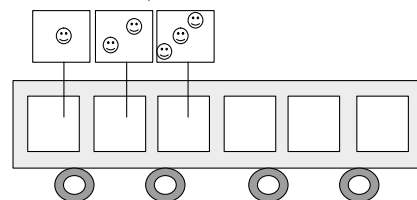
Instructions:

- Create stick puppets with images drawn on the cards. These images will vary in quantity (e.g. 2 cats, 4 smileys etc.) and represent number values. Refer to the given image to use as an example.
- Keep them in resealable transparent bags. Write the activity numbers and the topics the puppets will be used in on purple cards. Staple each card outside the respective bag.

Number puppets (stick puppets of numbers) placed in the Learning Train



Number Value puppets (stick puppets depicting quantity of objects) placed in the Learning Train.



Theme Boards

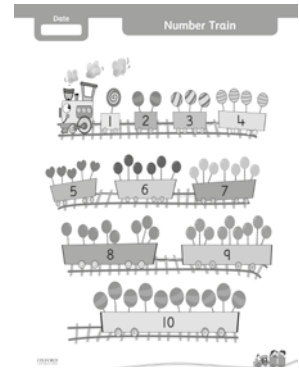
Theme boards are used to display images/scenes from stories (jungle, farm, rooms of a house, etc.). For theme boards, chart papers of different colours can be used to create different backgrounds as per the requirements of the activity (for example, jungle animals drawn or pasted for an activity related to the jungle.)

Materials Checklist:

- Chart papers of 2–3 colours
- Picture and word stick puppets

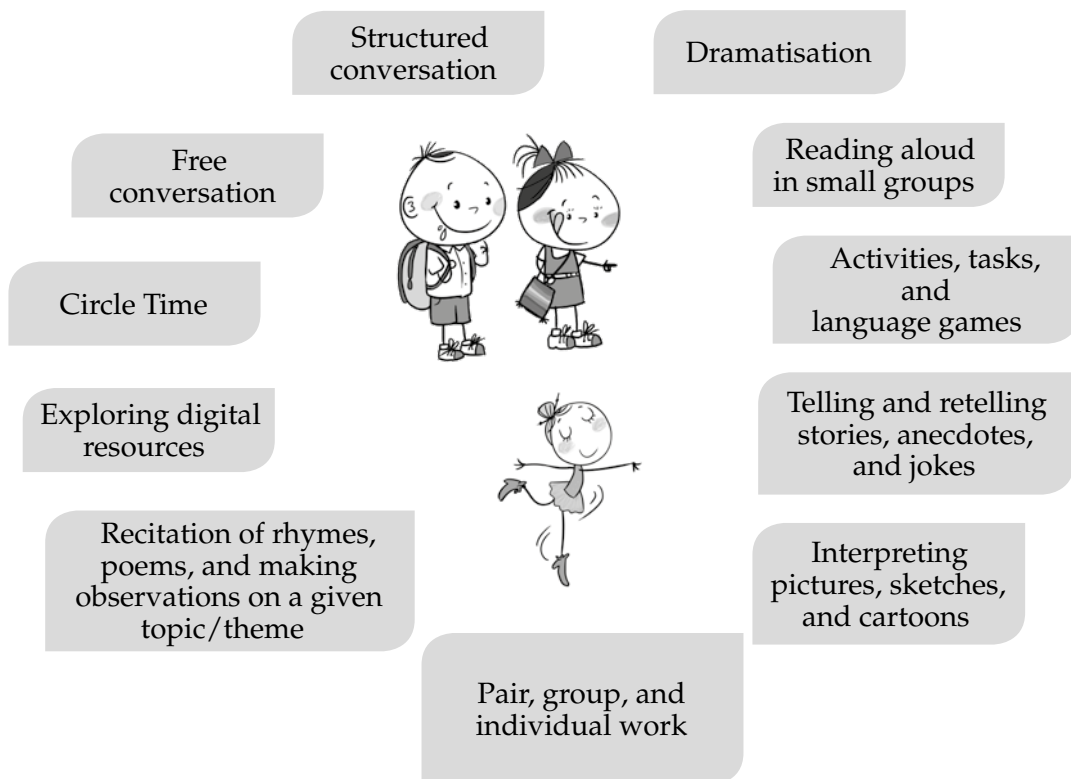
Instructions:

1. Cut the chart paper to the size of the required theme board. Draw or paste images on the chart paper as per requirement of your desired theme board, and slightly fold upwards from the bottom to make a pocket.
2. Staple the upward fold every 2/3 inches.
3. Fix the chart paper on the board and keep adding and removing the stick puppets as per the topic being taught in class.



Strategies to Encourage Student Participation

By making classroom activities highly interactive, teacher can promote optimal learner participation, leading to an urge to use language both in speech and writing. The selection of strategies is left to the discretion of the teacher. However, the following are recommended:



FLASH CARD ACTIVITIES FOR NUMBER SKILLS

Pre-Nursery, Nursery, and Kindergarten have different sets of flash cards but teachers teaching different grades can borrow them as required:

- To recapitulate topics taught at the level.
- To teach matching, sorting, sequencing etc.

The following are suggested ways in which flash cards can be used by the teachers to engage students. Further details of the activities mentioned below are given in the 'Activity Bank' section of each TG.

Flash Cards Activity 1: Sequencing and Patterns

Nursery flash cards

Sequencing and Patterns

Read and Match

Print/Make reading cards and combine them with the flash cards.

square

circle

triangle

Flash Cards Activity 2: Pre-Number Concepts and Reading

Nursery flash cards

Pre-Nursery
Identification and Matching of similar objects

Reading and Vocabulary Building (Kindergarten)

Make reading cards and ask the children to identify the word with the picture and match.

far

on

under

same

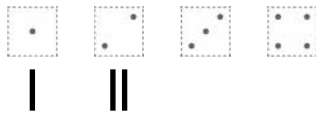
Flash Cards Activity 3: Number Values and Number Names

Pre-Nursery
Count and arrange in order

Nursery flash cards

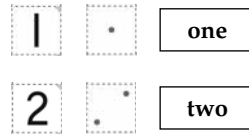
1	2	3	4				
5	6	7	8				
9	10	11	12				
13	14	15	16				
17	18	19	20				

Count and place the correct value



Match the numbers to their value and number names

Make number name cards

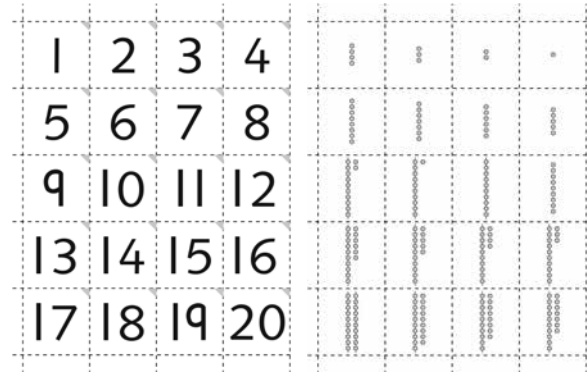


Flash Cards Activity 4: Numbers and Values—Counting in Tens and Ones

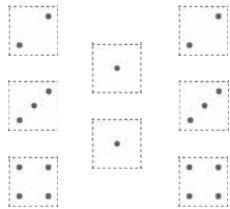
Count and arrange in order



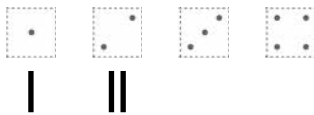
Kindergarten Flash cards



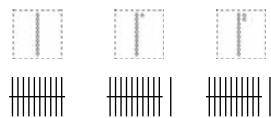
Use two sets to play snap



Count and place the correct value



Now children can make bundles with the card sheets border (1 cm x 5 cm given with the flash cards) with the help of small rubber bands



Use the Nursery and Kindergarten flash cards to match the same values



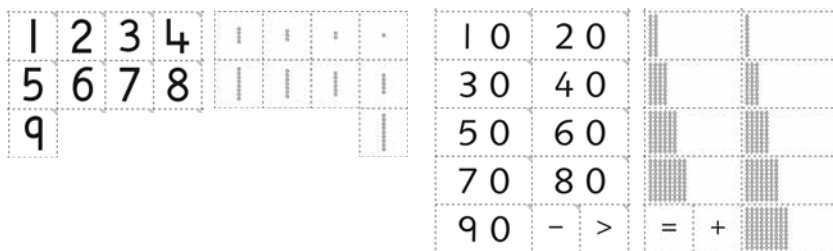
Match the numbers to their value and number names



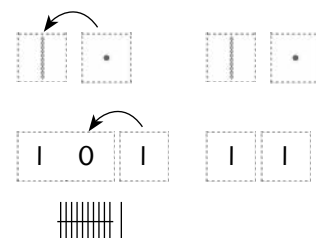
Flash Cards Activity 5: Number Building/Place Values

Understanding Number Building/Number Values and Place Value

Kindergarten Flash cards



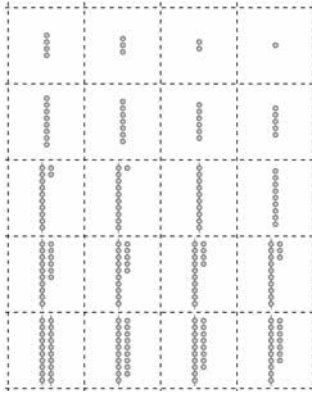
Place 1 to 9 cards to build numbers 11 onwards



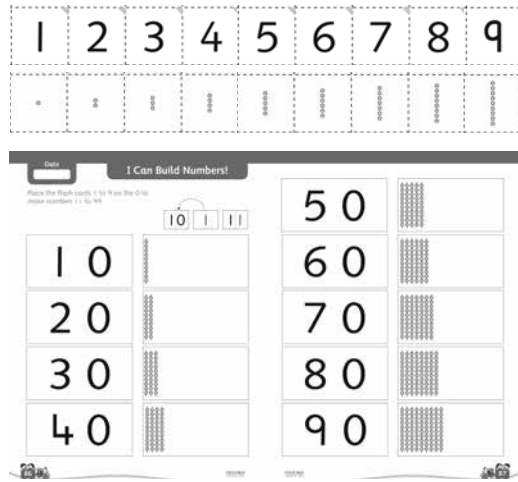
Flash Cards Activity 6:

Use flash cards for number building and comparisons with pages 86–87 of the student’s book.

Borders around flash card sheets can be separated into 1 cm x 5 cm strips and used for counting activities

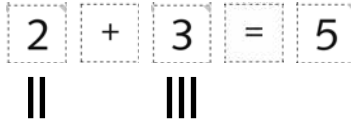
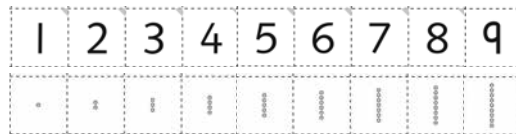
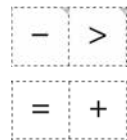


Flash cards 1–9 (Front and back)

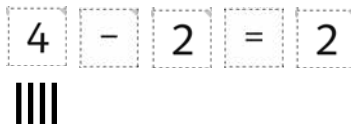


Flash Cards Activity 7: Addition and Subtraction

Use flash cards and counting strips for addition and subtraction.



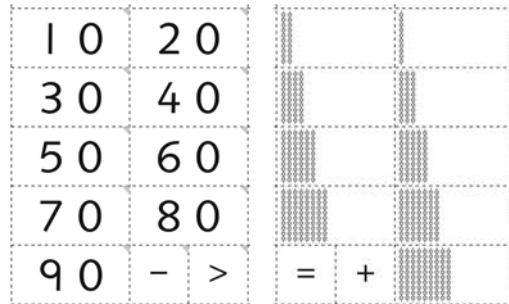
Shift the counting strips under the number 2 and 3 add and show that they count upto 5.



Ask the children to place the counting strips under the far left number of the equation. Take away the number of strips equal to the second number of the equation. Place the sticks you pick up under the answer of the equation that is on the far right of the equation. Children will count the remaining sticks as the answer.

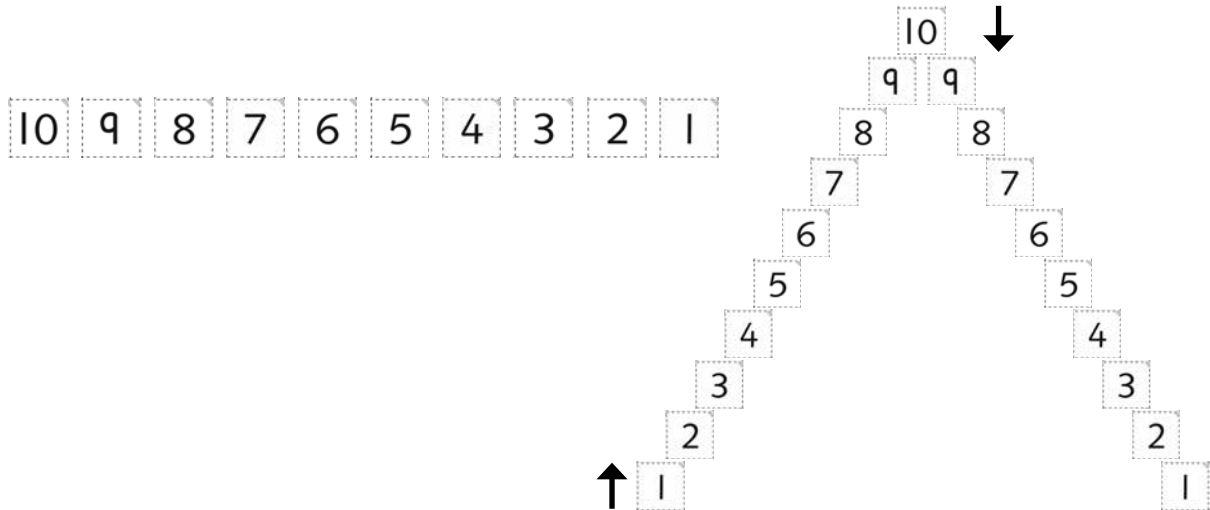
Flash Cards Activity 8:

Use flash cards to see the value of numbers and place the greater and lesser than sign. They can then flip the card over—see the number to compare and understand greater/lesser numbers.



Flash Cards Activity 9:

Use flash cards for backward counting 10–1 and to explain ascending and descending order.

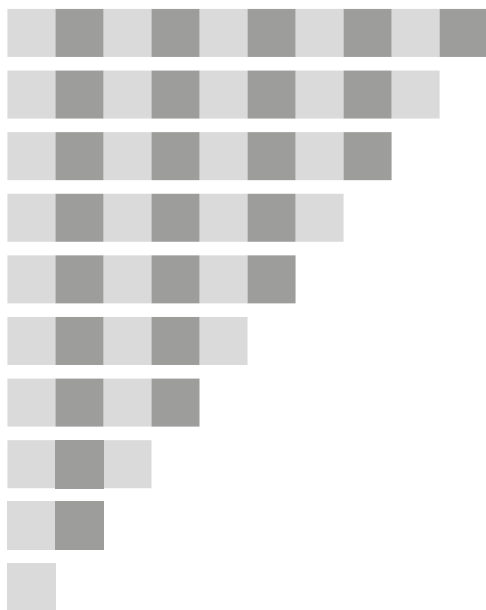


Flash Cards Activity 10: Numbers Strips and Numbers through 10

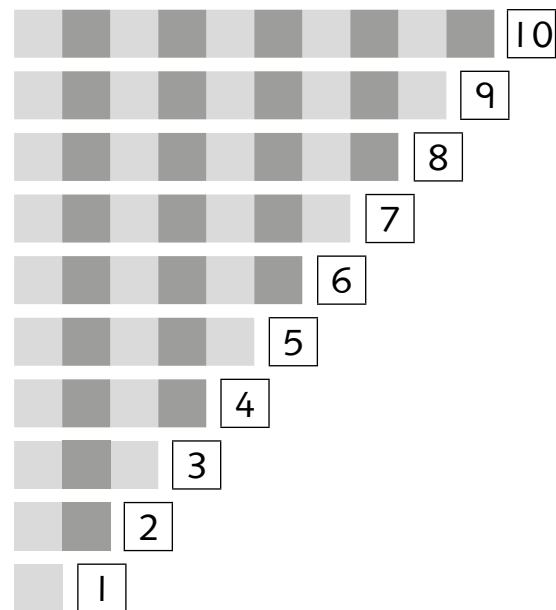
Please Note: You can buy a set of Montessori Number Rods made of wood for your Resource centre and start with that for the children to actually experience 1 as small and 10 as big.

- Arrange the number strips in order from 1 to 10. Children even in the Pre-Nursery can do this activity to see the strips increasing from 1 to 10.

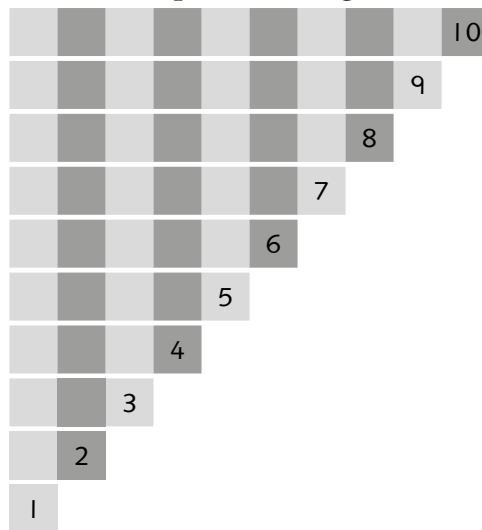
Arrange number strips 1 to 10, counting and saying the numbers out loud



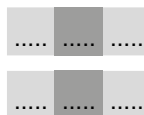
Match the strips to the number flash cards



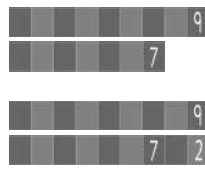
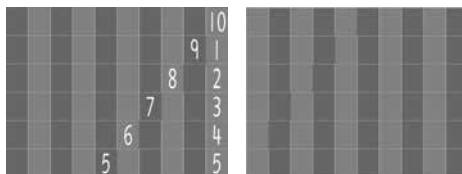
Turn the strips and arrange with the numbers



b. Use two sets of strips to match strips that are the same



c. Use the Number strips to add up to and make a number. Understand number bonds, i.e. the different addition combinations that can add up to a number—for example, $2 + 4 = 6$, $5 + 1 = 6$, $3 + 3 = 6$ or $7 + 1 = 8$, $6 + 2 = 8$, $2 + 6 = 8$, $5 + 3 = 8$, $3 + 5 = 8$, $4 + 4 = 8$.



Count how many blocks are left to make 9.

Add the number and check if it fits under 9. If it falls short or extends, it is wrong.

ACTIVITY BANK

Activity 1: Counting

Materials Checklist:

- One bowl (for each child)
- Ten sticks/beads (for each child)

Instructions:

1. Give each child ten sticks/beads in a bowl.
2. Demonstrate counting the sticks by arranging them from left to right one at a time.
3. Place a finger on each stick and count.
4. Let children do the same and count from 1 to 10.

Activity 2: Numbers and Values

Materials Checklist:

- Number flash cards
- Value flash cards

Instructions:

1. Seat children in pairs.
2. Give each of them a set of number flash cards 1–10.
3. Tell children to arrange the number flash cards in ascending order from 1 to 10.
4. Then ask them to arrange the value flash cards in order, corresponding to the number flash cards.
5. After children have mastered the use of 1 to 10 cards, introduce the flash cards from 11 to 20.
6. Ask them to arrange the number flash cards and corresponding value flash cards in order from 1 to 20.

Note: Instruct children to keep their cards on opposite sides of the table so that the flash card sets of the partners do not get mixed up.

7. Introduce page 1 of the student's book. Ask children to count the numbers from 1 to 20.

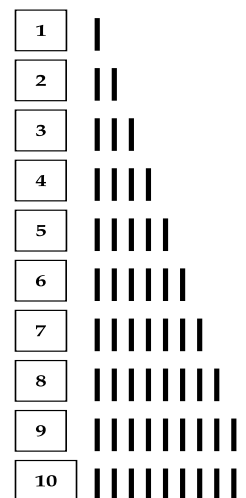
Activity 3: Numbers from 1 to 10

Materials Checklist:

- One bowl (per group)
- Fifty-five sticks (per group)
- Number flash cards

Instructions:

1. Seat children in groups of four.
2. Give each group fifty-five sticks in a bowl and a set of flash cards from 1 to 10.
3. Ask them to arrange the flash cards one next to the other in order from 1 to 10.
4. Tell them to arrange the corresponding number of sticks under each flash card.
5. Let children count the sticks and see which number has the least and which has the greatest number of sticks.
6. Children can also arrange the flash cards one below the other (as shown in the picture), and the corresponding number of sticks next to them as shown.
7. Let children complete page 2 of the student's book independently.



Activity 4a: Sing and Act

Materials Checklist:

- Rhyme given on page 3 of the student's book

Instructions:

1. Sing the rhyme with the children and facilitate them to enact the rhyme.

Activity 4b: Many and Few

Materials Checklist:

- Balls (of two different colours)
- Crayons

Instructions:

1. Seat children in groups.
2. Give each group a few balls so that there are more balls of one colour than those of the second colour.
3. Ask them to sort the balls by colour.
4. When they have sorted the balls, point out to them that there are 'many' balls of one colour and 'few' balls of the other colour.
5. Turn to page 3 of the student's book. Encourage children to picture read and try to tell the story. Ask them to follow the path shown on the page with the index finger.

Activity 5a: Obstacle Course

Materials Checklist:

- Cardboard boxes
- Old tyres

Instructions:

1. Place the objects in a haphazard manner to create an obstacle course.
2. Help children cross the course in small groups.
3. You can initially create an obstacle course using just one set of things, for example, placing boxes for children to step in/out of tyres to step on.
4. As children practise and develop control over their movement, you can combine different things to create the course.

Activity 5b: Big to Small

Materials Checklist:

- Chart papers (of two/three different colours)
- Scissors

Instructions:

1. Cut-out circles of different sizes from the chart papers.
2. In class, hold up circles of various sizes and let children compare the sizes using the words 'big' and 'small'.
3. Seat children in groups.
4. Give each group a few circles. Ask children to arrange them according to their size from 'big' to 'small'.
5. Ask children to count the number of circles they have.

Activity 5c: Tall and Short

Materials Checklist:

- Stuffed animals (of different heights, ranging from short to tall)

Instructions:

1. Show children the stuffed animals line up according to their heights. Draw their attention to the different heights of the stuffed animals and point out that one is 'tall' while the other is 'short'.
2. Call two children of different heights in front of the class and let the others compare their heights.

Activity 6a: Long and Short

Materials Checklist:

- Pencils (of different lengths)
- Play dough
- Newspapers

Instructions:

1. Show children two pencils of different lengths. Point out that one is a 'long' pencil and the other is a 'short' pencil. This will give them a visual representation of 'long' and 'short'.
2. Next, give them the play dough and tell them to form 'long' and 'short' snakes.
3. Ask them to identify which snakes are long and which ones are short.
4. You can also give them old newspapers to tear into 'long' and 'short' strips.

Activity 6b: Thin and Thick

Materials Checklist:

- Play dough
- Books (of different thickness)

Instructions:

1. Show children two books of different thickness. Point out that one is 'thick' and the other is 'thin'.
2. Give them play dough to form 'thick' and 'thin' snakes and ask them to identify their thickness.

Activity 7: Up and Down

Materials Checklist:

- Sheet of paper

Instructions:

1. Take a sheet of paper and make a paper plane.
2. Fly the plane. As it flies, draw the attention of children to the directions of the plane 'up' and 'down'.
3. Let children also make paper planes and fly them. Ask them to identify the direction as the paper planes fly.
4. Take children to the playground and draw their attention to the directions 'up' and 'down' as they climb up and down the slide or on a flight of stairs.

Activity 8a: Big and Small

Materials Checklist:

- Bottles (of different sizes)
- Toys (of different sizes)
- Water

Instructions:

1. Show two bottles of different sizes and describe them using the words 'big' and 'small'. Help the children to fill the bottles with water. Ask them which bottle has more water in it.
2. Seat children in groups of four. Give each group a few toys and ask them to arrange them according to their size.
3. Ask them to compare the toys using the words 'big' and 'small'.

Activity 8b: Big and Small Toys**Materials Checklist:**

- Pairs of big and small objects (like books, water bottles, building blocks, etc.)
- Picture puppets of big whales and small snails

Instructions:

1. Make picture puppets of big whales and small snails.
2. Make children sit in a circle.
3. Hold up the puppets of the snail and the whale and sing the rhyme given on page 4 of the student's book.
4. Next, give an object to each child.
5. Call a child at a time to place an object in the centre of the circle. Ask the child with the similar object to place it next to the object in the centre.
6. Ask both children to compare the sizes of the two objects.
7. Let children complete exercises on page 4 of the student's book independently.

Activity 9: More and Less Shells**Materials Checklist:**

- Shells/beads/sticks
- Stick puppets of a tortoise and a snail (one set for each group)
- Number puppets (1 to 10) (one set for each group)

Instructions:

1. Make picture puppets of a tortoise and a snail for each group.
2. Seat children in groups of four and give each group a tortoise and a snail picture puppet. Give them some shells and ask them to count them.
3. Give 1 to 10 number puppets to each group. Ask them to arrange the number puppets in order. Let children take turns to pick up a card and place the correct number of shells next to each puppet.
4. Ask them to compare the shells in terms of 'more' and 'less'. Ask children to place the snail puppet next to the shells that are 'less' and the 'tortoise' puppet next to the shells that are 'more'.
5. Let children complete the exercises on page 5 of the student's book independently.

Activity 10: Story Time**Instructions:**

1. Open to page 6 of the student's book.
2. Ask children to look at the pictures and re-tell the story given on the page in their own words.

Activity 11: Comparison

Materials Checklist:

- Picture puppets from the story 'Goldilocks and the Three Bears' of 3 chairs, 3 beds, 3 bowls in 3 different sizes (small, medium, and big), etc.
- Learning Train

Instructions:

1. Make picture puppets in sets of three different sizes (small, medium, big) as mentioned in the story 'Goldilocks and the Three Bears' on page 6 of the student's book.
2. Distribute the picture puppets. Invite one child to stand up and show their picture puppet. Ask children with similar picture puppets to stand up.
3. Let children compare their pictures in terms of sizes. Draw their attention towards how the sizes vary. Help them revise the concept of smallest/biggest.
4. Ask them to place the puppets together in the Learning Train.

Activity 12: Read and Draw

Materials Checklist:

- Drawing sheets
- Crayons
- Pencil
- Eraser
- Story page (page 6 of the student's book)

Instructions:

1. Once children are familiar with the story, give them drawing sheets and stationery.
2. Encourage them to draw the pictures related to the story.

Activity 13: Narrow and Wide

Materials Checklist:

- Wet chalk/Poster colours and brush

Instructions:

1. Draw narrow and wide paths on the floor at least 1–2 feet long and 4–5 feet long.
2. Ask children to walk on the paths from one end to the other end without stepping on the outlines.
3. This activity can be done in the playground as well.

Activity 14a: Circle Time

Instructions:

1. Sit with children in a circle.
2. Talk about the importance of safety rules.
3. Ask children questions such as, 'Should we go out on our own? What should we do if we want to use someone else's things?' etc.

Activity 14b: Big and Small Bears

Materials Checklist:

- Play dough

Instructions:

1. Give children play dough and help them make big and small bears with it.
2. Ask them to observe the difference sizes. Reinforce words 'big' and 'small'.

Activity 15: Match the Pictures**Materials Checklist:**

- 5 cm x 10 cm cards with pictures on them (as given on page 7 of the student's book)

Instructions:

1. Seat children in groups. Give each group two or three sets of picture cards.
2. Ask children to arrange them as small and big.
3. Ask them to compare the pictures using complete sentences. Groups can exchange the sets and repeat the activity.
4. Encourage them to use the words: small, smaller, smallest, big, bigger, and biggest.
5. Introduce page 7 of the student's book and let them complete the exercise independently.

Activity 16: Jack and the Beanstalk**Materials Checklist:**

- Picture puppets (related to the story on page 8 of the student's book)

Instructions:

1. Narrate the story of Jack and the Beanstalk to children using a set of the picture puppets.
2. Give children the picture puppets in groups and help them enact the story. Each group can practice amongst themselves first and then perform in front of the class.

Activity 17: Comparisons**Materials Checklist:**

- Picture puppets (related to page 8 of the student's book)
- Boxes (with labels such as tall, short, more, less, big, and small)
- Marker

Instructions:

1. Distribute the picture puppets among children.
2. Ask them to find their partners.
3. Tell them to compare the pictures using words like 'tall' and 'short', 'more' and 'less', 'big', and 'small'.
4. Label six boxes as tall, short, more, less, big, small.
5. Ask children to place the puppets in the appropriate boxes.
6. Introduce page 8 of the student's book and let children complete the exercises independently. Encourage them to read the words shorter, taller, less, more, bigger, and smaller.

Activity 18: Sort the Shapes**Materials Checklist:**

- Ball
- Cube
- Cylinder
- Cone

Instructions:

1. Seat children in a circle and pass one object around without telling them the shape's name. Encourage children to feel its sides, corners, edges, curves, etc., and then tell them the name of the shape.
2. Seat children in groups. Give each group a few objects and ask children to name the shape.
3. Ask children to find things around them that are similar to the given shapes.

Activity 19: Identify the Shapes**Materials Checklist:**

- Cut-outs of circle, triangle, square, star, rectangle, semi-circle, oval
- A3 size sheet of papers (for sorting shapes)
- Adhesive

Instructions:

1. On the sheet of paper make seven columns. Write the name of a shape in each column. Prepare one such sheet for each group.
2. Show the various shapes cut-outs to children. Name them and write the name of each shape on the blackboard, to familiarise children with the cut-outs.
3. Hold up the correct shapes and sing the rhymes given on page 9 of the student's book with children.
4. Hide the cut-outs of the shapes in different places in the classroom (choose places that are easy for children to locate). Tell children to look for the cut-outs.
5. Ask each child to count the number of cut-outs of each shape individually found. Let them name the shapes of each cut-out.
6. Seat children in groups of four. Give each group a few shape cut-outs, adhesive, and the prepared sheet of paper.
7. Ask them to sort the shapes and paste them in the correct columns.

Activity 20: Match the Shape**Materials Checklist:**

- Solid shapes (ball, cube, cylinder, cone)
- Cut-outs of flat shapes (circle, triangle, square, star, rectangle, semicircle, oval)
- Feely (Sensory) bag

Instructions:

1. Arrange the cut-outs on a table. Place the solid shapes on one side of the table.
2. Ask children to come forward and place the solid shapes on the correct cut-outs.
3. Place a solid shape in a feely bag. Let children feel it without seeing or taking it out, and name the shape.
4. Give each child a cut-out of a circle and ask them to fold it into half to make a semicircle. Name the shape. Write it on the blackboard for the children to see and remember.

Activity 21a: Fold and Find**Materials Checklist:**

- Paper cut-outs of circles (one for each child)
- Drawing sheet
- Adhesive

Instructions:

1. Distribute the cut-outs.
2. Demonstrate how children can fold the cut-outs into half to make semicircles.
3. They can paste them on a drawing sheet/scrap book.

Activity 21b: Match the Shape**Materials Checklist:**

- Fabrics (two or three different kinds)
- Scissors
- Adhesive
- Sheets of paper (one for each group)

Instructions:

1. Cut various shapes in pairs out of the fabrics. Paste one pair of each shape on a sheet of paper.
2. Seat children in groups of four, give each group the other pair of the shape and the sheet of paper with the shapes pasted on them.
3. Ask them to match the shapes and paste the corresponding shapes on the given sheet of paper next to the correct shape.

Activity 22: Draw with Shapes**Materials Checklist:**

- Drawing sheets
- Crayons
- Pencils
- Mini-whiteboards
- Whiteboard markers
- Newspapers

Instructions:

1. Let children practise drawing shapes on sand, mini-white boards, and newspapers.
2. Give each child a drawing sheet, pencil, and a few crayons.
3. Ask children to draw an object using the shapes they have just learnt. Children may draw a variety of things such as a house, a robot, a scarecrow, or a rocket.

Activity 23: Sort the Shapes**Materials Checklist:**

- Cut-outs of circle, triangle, square, star, rectangle, semicircle, oval
- Paper envelopes
- Marker
- Crayons

Instructions:

1. Write the name of one shape on each paper envelope.
2. Seat children in groups. Give each group a few shape cut-outs.
3. Ask them to sort the shapes cut-outs.
4. Place the paper envelopes on a table.
5. Ask each child to put the shapes in the correct paper envelope.
6. Introduce page 9 of the student's book and let children complete the exercise independently.

Activity 24a: Arranging Patterns

Materials Checklist:

- Bowls
- Cut-outs of different shapes
- Beads of different colours
- Three-dimensional shapes

Instructions:

1. Seat children in small groups.
2. Place the cut-outs/beads in bowls and give each group a bowl.
3. Ask children to use the cut-outs/beads to arrange in a pattern.
4. Next, they can match the cut-outs of the shapes with the corresponding three-dimensional shape.

Activity 24b: Draw the Shape

Materials Checklist:

- Cut-outs of circle, triangle, square, star, rectangle, semicircle, oval
- Drawing sheets
- Crayons
- Box

Instructions:

1. Place the cut-outs of different shapes in a box. Give the children drawing sheets and crayons.
2. Ask one child at a time to pick out a shape and name it. Others will draw the named shaped and a real-life object corresponding to it. For example, if a child says 'circle', the others have to draw a circle or a ball or an orange.
3. Introduce page 10 of the student's book and let the children complete the exercises independently.

Activity 25: Patterns

Materials Checklist:

- Cut-outs of circle, triangle, square, star, rectangle, semicircle, oval
- Learning Train
- Clothes line
- Clothes pegs

Instructions:

1. Pin one cut-out of each shape on the Learning Train pockets to create a pattern.
2. Distribute the remaining cut-outs among the children. Ask them to put the cut-outs in the Learning Train pockets as in the pattern you have placed. Tell them to name the shapes as they place the cut-outs in the train.
3. Put up a clothes line where children can also reach it. Using clothes pegs, pin up a few shapes on the clothes line to create a pattern.
4. Distribute the cut-outs among children. Tell them to pin up the shapes on the clothes line following the given pattern.
5. Instruct children to name the shapes as they put the shapes up on the clothes line.
6. Introduce page 11 of the student's book to children and let them complete the exercise independently.

Activity 26: Missing Object

Materials Checklist:

- Few objects (such as toys)
- Tray

Instructions:

1. Ask children to sit in a circle.
2. Place a tray with a few objects in the middle of the circle. Ask children to observe the objects.
3. Remove a few objects from the tray. Ask children to recall the missing objects.
4. Introduce page 12 of the student's book and let children complete the 'Spot and Circle three Differences' exercise.

Activity 27a: More/Less

Materials Checklist:

- One pair of trays for each pair of children with things like beads, sticks, clips, crayons in unequal quantity

Instructions:

1. Seat children in pairs.
2. Ask them to come and pick up one set of trays.
3. They can count the things in each tray and compare to count/see and say which tray has more/less objects.

Activity 27b: Find the Partner

Materials Checklist:

- Few objects that go together such as a bat and ball, toothbrush and toothpaste, etc.
- Toys

Instructions:

1. Distribute the objects (one to each child) and ask children to find the objects that go with them.
2. Next, place four similar toys and one different one on a table. Ask children to identify the odd one out.
3. Tell children to open to page 12 of the student's book. They can complete the remaining exercises independently.

Activity 28: Values from 11 to 20

Materials Checklist:

For each group:

- Bowls
- Poster colours
- Sponges
- Okra (ladies' fingers)
- Blank chart paper

Instructions:

1. Seat children in groups of four. Place a bowl in the centre of each group.
2. Put a sponge in each bowl. Pour some paint on each sponge.
3. Give children two halves of an okra.

4. Demonstrate printing with the okra. Press the cut surface of the okra on the paint-soaked sponge and then press the paint-coated okra surface on the page. Show children how to make similar patterns for numbers 11 to 20 on the chart paper.
5. Ask them to open page 14 of the student's book and make okra patterns on the page independently.

Activity 29a: Numbers with Cotton Buds

Materials Checklist:

- Cotton buds
- Poster colours
- Square-ruled sheets of paper

Instructions:

1. Once children have practised the printing of the number values with the ladies' fingers, you can give them poster colours, square-ruled sheets of paper, and cotton buds.
2. Call out a number and ask them to make the related number of cotton bud prints on the paper.
3. You can also encourage children to print patterns using their thumbprints.

Activity 29b: Counting

Materials Checklist:

- Learning Train
- Ice cream sticks
- Number puppets

Instructions:

1. Place number puppets in order from 11 to 20 in the Learning Train pockets.
2. Give children ice cream sticks.
3. Let them count and place the corresponding number of ice cream sticks in the pockets of the Learning Train.

Activity 30–31a: Threading Beads and Counting in Tens

Materials Checklist:

For each child:

- Twenty beads in two colours (ten of each colour)
- String

Instructions:

1. Demonstrate how to string beads and count them.
2. Give each child ten beads of one colour, another ten beads of another colour, and a piece of string.
3. Ask them to count and thread ten beads of one colour.
4. Instruct them to count and string one bead at a time of the second colour.
5. When they finish threading all the twenty beads, tell them to count all the beads together.

Activity 31b: Counting with Balls

Materials Checklist:

- Play dough

Instructions:

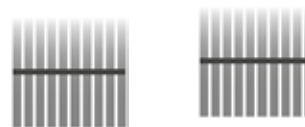
1. Give each child some play dough.
2. Tell children to form twenty balls from the play dough.

Activity 32: Bundles of Ten

Materials Checklist:

For each child:

- One bowl
- Twenty sticks
- Two rubber bands



Instructions:

1. Place twenty sticks in each bowl.
2. Give each child a bowl and two rubber bands.
3. Ask children to count and separate ten sticks from the bowl.
4. Demonstrate how to make a bundle of ten sticks and tie it with the help of rubber band.
5. Ask them to make a bundle of the sticks they have separated.
6. Tell them to place the bundle on the table. Then, ask them to place one stick at a time beside the bundle and count from 11 to 20.
7. Once the twentieth stick is placed, ask them to count again.
8. Tell them to take a rubber band and form a second bundle.
9. The activity can also be carried out by forming a bundle of ten and then calling out a number. Children will have to place the corresponding number of sticks next to the bundle.

Activity 33a: Missing Friends

Materials Checklist:

- Number puppets (from 1 to 10)
- Learning Train

Instructions:

1. Distribute the number puppets 1 to 10 to ten children.
2. Call two alternate numbers at a time (For example, 2 and 4).
3. Ask children with those two number puppets to come in front of the class and stand, keeping space in between them. Ask children which number is missing?
4. Then ask the child with the missing number to come and stand in between to fill the space .

Activity 33b: Missing Numbers

Materials Checklist:

- Number Puppets (from 1 to 10)
- Learning Train

Instructions:

1. Place some of the number puppets in the Learning Train.
2. Hide the missing numbers in places that are easy to locate.
3. Ask children to find the missing numbers and put them in the correct places in the Learning Train.
4. Introduce page 16 of the student's book and let children complete the exercises independently.

Activity 34a: Number Line

Materials Checklist:

- Poster colours and brush

Instructions:

1. Paint a number line up to 20 on the floor of the classroom.
2. Call the children one by one to jump on the numbers across the number line. As the child jumps from number to number, everyone can count along.
3. Make sure everyone gets a chance to hop across the number line.

Activity 34b: Counting 11–20**Materials Checklist:**

- Number puppets (11 to 20)
- Pencils
- Box
- Small balls
- Sequins
- Notebooks

Instructions:

1. Put up a number puppet of the number being taught (11 to 20) written on it. Show children ten pencils and ask them to count them with you. Add the required number of pencils (11 to 20) one by one to them, and ask the children to count the pencils again.
2. Seat children in small groups.
3. Next, give each group a box. Give them small balls. Tell them to count and place the correct number (11 to 20) of balls in the box as the number puppet you hold up.
4. Alternatively, give each group a packet of sequins.
5. Tell children to open their notebooks and write down the number shown on the number puppet.
6. Now help them to paste the corresponding number of sequins on the page.

Activity 34c: Count the Number**Materials Checklist:**

- Drawing sheet
- Crayons

Instructions:

1. Give each child a drawing sheet and some crayons.
2. Instruct them to draw a train with ten bogies. Tell them that the train has twenty wheels. Ask them to draw fifteen girls and eleven boys in front of the train. After they finish drawing, ask them to count the boys and girls they have drawn. Draw their attention to the fact the children are more than the wheels of the train. Ask them how many more children are there than the wheels?

Activity 34d: Bingo**Materials Checklist:**

- Bingo sheets (one per child)
- Crayons

Instructions:

1. Give each child a Bingo sheet, with numbers from 1 to 20 written randomly on it.
2. Call out the numbers and let children strike off the numbers called, using a crayon.
3. Introduce the page 17 of the student's book. Ask children to count, following the number line and the beads.
4. Let them draw the correct number of objects and trace the number.

Practice Activity: Counting 1–20**Materials Checklist:**

- Number puppets (11 to 20)
- Learning Train
- Chart paper
- Scissors
- Marker
- Buttons

Instructions:

1. Distribute number puppets (from 1 to 20).
2. Ask children to put them in order from 1 to 20 in the Learning Train.
3. Cut circles from chart paper. Number the circles from 1 to 20. Make sets of circles 1 to 20, as many as groups of four in your class.
4. Seat children in groups of four. Give each group a set of circles with numbers from 1 to 20 on them.
5. Give them some buttons.
6. Let them arrange the corresponding number of buttons on each circle.
7. Introduce page 27 of the student's book and let children complete the exercises independently.

Activity 35a: Caterpillar Walk**Materials Checklist:**

- Flash cards of numbers 1 to 20

Instructions:

1. Distribute flash cards of numbers 1 to 20 among the children.
2. Ask children to stand in order from 1 to 20.
3. Help them hold each other around the waist and do a short caterpillar walk.
4. Repeat the activity till all the children have had a chance to take part in the activity.

Activity 35b: Thumbprints**Materials Checklist:**

- Poster colours
- Sponge
- Bowls

Instructions:

1. Seat children in groups.
2. Give each group two bowls. Place a piece of sponge in each bowl.

3. Pour some poster colour on each sponge.
4. Open to page 28 of the student's book.
5. Demonstrate how to make a thumbprint. Help children press their thumbs on the paint-soaked sponge and then press their paint coated thumbs onto the page.
6. Let children make thumbprints on the tortoise shell. Tell them to colour the numbers from 1 to 20.
7. Ask them to look at the picture on the page, count the number of objects, and write the correct number in the given blocks.

Activity 36: Numbers 1 to 20

Materials Checklist:

- A3 size sheets of paper
- Chart paper
- Scissors
- Marker
- Adhesive
- Pencils
- Crayons
- Number flash cards (1–20)

Instructions:

1. For each group of children, make four columns on the sheet of paper. Draw or paste a picture of a fruit at the top of each column.
2. Using chart paper, make five small cut-outs of the fruits drawn on the sheets of paper.
3. Seat children in small groups. Give each group cut-outs of the fruits, some adhesive, and the sheet of paper with the columns drawn on them.
4. Ask children to sort the cut-outs of the fruits and count the number of each type that they have. They should add up to 20
5. Ask them to paste the cut-outs in the appropriate columns of the sheet of paper.
6. Tell children to write the number of fruits they have pasted at the bottom of each column.
7. Give each group number flash cards from 1 to 20.
8. Ask them to arrange them in order, from 1 to 20.
9. Call out a few numbers. Tell children to pick up those number flash cards and place them separately.
10. Give children the stickers relevant to the activity from the end of the book, and help them to complete the exercise on page 29 of the student's book.

Activity 37: Find the Ducklings

Materials Checklist:

- Number flash cards (1–10)
- Chart paper
- Marker
- Scissors
- Crayons

Instructions:

1. Give children number flash cards from 1 to 10 and let them arrange them backwards from 10 to 1.
2. Draw a duck and ten ducklings on a chart paper. Number the ducklings from 1 to 10. Cut out a duck and ten ducklings for each group.

3. Seat children in groups. Give each group a duck and some of the ducklings.
4. Tell children that the duck has lost some of her ducklings. They have to find the 'missing' ducklings and arrange them in order, from 1 to 10.
5. Hide the 'missing' ducklings in the classroom in places that are easy to discover.
6. Let children search and find the 'missing' ducklings and then arrange them in order from 1 to 10.

Activity 38: Missing Numbers

Materials Checklist:

- Number puppets (1–10)
- Learning Train

Instructions:

1. Give children number puppets to arrange backwards from 10 to 1.
2. Place some of the number puppets in the Learning Train.
3. Distribute the remaining number puppets to children. Ask them to put the missing number puppets in the correct place in the Learning Train.
4. Introduce page 30 of the student's book to children. Let them complete the exercises independently.

Practice Activity: Numbers 1–10

Materials Checklist:

- Number puppets (1–10)
- Value puppets (1–10)
- Stick puppets
- Notebooks
- Buttons/counters
- Bowls
- Adhesive
- Learning Train

Instructions:

1. On the stick puppets, write the names of the numbers.
2. Sing, 'One, two, buckle my shoe' and hold up the correct number puppet and stick puppet while singing the numbers.
3. Distribute the number puppets and value puppets among children.
4. Let them arrange the number puppets in the Learning Train in order from 1 to 10.
5. Ask them to arrange the value puppets in the corresponding pockets of the Learning Train.
6. Distribute the stick puppets with the number names. Let children place them in the correct pocket of the Learning Train.
7. Seat children in groups. Give each group a bowl of buttons/counters and some adhesive.
8. Ask children to write the numbers from 1 to 10 in a column in their notebooks.
9. As they write each number, ask them to paste the corresponding number of buttons/counters in front of each number.
10. Open to page 31 of the student's book. Encourage children to read the number names. Let them complete the exercise independently.

Activity 39: Number Names

Materials Checklist:

- Two sets of blank cards
- Markers

Instructions:

1. Write the names of the numbers from 1 to 10 on one set of cards.
2. Draw stars on the second set of cards to denote the values of numbers from 1 to 10.
3. Seat children in groups. Give them the cards with the number names. Let them arrange the number names in order, from 1 to 10.
4. Give children the value cards. Let them match the number values to number names, and arrange them in order, from 1 to 10.
5. Help children to complete pages 32–33 of the student’s book.

Activity 40: Counting 21 to 30

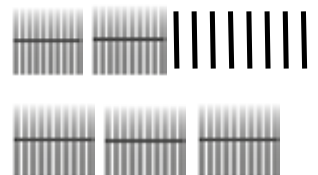
Materials Checklist:

For each pair of children:

- One bowl
- Thirty sticks
- Three rubber bands

Instructions:

1. Seat children in pairs.
2. Place thirty sticks in each bowl.
3. Give each pair of children a bowl and three rubber bands.
4. Ask them to count and separate ten sticks from the bowl.
5. Demonstrate how to make a bundle of ten sticks with the help of a rubber band.
6. Ask them to make two bundles of ten sticks each.
7. Tell them to place the two bundles on the table. Then, ask them to place one stick at a time beside the bundles and count from 21 to 30.
8. Once the thirtieth stick is placed, ask them to count them all again.
9. Tell them to take a rubber band and form a third bundle.
10. The activity can also be carried out for teaching numbers in tens from 31 to 40 and 41 to 50.



Practice Activity: Introducing Numbers

Materials Checklist:

- Flash cards
- Chart paper
- Pencil
- Crayons
- Markers

Instructions:

1. Introduce numbers from 21 to 30 using a familiar story such as Jack and the Beanstalk.
2. On a chart paper, draw or paste a large picture of Jack. Draw a jar with twenty large beans in it.

3. Ask children if they remember the story of Jack and the Beanstalk. Invite them to re-tell the story in their own words. If they do not remember, tell them the story briefly.
4. Hold up the picture of Jack and the jar of beans. Ask children to identify the picture.
5. Tell them to count the number of beans Jack has in the jar. Ask them how many beans Jack would have if he got one more bean.
6. Draw one more bean in the jar and introduce the number 21. Write it on the blackboard, say 'twenty-one' aloud, and ask children to repeat it after you.
7. Repeat the given steps to introduce numbers 22 to 30.

Activity 41–42: Counting with Beads

Materials Checklist:

- Strings (five per child)
- Beads (fifty per child)
- Bowls (one per child)
- Buttons

Instructions:

1. Place fifty beads in each bowl.
2. Give each child five strings and a bowl of beads.
3. Let children string ten beads in each string. Ask them to count as they string the beads.
4. Next, Seat children in groups of four. Give each group some buttons. Have them sort the buttons by size or colour. Tell them to count the number of buttons they have of each type.
5. Introduce the page 39 first and then page 40 of the student's book. Help children complete the page.
6. For activity 42, you can thread 100 beads in 10 strings (10 beads in each string) and tie them at the windowsill and ask children to count them.

Activity 43: Number Values

Materials Checklist:

- Number cards (41–50)
- Value cards (41–50)
- Learning Train

Instructions:

1. Give children the number cards and the value cards.
2. Ask them to match them.
3. Ask them to place the number cards in order from 41 to 50 in the Learning Train.
4. Ask them to place the corresponding value flash cards in the pockets of the Learning Train.

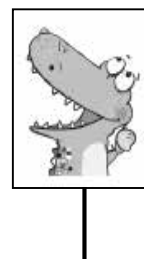
Activity 44: Comparing Numbers

Materials Checklist:

- Three 15 cm × 10 cm cards
- Three ice cream sticks
- Number puppets
- Stick puppets with values of numbers
- Adhesive
- Marker
- Learning Train

Instructions:

1. Draw or paste a picture of a crocodile on one side of a 15 cm × 10 cm card. On the other side, paste another picture of a crocodile facing the opposite way. Paste an ice cream stick to it, to make a stick puppet of a crocodile (used to represent greater than and less than).
2. Draw or paste a picture of a monkey on a 15 cm × 10 cm card. Paste an ice-cream stick on it, to make a stick puppet of a monkey.
3. Draw the 'equal to' (=) sign on a 15 cm × 10 cm flash card and paste an ice cream stick to make a stick puppet of the 'equal to' sign.
4. Hold up the stick puppets of the crocodile and the monkey and tell children the story given on page 46 of the student's book.
5. Explain to them that the crocodile always eats up the bigger number.
6. Hold up two number puppets. Ask children to identify the bigger number. Then ask which number the crocodile will eat.
7. Repeat it with another set of number puppets, and show children that the crocodile always eats up the bigger number.
8. Distribute the number puppets among children. Ask them to place two numbers at a time in the Learning Train pockets.
9. Give the crocodile puppet to a child. Ask the child to identify the number that the crocodile will eat. Tell them to choose the correct side of the puppet and place the crocodile facing the bigger number.
10. Repeat with another set of numbers.
11. Distribute the puppets with the value of numbers among children. Ask them to place two puppets at a time in the Learning Train pockets.
12. Give the crocodile puppet to a child. Ask them to identify the value that the crocodile will eat. Tell them to choose the correct side of the puppet and place the crocodile facing the puppet with the bigger number value.
13. Repeat with another set of puppets with the number values.
14. Introduce page 46 of the student's book and help children to complete the page.
15. Hold up the monkey and crocodile puppets. Tell children that sometimes the monkey and the crocodile will share and eat the same number of fruits. Draw the 'equal to' sign (=) on the blackboard, and tell them that the sign = is used to indicate the same number.
16. Place two number puppets of the same number in the Learning Train.
17. Hold up the puppet of the crocodile, the monkey, and the 'equal to' sign. Ask children to place the correct sign in the Learning Train.
18. Introduce pages 46–48 of the student's book and help children to complete the exercises.



Activity 45: Number Names

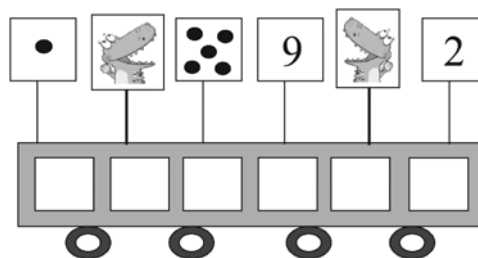
Materials Checklist:

- Deck of cards
- Linking cubes
- Number stick puppets of 5 and 3
- Crocodile stick puppet

Instructions:

1. Seat children in pairs and give them some linking cubes.
2. Shuffle the deck of cards and give each pair a few playing cards.
3. Ask each child to pull out a card, place it face up on the table, and call out the number indicated by the card.

- Tell children to build a tower using the number of linking cubes indicated in the card chosen by them. Children are required to compare the towers saying which tower has 'more' linking cubes and which has 'less'.
- Ask children to look at the cards and indicate the 'smaller' and 'bigger' number of the two. For example, 'Five is bigger than three'.
- Place a number five value stick puppet and number three value stick puppet in the Learning Train pocket, leaving a space of an empty pocket in the train to place the crocodile stick puppet towards the bigger value. Use this activity with different number stick puppet. Refer to the given image to use as an example.



Activity 46: Adding 1

Materials Checklist:

- Sticks
- Bowls

Instructions:

- Seat children in groups.
- Give each group a bowl of sticks.
- Ask each child to place one stick on the table, then place one more beside it, and count the number of sticks.
- Ask children to place the sticks back in the bowl.
- Next, instruct them to place two sticks, and then one more beside them and count the number of sticks they have.
- Let them add sticks in this manner, up to 10.

Activity 47: Adding 1 More

Materials Checklist:

- Sticks
- Dice
- Bowls

Instructions:

- Seat children in groups.
- Give each group a bowl of sticks.
- Ask one child in each group to roll the dice.
- Ask each child to identify the number on the dice and place the corresponding number of sticks on the table. Then tell them to add one more stick and count the number of sticks.

Activity 48a: Number Line Jumps

Materials Checklist:

- Wet chalk/poster colours
- 5 cm x 10 cm white cards
- Markers

Instructions:

- Draw a number line on the floor using wet chalk/poster colours.
- Use the white cards to make number cards from 1 to 8.
- Place the number cards next to the number line on the floor.

4. Invite a child next to the number line, ask them to pick any number card they want and jump as many times on the number line according to the number card they chose.
5. Continue the activity till all the children have had a chance to do the activity.

Activity 48b: How Many Carrots Does He Have?

Materials Checklist:

- Chart paper
- Scissors
- Stick puppet with a plus (+) sign made on it

Instructions:

1. Draw a large rabbit on one half of a chart paper.
2. Draw a few carrots on the other half of the chart paper. Cut out the carrots.
3. Show the picture of the rabbit to children. Pin up the picture on the display board.
4. Tell children a story about the rabbit. For example, 'Hoppy Rabbit lived in a burrow. One day he was very hungry. He came out of the burrow to look for a carrot. He found a carrot. When he picked it up, he saw another carrot nearby'.
5. Pin up a carrot next to the picture of the rabbit as you tell the story. Invite a child to come up and pin the other carrot as the story goes on.
6. Hold up the 'addition' sign (+) and ask children to add the carrots: 'One and one more, is two'.
7. As the story goes on, ask children to add the carrots.
8. Introduce page 49 of the student's book and help them to complete the page.

Activity 49: And 1 More...

Materials Checklist:

- Stuffed toy
- Feely bag
- Small toys
- Toffees
- Pictures of rides at a children's fair and the fair itself.
- Stick puppet with a plus (+) sign made on it

Instructions:

1. Use the stick puppet with the 'addition' (+) sign on it from the previous activity. Collect a few pictures of rides at a children's fair and a picture of the fair itself.
2. Introduce a stuffed toy to children. Tell them a story about the stuffed toy, such as, 'One day Teddy went to the fair. There he climbed onto many rides'.
3. Show all the pictures but one of the fair. Ask them to count the number of rides Teddy climbed onto. Then hold up the addition sign and tell them that Teddy climbed on one more ride. Show them the last picture and ask them to count the number of rides, for example, 'Four and one more is five'.
4. Continue the story by saying, 'Teddy played various games. He won many prizes'.
5. Place all the toys but one, in a feely bag. Let each child feel the bag and guess how many toys Teddy won.
6. Reveal the toys and ask children to count the number of toys. Then hold up the 'addition' sign and tell them that Teddy won one more toy. Show them the last toy and ask them to count the number of toys, for example, 'Five and one more is six'.
7. Continue the story saying, 'Teddy bought many toffees at the fair'.

- Place all the toffees but one, in a feely bag. Let each child feel the bag and ask them to guess how many toffees Teddy bought.
- Reveal the toffees and ask children to count the number of toffees. Then hold up the addition sign and tell them that Teddy bought one more toffee. Show them the last toffee and ask them to count the number of toffees, for example, 'Eight and one more is nine'.
- Call out the numbers from 1 to 9, as you write each one on the blackboard. Ask children to add 1 more and predict the next number.
- Introduce page 50 of the student's book and help them to complete the page.

Activity 50: Number Line

Materials Checklist:

- Number Line
- Stick puppets
- Cut-outs of shapes
- Wet Chalk/poster colours

Instructions:

- Use cut-outs of various shapes to make stick puppets.
- Distribute the stick puppets.
- Draw a number line on the floor using wet chalk/poster colours.
- Ask children to begin by placing a stick puppet at number 1 on the 'Number Line'. Tell them to count the numbers as they jump one place at a time.

Practice Activity: Add 2 Apples

Materials Checklist:

- Bowls
- Small balls
- Basket
- Apples

Instructions:

- Tell children a story for example, 'Little Red Riding Hood'. Tell them that she carried a basket of apples to her grandmother's house.
- Place a basket on the table. Put five apples in the basket one by one and ask children to count as each apple is placed in the basket.
- Then show them two more apples and say 'five apples and two more apples are'. Let them call out the answer.
- Next, seat children in pairs. Give each pair a bowl and some small balls.
- Tell them to count and place three small balls in the bowl. Then ask them to add two more and call out the total number of balls in the bowl.

Practice Activity: Adding 2

Materials Checklist

- 10 cm x 10 cm cards
- Markers
- Sticks
- Bowls

Instructions:

1. Write addition sums on the cards, for example, $3 + 2 =$ as shown in the given picture.
2. Seat children in groups of four. Give each group a bowl with some sticks in it.
3. Give some cards to each group.
4. Ask each child to place a card on the table and read the numbers on the card.
5. Ask children to place the correct number of sticks under each number on the card. Let them count the total number of sticks and write the answer to the sums.
6. Introduce pages 50–51 of the student’s book and help children to complete them.

$$3 + 2 =$$

**Activity 51a: Adding Numbers****Materials Checklist:**

- 20 cm × 10 cm cards
- Markers
- Sticks
- Bowls

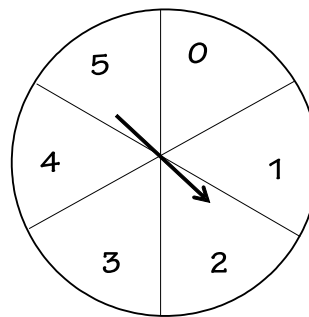
Instructions:

1. Write addition sums on the cards, for example, $3 + 4 =$
2. Seat children in groups of four. Give each group a bowl with some sticks in it.
3. Give some cards to each group.
4. Ask each child to place a card in front of them and read the numbers on the card.
5. Ask each child to place the correct number of sticks under each number on the card. Let them count the sticks and write the answer to the sums.

$$3 + 4 =$$

**Activity 51b: Add the Numbers****Materials Checklist:**

- Chart paper
- Cardboard
- Marker
- Adhesive
- Scissors
- Paper clip
- Ribbon
- Adhesive tape
- Notebooks
- Pencils

**Instructions:**

1. To make a Spinner Wheel, cut a chart paper into a circle. Use a pencil to divide the circle into six sectors. Colour each sector differently and write numbers 0 to 5 on them.
2. Paste the chart paper circle on a cardboard piece. Cut the cardboard to make a Spinner Wheel.
3. Cut an arrow out of the extra cardboard. Straighten a paper clip. Push the paper clip through the centre of the arrow and then through the centre of the spinner wheel, connecting them.
4. Fold the paper clip in, at both ends. Use some tape to fasten the clip onto the base of the Spinner Wheel.

5. Make holes on two ends of the wheel and thread a ribbon through it, so that the wheel can be hung on a notice board in class.
6. Put up the spinner wheel in the class.
7. Invite one child to come up and spin the arrow. When the arrow comes to a stop, ask the child to read out the number where it has stopped.
8. Ask children to open their notebooks and write that number.
9. Invite another child to come up and spin the arrow. When the arrow comes to a stop, ask them to read the number where it has stopped.
10. Ask children to write the number in their notebooks and add it to the previous number they had written.
11. Give children a minute for each sum and then ask them to call out the answer.
12. Introduce pages 53–54 of the student’s book and help children to complete them.

Teacher Buzz: Practise showing of numbers on the fingers. Call out a number and ask children to show the corresponding number of fingers. Once children are able to do so comfortably, introduce ‘addition by counting fingers’, by helping them count using their fingers.

Ask children to read the first number in the given sums, and then hold up the corresponding number of fingers. Then ask them to read the next number and open the corresponding number of fingers, adding to the number of fingers already open. For example, while adding $4+3$, children should hold up four fingers. Then, they should open three more, saying ‘five, six, seven’.

Activity 52: How Many Are Left?

Materials Checklist:

- Balloons
- Lollipops (one for each child)
- Adhesive tape

Instructions:

1. Tape five inflated balloons to the blackboard. Ask children to count the number of balloons on the blackboard.
2. Burst one balloon and ask children to count the number of balloons remaining.
3. Repeat the activity. This time ask a child to burst a balloon.
4. Tape nine lollipops in a row on the blackboard. Ask children to count the number of lollipops.
5. Sing the rhyme on page 56 of the student’s book, asking the child named in the rhyme to come and take away a lollipop.
6. Now ask children, ‘Nine less one is’. Have them count the remaining lollipops and give the answer.
7. Write a sum on the blackboard to familiarise children with the ‘subtraction’ (–) sign.
8. Repeat the activity till all the lollipops have been taken by children.

Activity 53: Subtracting 1

Materials Checklist:

- Sticks
- Bowls

Instructions:

1. Seat children in groups.
2. Give each group a bowl of sticks.
3. Ask each child to place nine sticks before them. Tell them to remove a stick and count the remaining ones.
4. Have them express the same, saying, 'Nine less one is eight'.
5. Have them remove another stick, and continue thus till one stick is left.
6. Introduce pages 57–58 of the student's book. Help children to complete the pages.

Activity 54a: Subtraction with Sticks**Materials Checklist:**

- Sticks
- Bowl

Instructions:

1. Seat children in groups
2. Give each group a bowl with some sticks in it.
3. Ask each child to pick up ten sticks and place them in a horizontal line.
4. Call out a number and ask children to remove the corresponding number of sticks from the ten sticks in front of them. For example, say: 'Take away two sticks'.
5. Ask: 'How many sticks are left?'
6. Have them answer in complete sentences, for example, 'Ten less two is eight'.

Activity 54b: Bowling Subtraction**Materials Checklist:**

- Nine empty bottles or cans
- One small ball

Instructions:

1. Set up a mock bowling activity to practise subtraction.
2. Place nine empty bottles or cans on a table. Ask children to count as you place the bottles or cans on the table.
3. Ask a child to come to the table and roll the ball down the table to topple the bottles or cans.
4. Ask children to count the number of bottles or cans that have fallen. Ask them to express the remaining number in a sentence such as, 'Nine less three makes six'.
5. Write the sum on the board.
6. Repeat the activity for practice.

Activity 54c: Number Line**Materials Checklist:**

- Wet chalk/poster colours
- Number Line
- Stick puppets

Instructions:

1. Distribute the stick puppets. Draw a number line on the floor of the class using wet chalk/poster colours.
2. Ask children to begin by placing a stick puppet at number 10 on the Number Line. Tell them to call out the numbers as they jump backwards, one place at a time.

Activity 54d: Subtracting Numbers

Materials Checklist:

- Bowls (for each pair of students)
- Beans (ten in each bowl)
- Picture of Jack and the Beanstalk

Instructions:

1. Seat children in pairs.
2. Give each pair of children a bowl with ten beans in it.
3. Show children a picture of 'Jack and the Beanstalk'.
4. Tell them the story of 'Jack and the Beanstalk'. Tell them that Jack received as many beans as they have in their bowls.
5. Tell them to count the number of beans in their bowls.
6. Continue the story and narrate as follows: 'On the way home Jack dropped four beans'.
7. Stop and ask them 'Ten less four is'. Write the sum and the answer on the blackboard.
8. Let children calculate the remaining beans. Write it on the blackboard.
9. Introduce page 60 of the student's book and help children to complete the exercise on the page.

Activity 54e: Subtraction Sums

Materials Checklist:

- 10 cm × 10 cm cards
- Markers
- Sticks
- Bowls

Instructions:

1. Write subtraction sums on the cards, for example, $6 - 4 =$
2. Seat children in groups of four. Give each group some sticks in a bowl and some cards.
3. Ask each child to place a card in front of them and read the numbers on the card.
4. Ask children to place the correct number of sticks under each number on the flash card. Let them count the sticks and write the answer to the sums.
5. Introduce pages 58–59 of the student's book and let children complete the pages independently.

$6 - 4 =$



Activity 55a: Introducing 0

Materials Checklist:

- Three balloons
- Number dice (with numbers 0–5)

Instructions:

1. Tape three inflated balloons to the blackboard.
2. Ask children to count the number of balloons on the blackboard.
3. Burst one balloon. Ask children to count the remaining balloons.
4. Burst one more balloon and ask children to count the number of balloons left.
5. After bursting the last balloon ask them how many balloons are left.
6. Introduce the number 'zero'. Write it on the blackboard and explain that it does not have any value.

7. On a table, place a large number dice with numbers 0 to 5 on it. (Refer to section 'Handmade Resources' of the TG.)
8. Ask a child to roll the dice and call out the number.
9. Children have to jump as many times as the value of the number called out.
10. When the number is zero, explain that they should stand still as the number has no value.

Activity 55b: Adding 0

Materials Checklist:

- Chart paper
- Marker

Instructions:

1. On a chart paper draw a pot with a few flowers (not more than four) in it.
2. Show the drawing to children. Ask them to count the number of flowers.
3. Write the number of flowers on the chart paper.
4. Ask: 'Four flowers and one more is?'
5. Write the sum $4 + 1 = 5$, on the chart paper and draw one more flower.
6. Ask: 'Five and zero is?'
7. Write the sum $5 + 0 = 5$ on the chart paper and explain to children that zero added to any number yields the same number.

Activity 55c: Counting Pebbles

Materials Checklist:

- Bowls
- Water
- Pebbles
- Trays
- Picture
- Stick puppet
- Marker

Instructions:

1. Make a stick puppet with the number zero (0) on it.
2. Seat children in groups of four. Give each group a bowl with some water in it. Provide them with ten pebbles on a tray.
3. Tell them the story, 'The Thirsty Crow' (done previously and also available online). Ask them what the crow did to raise the level of water in the pitcher and drink it.
4. Show children a picture of 'The Thirsty Crow'.
5. Tell them to count the number of pebbles on their trays.
6. Ask them to count and drop five pebbles to raise the level of water.
7. Have them observe whether the water has risen to the brim of the bowl. Then have them count and add the remaining pebbles to the bowl of water.
8. Now ask them how many pebbles are in the bowl and how many are on the tray.
9. Draw their attention to the tray and ask them how many pebbles are on the tray. Hold up the stick puppet, and tell them that there are zero pebbles on the tray.

Activity 55d: Sums

Materials Checklist:

- 10 cm × 10 cm cards
- Markers
- Sticks
- Bowls

Instructions:

1. Write sums with zero in them, on cards, for example, $6 + 0 =$ and $4 - 0 =$
2. Seat children in groups of four. Give each group a bowl with some sticks in it.
3. Give some cards with sums on them to each group.
4. Ask each child to place a card in front of them and read the numbers on the card.
5. Ask each child to place the correct number of sticks under each number on the card. Explain that zero means that no sticks will be placed below the number.
6. Help children count the sticks and write the answer.
7. Introduce page 61 of the student's book and help children complete the exercise on the page.

$$6 + 0 =$$



$$4 - 0 =$$



Activity 56a: Counting with Beads

Materials Checklist:

- Beads of different colours and strings
- Ready-made bead string of 100 beads

Instructions:

1. Put up the ready-made bead string of 100 beads where it is easily accessible for children to count.
2. Encourage them to think of a number and then count the corresponding number of beads.
3. Place loose beads of different colours and strings in bowls and ask children to thread the corresponding number of beads as they count on the ready-made bead string.

Activity 56b: Aim and Throw

Materials Checklist:

- Basket
- Small balls

Instructions:

1. Place one basket in front of the class.
2. Call one child at a time and give them a few balls. Tell them to aim and throw the balls into the basket.
3. Ask the others to count the number of balls that fall into the basket.
4. Write the number on the blackboard.
5. Call forward another child and repeat the activity. Ask the others to continue counting from the number where the previous child had stopped.

Activity 56c: Count the Toys

Materials Checklist:

- Toys of different colours
- Small squares of paper

Instructions:

1. Seat children in groups of four. Give each group a number of toys of different colours and small squares of paper.
2. Ask them to count the number of toys they have.
3. Tell them to sort the toys according to their colour.
4. Instruct them to count the number of toys they have of each colour.
5. Ask them to write down each number on a small square of paper and place a paper next to each group of toys.

Activity 56d: Numbers 1–50**Materials Checklist:**

- Number puppets (1–50)
- Learning Train

Instructions:

1. Distribute number puppets (1–50) among children.
2. Ask them to place the puppets in the Learning Train in order from 1 to 50.
3. Remove some of the number puppets.
4. Distribute them among children.
5. Ask them to fill in the missing numbers.

Activity 56e: Arrange the Toys**Materials Checklist:**

- Toys

Instructions:

1. On a table, arrange a few toys to form a pattern.
2. Ask children to come to the table and continue the pattern.
3. Introduce page 63 of the student's book and let them complete it.

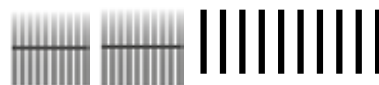
Activity 57a: More Numbers**Materials Checklist:**

For each pair of children:

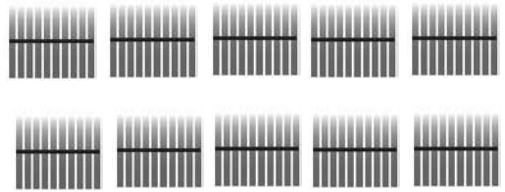
- Bowls
- Hundred sticks (per each pair of children)
- Ten rubber bands
- Ten 10 cm x 10 cm cards

Instructions:

1. Write the numbers in tens—10, 20, 30 till 100, on ten 10 cm × 10 cm cards.
2. Seat children in pairs.
3. Place a hundred sticks in each bowl.
4. Give each pair of children a bowl and ten rubber bands.
5. Ask children to count and separate ten sticks from the bowl.
6. Demonstrate how to make a bundle of ten sticks with the help of a rubber band.
7. Ask them to make a bundle of the ten sticks which they have separated.



8. Ask them to count and make a second bundle of ten sticks and so on, till ten bundles are made from the hundred sticks.
9. Ask children to bring along their bundles and sit in a circle.
10. Place the card with the number 10 in the centre of the circle.
11. Ask a child to come and place the correct number of bundles on it.
12. Place the other cards of numbers 20, 30, till 100, in the circle. Call on children to place the correct number of bundles on each card.



Activity 57b: Counting with Beads

Materials Checklist:

- Strings
- Beads
- Bowls

Instructions:

1. Seat children in groups of four.
2. Put ten strings and a hundred beads in each bowl. Give each group a bowl.
3. Help children to string ten beads on each string and count along, as they string the beads till 100.
4. Introduce pages 66–67 of the student's book and help children complete the pages.

Practice Activity: Number Names 11–20

Materials Checklist:

- Number puppets (11–20)
- Value puppets (11–20)
- Stick puppets
- Notebooks
- Seeds
- Bowls
- Adhesive
- Learning Train

Instructions:

1. On the stick puppets, write the names of the numbers from eleven to twenty.
2. Ask children to count from eleven to twenty, while you hold up each relevant number puppet with the corresponding stick puppet.
3. Next, distribute the number puppets and the value puppets among children.
4. Let them arrange the number puppets in the Learning Train in order from 11 to 20.
5. Ask them to arrange the value puppets in the corresponding pockets of the Learning Train.
6. Distribute the stick puppets with the number names. Have children place them in the correct pocket of the Learning Train.
7. Next, seat children in groups. Give each group a bowl of seeds and some adhesive.
8. Ask children to write the numbers and their names from 11 to 20 in their notebooks.
9. As they write each number, ask them to paste the corresponding number of seeds under each number and number name.

10. Introduce pages 68–69 of the student’s book. Encourage children to read the number names. Let them complete the pages independently.

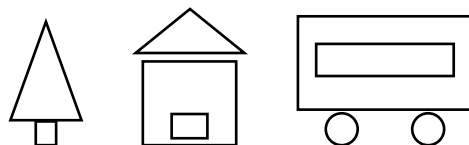
Activity 58a: Making Figures with Shapes

Materials Checklist:

- Cut-outs of shapes of different colours for each group

Instructions:

1. Give children shapes and ask them to spread them.
2. Encourage them to use the shapes to create figures/scenes.



Activity 58b: Puzzles

Materials Checklist:

- 5–6 jigsaw puzzles (appropriate for the age group)

Instructions:

1. Give each child a puzzle to rebuild.
2. They can then exchange the puzzles and build them.

Activity 58c: Rebuilding Shapes

Materials Checklist:

- Two shape cut-outs of different colours (cut into 3–4 pieces for each child)

Instructions:

1. Give children the pieces of the shape cut-outs to rebuild.
2. Give them pictures of the complete shape as a sample to follow, if required.
3. Ask children to look at the outlines of the pieces and to try to join the pieces to make a proper shape.

Practice Activity: Number Strips

Materials Checklist:

- Addition strips given at the end of the book
- Number cards 1 to 10 (2 sets)

Instructions:

1. Distribute the strips and demonstrate to the children how to spread the cards. Arrange them from 1 to 10 and then 10 to 1.
2. Ask children to form pairs. Invite pairs to match the number strips to the number cards.

Practice Activity: Addition with Number Strips

Materials Checklist:

- Addition strips given at the end of the book
- Slates and chalk/drawing sheets and pencils
- Number cards 1 to 9

Instructions:

1. Distribute the bags and demonstrate to the children how to spread the cards and arrange them from 1 to 5.
2. Ask children to pick up the strip of 1 and add one number at a time to it.
3. They can also draw each combination.

4. Repeat the activity with the strips of 2, 3, 4, 5.
5. Introduce more number strips when children can complete this activity with ease.

Practice Activity: Adding the Same Numbers

Materials Checklist:

- Addition strips given at the end of the book

Instructions:

1. Seat children in pairs and ask them to separate the strips from 1 to 5.
2. Ask them to match the same number strips and add them by counting the boxes on the strips.

Practice Activity: Number Families

Materials Checklist:

- Addition strips given at the end of the book
- Ice cream sticks

Instructions:

1. Give each child their set of numbers strips and seat them in pairs.
2. Ask children to make the combinations with the cards. For example, 1 and 4 make 5, 2 and 3 make 5, 4 and 1 make 5, 3 and 2 make 5, etc.
3. Children can revisit the number combinations with the help of the strips and ice cream sticks.

Activity 59: Skip Along

Materials Checklist:

- Number circles
- Poster colours and brushes/Wet chalk

Instructions:

1. Draw circles numbered 1 to 20 using poster colours/wet chalk on the floor.
2. Ask children to make a line and jump across the circles, skipping one circle in between.
3. They can say the number out loud while jumping.
4. Open to page 88 of the student's book and ask students to skip a number and count.

Activity 60: Skip a Block

Materials Checklist:

- Number cards with 1 to 50 written in blocks
- Card sheet counters (size: same as the blocks)

Instructions:

1. Make number cards using A4 sheets with numbers 1 to 50 written in blocks.
2. Give children counters. (Refer to section 'Handmade Resources' in the TG.)
3. Demonstrate how they have to cover a number with a counter and count the next number.
4. Ask them to read the numbers they can see.

Activity 61a: Building Numbers

Materials Checklist:

- Pages 86–87 of the student's book
- Number flash cards 1 to 9

Instructions:

1. Distribute the books and ask children to open to the number building pages.
2. Distribute the flash cards and ask them to arrange them in order.
3. Demonstrate how they can place the number and the value cards on the given number blocks to build numbers.
4. They can then turn the card over and place it in the value block to see the value of the numbers.
5. You can call out numbers and ask children to build them using the flash cards and the number / value blocks.

Activity 61b: Number Values**Materials Checklist:**

- Sticks
- Rubber bands
- 10 bead rods
- Loose beads
- Strings
- Bowls

Instructions:

1. Give children the sticks and rubber bands.
2. Demonstrate how they can make bundles of ten and combine them to make a number with the bundles representing 10 and loose sticks representing ones.
3. The activity can also be done with the ten bead rods and loose beads.
4. Children can also use beads to string and show the number value.

You can also make handmade bead rods through the following steps:

Materials Checklist:

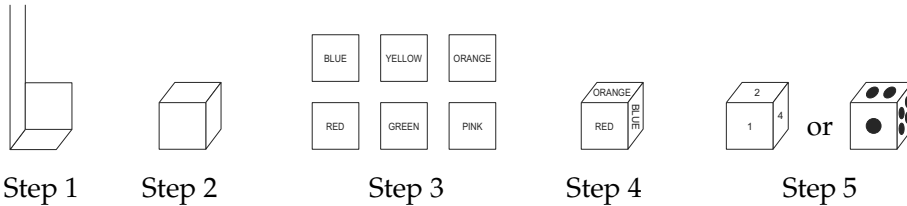
- Binding wires
- Beads
- Long nose pliers
- Boxes/Packets

Instructions:

1. Cut the binding wires to the size that would fit in 10 beads and leave space for looping the wires at the ends.
2. String the beads on the wire, and turn in the ends of the wires so that the beads do not fall off.
3. Store in boxes/packets.

HANDMADE RESOURCES

How to Make Handmade Dice:



Materials Checklist:

- Small rectangular cardboard box (e.g. a box in which toothpaste is bought)
- Six card sheets of various colours
- Scissors
- Adhesive
- Sketch pen
- Lamination tape

Instructions:

1. Step 1: Cut the box into two halves in such a way that three sides of the box are equal in size to the base of the box, and the remaining side is one and a half times longer than the base.
2. Step 2: Turn the longer side downwards, covering the open side of the box. Paste it to make a cube.
3. Step 3: Cut the coloured card sheets in squares equal in size to the sides of the cube.
4. Step 4: Paste them on the 6 sides of the cube and leave to dry.
5. Step 5: Draw the values or write the numbers 1 to 6 on the sides of the cube.
6. Laminate and use it in required activities.

How to Make Handmade Counters:

Counters are small circular disks used during activities in the student's books. These enable the students to indicate that they recognize certain words/images/symbols on pages.

Materials Checklist:

- Card sheets of four colours or small lids from old bottles

Instructions:

1. Cut the card sheets into small counters which children can use.
2. You can also cover the top of lids from old bottles with coloured card sheets to make counters.

ASSESSMENT GUIDE

Assessment at this level is usually informal and a continuous part of teaching and learning. Various tools and activities can be used to observe and record the progress of children. No formal testing is recommended at this level.

Assessment helps:

- to improve or modify learner's experience according to their needs;
- to change the pace and planning of the lessons/syllabus to suit the learning levels of the learners;
- to help the teacher and parents understand the needs of the learners.

How to record/gather information for assessment:

- Learning levels can be gauged through observation. An observation checklist can be used to identify the student's progress and gap areas in each topic. The feedback gathered can aid in the designing of remedial/reinforcement activities. A sample observation checklist has been given on the next page. Teachers can modify it to suit their needs.
- Portfolios of children's work (worksheets, drawings, and so on) should be maintained to track their progress. Parents and children can revisit the portfolios as and when required.
- An anecdotal record (record of an incident that has a significant impact on the development of a child) can be maintained.

The student's books have the following child-friendly logos to assess the learning levels of children:



Exceeds learning expectations.
Can work independently all the time.



Is moving towards the learning expectations. Can work independently sometimes.



Meets learning expectations.
Can work independently most of the time.



Needs nurturing and care. Needs adult support most of the time.





Criteria to decide informal assessment pattern:

- The number of children in each class should be taken into consideration.
- Learning objectives should be commensurate with the time available and the activities planned towards achieving those objectives.
- Learning levels of children should lead the curriculum and not vice versa.

Sample Observation Checklist*

Name:

Class:

Suggested Category				
Emotional and Social Development				
Adapts to the new class and friends				
Follows classroom rules				
Enjoys group activities				
Makes new friends				
Feels emotionally secure				
Identifies self				
Language Development				
Expresses needs in English				
Expresses needs in the first language				
Listens and follows directions				
Recites rhymes				
Matches same letters and pictures				
Listens and repeats				
Can use crayons to write				
Can read and recognise the letters taught in the last four weeks and associate pictures and sounds with the letters				
Can write the letters taught in the last four weeks				
Fine Motor Development				
Holds crayons/pencil with ease				
Draws vertical and horizontal lines				
Colours within outlines				
Enjoys fine motor skill activities				
Can paste shapes within outlines				
Can open and close the bag independently				
Large Motor Development				
Catches and throws a ball				
Walks in a line				
Has control while running, walking, and so on				
Jumps in and out of circles				
Plays independently in groups				
Has coordinated muscle control				
Number Skills				
Can match the same objects				

Can compare and sort objects according to: <ul style="list-style-type: none"> • big and small • long and short • tall and short 				
Can match objects and pictures				
Can count on fingers from 1 to 5				
Can identify and name different shapes				
World Around Me				
Can name their school and class				
Can express feelings: happy/sad				
Recognises the colours: yellow, blue, and so on				
Takes care of personal belongings				
Can express personal needs and uses the washroom independently				
Comes to school on time				
Respects common property and follows class rules				

* **Note:** Indicators and their interpretations can vary and can be determined according to the topics/areas of development of the children.

