RESOURCE PACK

OF

MATHEMATICS

FOR

PREP

KIDLINGS CLUB

STEP 3

# **Tens and Ones**

# **Learning Outcomes:**

The students will be able to:

Read and write the numbers in tens and ones correctly.

# **Periods Required: 3**

# **Material Required:**

☐ Number, word and picture flashcards for numbers

#### **Starter:**

- Use the flashcards to revise the numbers 0 to 30.
- Draw two columns on the board. Ask a student to write numbers from 0 to 9 in the column.

#### **Activities:**

- ™ Now introduce the number 10. Ask them what if we add 1 into 10. Introduce number 11 to 30 in this way.
- ☐ Gather students on the rug and display a number line. Call their attention to the numbers 11–20, and tell the students that these are called the teen numbers. Activate prior knowledge by asking students what they know about numbers 11–20. Ask if they know someone between 11 and 20 years old, or where they may have seen these numbers. Have students turn and talk to a partner, and then choose a few volunteers to share out with the class. Tell the students that today they will work on building numbers between 11 and 20 with cubes. EL Beginning Display written numbers 11–20 and practice counting them while pointing to each number. Allow students to turn and talk to share what they know about teen numbers in their home language (L1). Intermediate Have students turn and talk to a partner to share what they know about teen numbers using the sentence starter, "I know that teen numbers \_\_\_\_\_."
- In Draw one blank ten frame on the board. Choose a student volunteer to call out a number between 11 and 20, for example 16. Model building the number 16 on the ten frame, adding unifix cubes or drawing squares on the ten frame one at a time as the class counts together. When the ten frame is full, place the left over cubes next to the ten frame. Review that exactly ten cubes are needed to fill the ten frame. Explain that each cube is a one, and that exactly ten ones fit inside the ten frame. Ask students to show you on their fingers how many cubes are outside of the ten frame. Agree that

there are six ones outside the ten frame, recounting if some students do not show an accurate count on their fingers. Point to the cubes inside the ten frame and say, "I have 10 ones." Then, point to the cubes outside the ten frame and say, "and six ones." Ask students to whisper the total number of cubes to a partner. Agree that there are 16 cubes total. Have students repeat the teen number verbally. Students can also practice writing the numeral in the air, or writing the numeral on their hand using their finger. Model writing the total number of cubes below the ten frame. Choose a student to name a different number and repeat the procedure with two additional numbers between 11 and 20.

- ☐ Tell them that 10 represent one group of ten and no extra ones;
- □ Tell them that 20 represent two groups of ten and no extra ones;
- Mow name a number and ask a student to write it on the board.

#### **FUN WITH NUMBERS**

- 1. **Counting Blocks**: Provide a variety of building blocks or counting cubes to the children. Encourage them to count out individual blocks (ones) and then group them into groups of ten (tens). This visual representation helps them understand the concept of grouping tens.
- 2. **Number Line**: Create a large number line on the floor or wall with numbers from 1 to 20 or higher. Use objects like stickers, toy cars, or pictures to represent each number. Point to each number as you count aloud, emphasizing the ones and then the tens as you reach multiples of ten.
- 3. **Grouping Objects**: Give children a collection of objects like buttons, beads, or counters. Have them group the objects into sets of ten using small containers or cups. Count the objects together, emphasizing how each group represents ten.
- 4. **Number Blocks**: Use number blocks or cards with digits from 0 to 9. Have children build two-digit numbers by placing a "tens" block (e.g., a block labeled "10") followed by one or more "ones" blocks (e.g., blocks labeled "1" through "9"). Practice counting and identifying the digits in each number.

#### **Book Work:**

- I Tell students to open their books and go through page no. 1 to 7.
- Move around to help them.

#### Homework:

□ Do page no. 8 of the book.

# Wrap up:

I Encourage students to share their work with others. Write a number on the board and tell the students to tell the name of the number.

# **Numbers in words**

#### **Learning Outcomes:**

The students will be able to:

 $\blacksquare$  Read and write the numbers in words from 0 to 2 correctly.

# Periods Required: 2

# **Material Required:**

□ Number and words flashcards for 0 to 2.

#### **Starter:**

Use the flashcards to revise the numbers 0 to 2.

#### **Activities:**

- □ Divide the board into 2 columns.
- ☐ Write numbers in numerals in the first column and numbers in words in the other column.
- ☐ Help students to read and learn the spellings.
- □ Now call students one by one, assign them a number and let them write in numeral and words on the board.
- Make the lesson interesting by writing the wrong spellings on the board and ask students to correct the words.

#### **Book Work:**

☐ Ask students to go through page no. 8.

#### Homework:

☐ Practice writing numbers in words in notebooks.

# Wrap up:

# **Backward Counting (30 to 0)**

# **Learning Outcomes:**

The students will be able to:

Complete a written sequence of descending numbers from 30–0.

# Periods Required: 2

# **Material Required:**

- HA ball.
- Flashcards of numbers 0–30.
- ☐ Some adhesive material.

#### **Starter:**

- Take the students in the ground and have backward race.
- Ask the students to stand in a circle and play the ball game to practice counting from 1–30 and from 30–1.

#### **Activities:**

# **Flash Cards Fixing**

- Fix the flashcard of zero on the board and ask the students to take turns to come and fix the next number until the sequence to 30 is completed.
- Revise the terms before and after by pointing to a number and asking the students to tell you which number comes before or after it.
- Repeat this activity, starting with flashcard of 30 and arranging the cards in descending order.

#### **FUN WITH NUMBERS**

1. **Counting Down with Blocks or Toys**: Use building blocks, toy cars, or any other small toys. Start with a small number, like 5, and place them in a row. Then, ask

- the children to count backward as they remove one block or toy at a time until they reach zero.
- 2. **Counting Down with Movement**: Incorporate physical movement into counting backward. For example, have the children take steps backward as they count down from 10 to 1. This can be done indoors or outdoors in a safe space.
- 3. **Counting Down with Songs**: Create or find songs that involve counting backward. Singing songs like "Five Little Ducks" or "Five Little Monkeys" where the characters disappear one by one can help reinforce the concept of counting backward.
- 4. **Counting Down with Visual Aids**: Use visual aids like a countdown poster or a large clock with movable hands. Start with a higher number, such as 10, and move a marker or hand backward with each count. This helps children visualize the concept of counting backward.
- 5. **Counting Down with Storybooks**: Choose storybooks that involve countdowns, such as "Ten, Nine, Eight" by Molly Bang or "Chicka Chicka 1, 2, 3" by Bill Martin Jr. and Michael Sampson. Pause at each countdown number and ask the children to say the next number.
- 6. **Counting Down with Fingerplays**: Teach fingerplays or rhymes that involve counting backward, such as "Five Little Speckled Frogs" or "Five Little Pumpkins." Encourage children to use their fingers to represent each object as they count down.
- 7. **Counting Down with Games**: Play simple games that involve counting backward, such as "Musical Chairs" or "Duck, Duck, Goose." When playing these games, count backward to indicate the number of rounds or repetitions left.
- 8. **Counting Down with a Timer**: Use a visual timer or an hourglass to count down from a specific time, such as one minute or thirty seconds. Encourage children to watch as the time decreases and count backward with each passing second.
- 9. **Counting Down with Nature**: Take children on a nature walk and encourage them to find objects to count backward, such as leaves on a tree or stones on a path. Start with a higher number and count backward as they remove or touch each object.
- 10. **Counting Down with a Calendar**: Use a calendar to count down to special events or holidays. Start with the current date and count backward to the event, marking off each day as you go.

#### **Book Work:**

Ask the students to open their books at page 9. Explain the task and before the

students begin to write, ask them to point to each box and say which number they will write in it.

#### Homework:

□ Revise backward counting from 30 to 0.

# Wrap Up:

The students will sing the backward counting song.

# **Odd** one out

# **Learning Outcomes:**

The students will be able to:

Put odd one out

# Periods Required: 2

# **Material Required:**

Pictures and real-life objects

#### **Starter:**

Show the set of pencils to students and ask if they belong to a same category.

Now add a food item and repeat your question.

#### **Activities:**

- □ Repeat the same thing with different sets and objects.
- ☐ Divide the students in different groups and provide them objects to make a group. Don't forget to add something odd.
- ☐ Now paste pictures on the board and encourage them to cross the odd one out. Explain the word odd as something does not belong to.

#### 

Ask students to go through page no. 10.

# Wrap up:

Encourage students to share their work with others.

# Circle

# **Learning Outcomes:**

The students will be able to recognize the "circle" and write the word circle.

#### Periods Required: 2

# **Material Required:**

Board, marker, duster, pictures, circular objects like button, coins, water bottle caps, circular plates, circular biscuits and book

#### Starter

The teacher will show pictures of different circular objects to the students by saying.

This is a plate. It is like a circle. It goes round and round. She will draw a circle with her finger in the air.

- The teacher will draw a circle on the board and ask the students to find out things in the class room of this shape.
- ☐ She will show different objects/pictures to the students and ask them is it a circle?
- Introduce the spellings of circle and help the students to learn it.

#### **Activities:**

#### **Bring THE Object Game:**

The teacher will divide the class into two teams. Anyone who can bring the exact object to the teacher will get 5 points. The students will be given a maximum of 1 minute to find the particular object.

#### **OBJECTS TO BRING**

Button

Coins

Water bottle caps

Circular plates

#### Circular biscuits

#### **Trace Me Game:**

The teacher will give each student a bottle cap, jar lid or other circular object. She will show the students how to trace around the object to create a circle. Then help them cut out the circles and stack them in a pile. She will show them how to glue their circles in a row on another piece of paper to create a caterpillar.

#### **Book Work**

The teacher will introduce the page no. 12 of the book and guide the students about it. **Wrap up:** 

The students will have a shape hunt to find circles around the classroom.

# Number sequence and numbers in tens and ones 31 to 50

### **Learning Outcomes:**

The students will be able to:

- $\square$  Count in tens from 31-50.
- Begin to read and write the numbers from 31 50 correctly.

# **Periods Required: 5**

# **Material Required:**

- □ Number and picture flashcards for 0–50.
- I Enough small items, e.g. plastic bottle tops, blocks and counters for each pair/group of students

#### **Starter:**

- Use the flashcards to revise the numbers 0 to 30.
- Fix the cards on the board and ask students to match the pictures and numbers.
- Revise the facts that:
- ✓ 10 represent one group of ten and no extra ones;
- ✓ 20 represent two groups of ten and no extra ones;

- ✓ 30 represent three groups of ten and no extra ones.
- ✓ 40 represent four groups of ten and no extra ones.
- ✓ 50 represent five groups of ten and no extra ones.
  - With the help of blocks or counters help them to count up to 50.
- Ask the students to suggest how the numbers from 0 to 50 are written.
- Draw two boxes on the board headed tens and ones and ask different students to write the numbers from 0 to 50 on the board.

#### **Activities:**

#### **Guess It**

☐ Ask students to guess what comes next. Announce a number and let them name the next number. Focus on numbers from 30-50.

#### **Book Work:**

- I Tell students to open their books and go through page no. 12 to 14.
- ☐ Move around to help them.

#### Homework:

# Wrap up:

- $\square$  Ask them to name numbers 0 to 50.

# **Backward Counting (50 to 0)**

# **Learning Outcomes:**

The students will be able to:

Complete a written sequence of descending numbers from 50–0.

# **Periods Required: 2**

# **Material Required:**

- A ball.
- ☐ Flashcards of numbers 0–50.
- ☐ Some adhesive material.

#### **Starter:**

- Take the students in the ground and have backward race.
- Ask the students to stand in a circle and play the ball game to practice counting from 0-50 and from 50-0.

#### **Activities:**

# **Flash Cards Fixing**

- Fix the flashcard of zero on the board and ask the students to take turns to come and fix the next number until the sequence to 50 is completed.
- Revise the terms before and after by pointing to a number and asking the students to tell you which number comes before or after it.
- Repeat this activity, starting with flashcard of 50 and arranging the cards in descending order.

#### **Book Work:**

Ask the students to open their books at page 15 and 16 one by one. Explain the task and before the students begin to write, ask them to point to each box and say which number they will write in it.

#### Homework:

☐ Write backward counting from 50 to 0 in notebooks.

# Wrap Up:

The students will sing the backward counting song.

# **Numbers in words**

# **Learning Outcomes:**

The students will be able to:

Read and write the numbers in words from 3 to 5 correctly.

# Periods Required: 2 Material Required:

□ Number and words flashcards for 3 to 5.

#### **Starter:**

Use the flashcards to revise the numbers 3 to 5.

#### **Activities:**

- □ Divide the board into 2 columns.
- ☐ Write numbers in numerals in the first column and numbers in words in the other column.
- □ Now call students one by one, assign them a number and let them write in numeral and words on the board.
- Make the lesson interesting by writing the wrong spellings on the board and ask students to correct the words.
- ☐ Ask students to go through page no. 17.

#### Homework:

 Practice writing numbers in words in notebooks.

# Wrap up:

# **Triangle**

# **Learning Outcomes:**

The students will be able to recognize the "triangle" and write the word triangle.

# Periods Required: 1

# **Material Required:**

Board, marker, duster, pictures, triangular objects and book

#### Starter

The teacher will show pictures of different triangular objects to the students by saying.

This is a sandwich. It is like a triangle. It has three sides and three corners. She will draw a triangle with her finger in the air.

#### **Activities:**

- The teacher will draw a triangle on the board and ask the students to find out things in the class room of this shape.
- ☐ She will show different objects/pictures to the students and ask them is it a triangle?
- Introduce the spellings of triangle and help the students to learn it.

#### **Book Work**

The teacher will introduce the page no. 18 of the book and guide the students about it. **Wrap up:** 

The students will have a shape hunt to find triangles around the classroom.

#### **EVEN AND ODD NUMBERS**

# Objective:

- To introduce preschoolers to the concepts of even and odd numbers.
- To help preschoolers identify and differentiate between even and odd numbers.
- To engage preschoolers in hands-on activities to reinforce learning.

#### Materials Needed:

- Counting objects such as blocks, buttons, or counters
- Large number cards (0-10)
- Whiteboard or chart paper
- Markers
- Pictures or illustrations of objects (optional)

- Worksheets or printables for reinforcement (optional)

#### Starter:

- 1. Gather the children in a circle and begin by reviewing counting from 1 to 10.
- 2. Show the children a set of objects (e.g., blocks) and count them together.
- 3. Explain that today, they will learn about two special types of numbers called even and odd numbers.

# Methodology:

- 1. Distribute counting objects such as blocks or buttons to each child or group of children.
- 2. Demonstrate how to divide the objects into two equal groups.
- 3. Ask the children to explore and divide their objects into groups on their own.
- 4. After they have divided the objects, discuss whether each group has an equal number of objects.

# Concept Introduction:

- 1. Display the large number cards (0-10) on the whiteboard or chart paper.
- 2. Explain that even numbers can be divided into two equal groups, while odd numbers cannot.
- 3. Begin with the number 2 and discuss how it can be divided into two equal groups.
- 4. Continue with other even numbers (4, 6, 8, 10) and demonstrate how they can also be divided into two equal groups.
- 5. Then, introduce odd numbers (1, 3, 5, 7, 9) and discuss how they cannot be divided into two equal groups.

# **Interactive Sorting Activity**

- 1. Create two labeled sections on the whiteboard or chart paper: "Even" and "Odd."
- 2. Show pictures or illustrations of different objects and ask the children to identify whether each object represents an even or odd number.
- 3. Guide the children in sorting the objects into the appropriate sections.
- 4. Discuss their choices and reinforce the concept of even and odd numbers.

#### Hands-On Practice:

- 1. Provide each child with a worksheet or printable containing numbers.
- 2. Ask the children to circle the even numbers with one colour and the odd numbers with another colour.
- 3. Circulate around the room to provide assistance and reinforcement as needed.

4. Encourage the children to explain their choices and reasoning.

#### Conclusion;

- 1. Review the concept of even and odd numbers with the children.
- 2. Ask the children to share something new they learned about even and odd numbers.
- 3. Reinforce the idea that even numbers can be divided into two equal groups, while odd numbers cannot.
- 4. Conclude the lesson by praising the children for their participation and understanding.

# Extension Activities (optional):

- 1. Play games such as "Even or Odd" where children identify the number of objects in a set as even or odd.
- 2. Create simple art projects using even and odd numbers of materials (e.g., making a collage with even numbers of buttons or odd numbers of beads).
- 3. Reinforce learning through additional worksheets or online games focusing on even and odd numbers.

#### **Book Work**

The teacher will introduce the page no. 19,20 and 21 of the book and guide the students about it.

#### Wrap up:

The students will share their work with the class.

# What comes before, between and after?

# **Learning Outcomes:**

- The students will be able to understand the term before, between and after.
- They will be able to write the number that comes before, after or in between given numbers.

# Period Required: 3

# **Materials Required:**

Pictures, board, marker and duster

#### **Starter:**

Draw a number line on the board. When a number line is completed, use it to revise the terms before, after and in between by asking questions about a number on the line, e.g., which number comes before 7? After 4? In between 1 and 3? To encourage the students to use, point to a number and ask a student to tell you something about the number using the word before, after or in between, e.g. point to number 8 and ask a student to make a sentence about the number using the word after.

#### **Activities:**

Ask the students to work in pairs. Give each student a set of cards and ask them to place the cards in a pile face down in front of them. The students should take turns to turn over a card and make sentences about the number it shows. For example, a student who turns over the number 2 could say, 'It comes before 3.' Students should award themselves a point for every correct sentence. Pairs should check each other's scoring and ask the teacher if there is any doubt.

#### **Book Work:**

Ask the students to go through their books from page # 22 to 24. Make sure they understand the task and give them a set amount of time to complete it before checking their work as a class.

Explain each task, and ask them to complete all of the questions in a given amount of time. When you check their work, ask them to reply in sentences to practice the terms before, after and in between.

# **Example:**

- As 2 comes between 1 and 3.
- $\square$  As 3 comes after 2.
- $\square$  As 4 comes before 5.

# Wrap - Up:

Show them different pictures and ask who is standing before.....?

Who is standing after.....?

# **Numbers in words**

# **Learning Outcomes:**

The students will be able to:

Read and write the numbers in words from 0 to 8 correctly.

# **Periods Required: 2**

# **Material Required:**

□ Number and words flashcards for 0 to 8.

#### Starter:

Use the flashcards to revise the numbers 0 to 8.

#### **Activities:**

- □ Divide the board into 2 columns.
- ☐ Write numbers in numerals in the first column and numbers in words in the other column.
- □ Now call students one by one, assign them a number and let them write in numeral and words on the board.
- Make the lesson interesting by writing the wrong spellings on the board and ask students to correct the words.
- ☐ Ask students to go through page no. 25.

#### Homework:

☐ Practice writing numbers in words in notebooks.

# Wrap up:

# Ascending and Descending Order/ Ordering Numbers

# Learning Outcomes:

The students will be able to demonstrate the ability to place multi-digit numbers in ascending and descending order.

Period Required: 2

Materials Required:

Board, marker, duster, book and cards

#### Starter:

- Ask the students to sing the song of abc. Write letters randomly on the board and ask the students to come forward and write letters in correct order.
- □ Tell the students that numbers have a method of ordering, just like letters.

#### Activities:

- Ask the students to make a line height wise. It means short will stand front and taller one back. Now tell the students that this is ascending line. Now ask them to arrange their line in descending order.
- In Show them a staircase to clarify the concept.

#### **FUN WITH NUMBERS**

- 1. Write numbers 1 to 10 on the large number cards.
- 2. Arrange the building blocks in stacks, with each stack containing a certain number of blocks corresponding to the numbers on the cards.

# **Ascending Order Activity**

Show the children the number cards and explain that they will be arranging the blocks in ascending order.

- 1. Begin with the number 1 and ask the children to find the stack of blocks with one block.
- 2. Have them place the stack labeled "1" on the floor or table.
- 3. Continue with the numbers 2, 3, and so on, until they have arranged all the stacks of blocks from 1 to 10 in ascending order.
- 4. Encourage the children to count aloud as they arrange the blocks.

#### **Discussion**

Once the blocks are arranged in ascending order, review the sequence with the children.

- 1. Ask questions to reinforce their understanding, such as:
  - What does ascending order mean?
  - Which number comes before/after another number?
  - How did you know which stack of blocks to place next?

# **Descending Order Activity**

- 1. Now, explain that they will be arranging the blocks in descending order, which means going down instead of up.
- 2. Start with the number 10 and ask the children to find the stack of blocks with ten blocks.
- 3. Have them place the stack labeled "10" on the floor or table.
- 4. Continue with the numbers 9, 8, and so on, until they have arranged all the stacks of blocks from 10 to 1 in descending order.
- 5. Encourage the children to count backward aloud as they arrange the blocks.

#### **Discussion:**

- 1. Once the blocks are arranged in descending order, review the sequence with the children.
- 2. Ask questions to reinforce their understanding, such as:
  - What does descending order mean?
  - How is it different from ascending order?
  - Can you tell me which number comes before/after another number in descending order?

# **Conclusion):**

- 1. Summarize the concepts of ascending and descending order with the children.
- 2. Have them reflect on what they learned during the activity.
- 3. Praise their efforts and participation.

# **Extension Activity (optional):**

- Create a number line poster or floor mat with numbers 1 to 10 and have children place the blocks on the appropriate numbers in ascending or descending order.
- Use different colors or sizes of blocks to add variation to the activity.

#### **Book Work:**

Ask the students to open their books at page 26 and 27. Introduce the exercises on the board and help the students to do the exercises there. Then encourage them to complete the pages.

# Wrap – Up:

Encourage the students to share and explain their work.

# Smaller and bigger number

# **Objective:**

- Students will be able to compare numbers and identify the smaller and larger numbers.
- Students will understand the concept of comparing quantities and develop skills in ordering numbers.

#### **Materials Needed:**

- Number cards (0-50)
- Whiteboard or chart paper
- Markers
- Counting objects (e.g., beans, buttons, or cubes)
- Worksheets or printables for reinforcement

#### Starter:

- 1. Begin by reviewing counting from 1 to 50 with the students.
- 2. Introduce the concept of comparing numbers by explaining that we can tell which number is smaller or larger without using symbols.
- 3. Show examples of sets of objects and ask students to identify which set has more or fewer objects.

#### **Direct Instruction**

- 1. Display two number cards on the board, such as 23 and 37.
- 2. Ask students which number they think is smaller and which is larger.
- 3. Discuss with the students why they think one number is smaller or larger than the other.
- 4. Encourage students to use counting or visualizing strategies to compare the numbers.

#### **Guided Practice**

- 1. Divide the students into small groups or pairs.
- 2. Provide sets of numbers for the groups to compare (e.g., 15 and 29, 42 and 33, 8 and 8).
- 3. Instruct the groups to use counting objects or drawing strategies to compare the numbers and determine which is smaller or larger.
- 4. Circulate around the room to provide assistance and guidance as needed.
- 5. Encourage students to explain their reasoning and choices to their group members.

# **Independent Practice**

- 1. Provide each student with a worksheet or printable containing number comparison exercises.
- 2. Instruct the students to compare the pairs of numbers and circle the smaller number in one color and the larger number in another color.
- 3. Encourage students to use counting or visualizing strategies to compare the numbers.
- 4. Allow students to work independently, but be available to provide support and clarification as needed.

#### **Extension Activities**

- 1. Play a game where students race to identify the larger or smaller number in a given pair using counting objects.
- 2. Create a number line on the floor or wall and have students place number cards in order from smallest to largest using counting or visualizing strategies.
- 3. Provide additional worksheets or online activities for further practice on comparing numbers without symbols.

Book work:

Go through page no. 28, 29 and 30.

# Wrap up:

- 1. Review the concept of comparing numbers with the students.
- 2. Ask volunteers to share their strategies for determining which number is smaller or larger.
- 3. Reinforce the importance of using counting or visualizing strategies to compare

#### numbers.

4. Summarize the lesson by emphasizing the skills learned in comparing and identifying smaller and larger numbers.

# Square

### **Learning Outcomes:**

The students will be able to recognize the "square" and write the word square.

# **Periods Required: 2**

### **Material Required:**

Board, marker, duster, pictures, square objects and book

#### Starter

The teacher will show pictures of different square objects to the students by saying.

This is a book. It is like a square. It has four sides and four corners. She will draw a square with her finger in the air.

#### **Activities:**

- The teacher will draw a square on the board and ask the students to find out things in the class room of this shape.
- ☐ She will show different objects/pictures to the students and ask them is it a square?
- Introduce the spellings of square and help the students to learn it.

#### **Book Work**

The teacher will introduce the page no. 31 of the book and guide the students about it. **Wrap up:** 

The students will have a shape hunt to find squares around the classroom.

# **Numbers in words**

# **Learning Outcomes:**

The students will be able to:

Read and write the numbers in words from 0 to 10 correctly.

# Periods Required: 2

# **Material Required:**

□ Number and words flashcards for 0 to 10.

#### Starter:

Use the flashcards to revise the numbers 0 to 10.

#### **Activities:**

- ☐ Divide the board into 2 columns.
- ☐ Write numbers in numerals in the first column and numbers in words in the other column.
- □ Now call students one by one, assign them a number and let them write in numeral and words on the board.
- Make the lesson interesting by writing the wrong spellings on the board and ask students to correct the words.

#### 

Ask students to go through page no. 32 and 33.

 ∴

#### Homework:

☐ Practice writing numbers in words in notebooks.

# Wrap up:

# **Ordinal Numbers**

# **Learning Outcomes**

The students will be able to recognize ordinal numbers in figures and use ordinal numbers to rank things, and order the months of the year.

# **Periods Required: 4**

#### **Starter:**

- Line up 10 objects (like book, pencil eraser, ruler, and sharpener) on a table at the front of the room.
- Pick up the first object and ask students to repeat after you '1st'.
- Place the flashcard 1st in front of the object.
- Repeat for all 10 items and flashcards.
- Ask the students to point to the items and cards and recite the ordinal numbers 1<sup>st</sup> to 10<sup>th</sup> three times.
- Ask questions, e.g. 'In which position is the eraser?'

#### **Activities**

#### Race

- Carry out this activity in the corridor, race or on the running track. Mark start and finishing lines and ask students to race against each other to see who is the fastest.
- Say 'Go' to start the race and give the first 10 pupils who finish the race, ordinal number cards corresponding to their positions. As each pupil finishes, say, e.g. 'Congratulations! You are first!' and hand him/her the card that says '1st'. In the

- same way, give the cards to each student according to their positions.
- Ask students to stand in a line in order from 1st to 10th and hold up their ordinal number cards.
- Point to each student in turn and ask the students to repeat the ordinal numbers 1<sup>st</sup> to 10<sup>th</sup>.

# **Arrange it:**

- In Show students flashcards of different sets of objects and ask them to identify and count the objects, e.g. 5 cakes, 7 shoes, etc.
- Show the students how to arrange them in order from 1<sup>st</sup> to 10<sup>th</sup>, starting with the largest set, e.g. 10 items, 8 items 7 items, 5 items, 2 items.
- Write above each flashcard 1st, 2nd, 3rd, 4th, 5th respectively.

# **Calendar Reading:**

- If Show students a calendar and explain that it shows the months of the year.
- Show the first page and ask students to say, 'The first month of the year is January.'
- Introduce all the months in the same way; each time, pupils should repeat,
  - a. "The second month of the year is February.
  - b. "The third month of the year is March.
  - c. "The fourth month of the year is April.
  - d. "The fifth month of the year is May.
  - e. "The sixth month of the year is June.
  - f. "The seventh month of the year is July.
  - g. "The eighth month of the year is August.
  - h. "The ninth month of the year is September.
  - i. "The tenth month of the year is October.
  - j. "The eleventh month of the year is November.
  - k. "The twelfth month of the year is December.
- Bring about that the last month is December and that there are 12 months in one year.
  - ☐ Ask some student about their date of birth.

  - □ Because it is such a long period of time, it is broken down into twelve months and

each month is further divided into weeks.

- If Continue to explain that months are divided into weeks and there are four weeks in a month, and that each week is divided into seven days.
- Ask if they name the days of the week in ordinal numbers.

#### **Book Work:**

Invite the students to go through page no. 34 to 37 of the book and do the activities.

#### **Home Work:**

Write the ordinal numbers in the notebooks.

# Wrap - Up:

Ask the students to sing the song of the days of the week.

# Rectangle

# **Learning Outcomes:**

The students will be able to recognize the "rectangle" and write the word rectangle.

# Periods Required: 1

# **Material Required:**

Board, marker, duster, pictures, rectangular objects and book

#### Starter

The teacher will show pictures of different rectangular objects to the students by saying.

This is a biscuit. It is like a rectangle. It has four sides and four corners. She will draw a rectangle with her finger in the air.

#### **Activities:**

The teacher will draw a rectangle on the board and ask the students to find out things in the class room of this shape.

- I She will show different objects/pictures to the students and ask them is it a rectangle?
- Introduce the spellings of rectangle and help the students to learn it.

#### **Book Work**

The teacher will introduce the page no. 38 of the book and guide the students about it. **Wrap up:** 

The students will have a shape hunt to find rectangles around the classroom.

# **Addition**

# **Learning Outcomes:**

The students will be able to:

Add the objects and numbers up to 10 accurately

# Periods Required: 8

# Materials Required:

A number line from 0–10 drawn on the board; student number cards 1–10, board, marker, duster, book

#### Starter:

- Draw a number of shapes or simple objects on the board, e.g. six flowers.
- Ask the students to count the number of flowers.
- Draw two more flowers next to them and ask the students to tell you if there are more or fewer flowers (more).
- Explain that to get more items you need to add.
- Ask the students to count the flowers and tell you the new total.
- Draw another set of items on the board, e.g. three circles. Count them and ask a student volunteer to draw seven more circles next to them. Explain to the students that you have added seven circles to the original four and ask them to tell you the new total.
- Point out that when you add, the total is always more than the original number.
- Use the number line to show the students the two addition sums that they have just done.

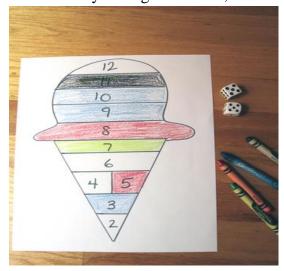
#### **Activities:**

- ☐ Draw a number line on the floor and help students in adding numbers by jumping on the number line. For example: Ask a student to student on number 1 and jump three times. Ask the class to find out 1+3 gives 4
- **□** Play Ice Cream Addition!

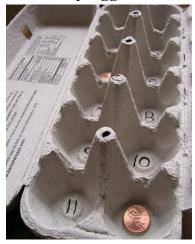
#### What You Need:

- □ Dice
- □ Pencil
- □ Blank paper
- ¤ Crayons
- ☐ Ice Cream Worksheet
- 1. Print enough copies of the Ice Cream Worksheet so that every player has one.
- 2. Determine who goes first. The first player will roll the dice. On a blank sheet of paper, the player will then write the addition problem out using the numbers he rolled as the addends. If he rolled a 3 and 4, for instance, he would write the problem this way: 3 + 4 = 7.
- 3. The first player will then color the sum on the ice cream cone. In the example 3 + 4 = 7, 7 is the sum and would be colored on the cone.
- 4. The next player rolls the dice to determine his addends, writes the addition problem, and colors in his sum.
- 5. Continue playing with each player taking turns. If someone rolls a sum that is already colored on his sheet, he loses that turn. Try to use the math vocabulary as you play this game and see how quickly you learn these new words.
- 6. The first player to sum up all his problems and color in his entire ice cream cone wins the game!

Celebrate by eating some real, delicious ice cream for a treat!



# **□** Play Egg Carton Addition



What You Need:

- Empty egg carton
- 2 "game tokens" (pennies, chips, or beans work well)
- Marker
- 2 pieces of white paper
- Pencils
- 1. Use your marker to put a number in the bottom of each egg cup in the carton. (If you have a math beginner, start by cutting your carton in half, so you only have six cups; if you've got a kid who's surging ahead, go ahead and use all twelve!)
- 2. Put a bowl of game tokens (pennies, marbles or beans) in the center of your table or play area and place two pieces into the egg carton.
- 3. Each player takes turns shaking the carton and then writing an addition problem on their paper using the two number sections the pieces landed in. Let's say, for example, that the two pieces landed in 4 and 6. The addition problem would then be 4+6.
- 4. The person with the highest sum after each player has had a turn would then take a token from the bowl in the center of the table. If a wrong answer is given, a token is returned to the bowl. In case of a tie, each child takes a token.
  - Continue playing until each player has collected five tokens. Do this a few times, and be prepared to see steady gains in your young mathematician's adding confidence!

#### **Book Work:**

Give the students a set amount of time to go through the book and complete the work and then check their answers as a class.

# Wrap - Up:

Let the students share their work.

.

# Cone

# **Objective:**

- Introduce preschoolers to the cone shape.
- Help preschoolers understand the concept of a cone through exploration and hands-on activities.
- Encourage creativity and fine motor skills development.

#### **Materials Needed:**

- Different-sized paper or plastic cones
- Playdough or modeling clay
- Construction paper
- Crayons or markers
- Scissors
- Glue
- Small toys or objects that resemble cones (optional)

# **Starter:**

- 1. Gather the children in a circle and begin by discussing shapes they are familiar with, such as circles, squares, and triangles.
- 2. Introduce the concept of a cone as a three-dimensional shape that looks like a party hat or an ice cream cone.
- 3. Show the children different examples of cones, such as traffic cones, party hats, or ice cream cones.
- 4. Ask the children what they notice about the shape of a cone and what objects they have seen that resemble cones.

# **Exploration and Play**

- 1. Provide each child with a paper or plastic cone and encourage them to explore the shape with their hands.
- 2. Set up a playdough or modeling clay station where children can mold their own cones using their hands or cone-shaped molds.
- 3. Encourage children to experiment with stacking cones on top of each other or arranging them in different patterns.
- 4. Allow children to freely explore the cones and use their imagination to create different

structures or designs.

# **Art Activity**

- 1. Provide each child with a piece of construction paper, crayons or markers, scissors, and glue.
- 2. Instruct the children to draw and color a picture of a cone or cut out a cone shape from the construction paper.
- 3. Encourage children to decorate their cone shapes with patterns, colors, or stickers.
- 4. Assist children in cutting out their cone shapes if needed, and help them glue their artwork onto another piece of paper.

# **Storytime**

- 1. Read a story or book that features cones, such as "The Cone Family" by Margaret Lo or "The Ice Cream Cone Coot" by Andy Griffiths.
- 2. As you read, point out the cone shapes in the illustrations and discuss how they are used or represented in the story.
- 3. Encourage children to share their thoughts and observations about the story and the cone shapes.

#### **Extension Activities:**

- 1. Set up a sensory bin filled with sand or rice and hide cone-shaped toys or objects for children to find and explore.
- 2. Conduct a science experiment where children stack different-sized cones to see which one can hold the most small objects, such as marbles or beans.
- 3. Take a nature walk and look for cone-shaped objects in the environment, such as pine cones or traffic cones.

#### Book work:

Go through page no. 50.

# Wrap up:

- 1. Gather the children in a circle and review what they have learned about cones during the lesson.
- 2. Ask children to share their favorite part of the lesson or something new they learned about cones.
- 3. Summarize the key points about cones and their characteristics.
- 4. Reinforce the concept of cones by asking children to identify cone shapes in the classroom or their surroundings.

# **Subtraction**

# Learning Outcomes:

The students shall be able to:

- Recognize the (-) sign means subtract, minus, or take away.
- H Complete subtraction sums correctly.

# Periods Required: 6

# Materials Required:

- Sets of up to 9 items to demonstrate subtraction.
- Counters, bottle tops or other small items for the students to work out answers if required.
- Book, board, maker, duster

#### Starter:

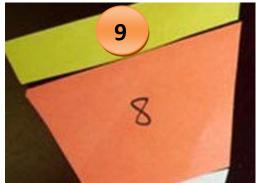
- ☐ Draw a number line from 0–10 on the board.
- Use a set of items to demonstrate how to find one less by taking 1 away.
- For example, set out seven items, count them and then ask a student to take one away and explain that you now have one less and count to find the new total.
- Show the students how to count back on the number line one space to find the number that is one less than 7.
- Repeat this for another number and also to demonstrate how to find two less.

#### Activities:.

#### **□** Number line subtraction

Draw the number line on the floor and invite students to experience subtraction practically.

# **□** Candy Corn Subtraction



#### What You Need:

- Orange, yellow, and white construction paper
- Candy corn template (make your own by dividing a triangle into 3 sections)
- Scissors
- Pencil
- Bag of candy corn for use as manipulative
- 1. Draw a candy corn template. Then, have your child cut it out.
- 2. Help your child trace the pieces onto the colored construction paper as directed. Have her cut out a yellow, orange, and white piece for each candy corn subtraction fact.
- 3. Think about some subtraction facts your child might need to work on. You can check out some of her math homework from school to see what your child is currently learning.
- 4. In the yellow part of the candy corn cut out, have your child write the minuend or the large amount that will have another number subtracted from it. Come up with a subtraction problem with your child.
- 5. In the orange part, have your child write the subtrahend, or the number to be subtracted.
- 6. In the white part, write the difference, or the answer to the subtraction problem. You can teach your child these math vocabulary words along the way. For example, in the problem 9 8 = 1, 9 is the minuend, 8 is the subtrahend, and 1 is the difference.
- 7. Give your child three candy corn subtraction problems at a time. Mix up the pieces. Set the white pieces on the bottom and explain that these are the answers or differences for the subtraction problems. Can she figure out what the top two pieces are? A yellow piece (or the minuend) goes on top minus an orange piece (or subtrahend) and ending in a white piece or difference. Give her some real candy corn to use as manipulative to her figure out the problems.

When finished, eat some candy corn to celebrate subtraction!

#### **Book Work:**

Give the students a set amount of time to go through the book from page no. 51 to 60 and complete the work and then check their answers as a class.

# Wrap - Up:

Let the students share their work.

# **Numbers in words**

### **Learning Outcomes:**

The students will be able to:

Read and write the numbers in words from 0 to 10 correctly.

# Periods Required: 2

# **Material Required:**

☐ Number and words flashcards for 12 to 14.

#### Starter:

Use the flashcards to revise the numbers 0 to 14.

#### **Activities:**

- □ Divide the board into 2 columns.
- ☐ Write numbers in numerals in the first column and numbers in words in the other column.
- □ Now call students one by one, assign them a number and let them write in numeral and words on the board.
- Make the lesson interesting by writing the wrong spellings on the board and ask students to correct the words.

#### 

Ask students to go through page no. 61.

#### Homework:

☐ Practice writing numbers in words in notebooks.

#### Wrap up:

# **Cubes**

# Objective:

- Introduce preschoolers to the concept of cubes as 3-dimensional shapes.
- Help preschoolers identify and describe cubes in their environment.
- Engage preschoolers in hands-on activities to explore the characteristics of cubes.

#### Materials Needed:

- Cubes of different sizes and colors (e.g., wooden blocks, foam blocks)
- Pictures or illustrations of cubes
- Large cardboard box or cube-shaped objects (optional)
- Drawing materials (crayons, markers)
- Storybooks featuring cubes (optional)

#### Starter:

- 1. Gather the preschoolers in a circle and begin by asking if anyone knows what a cube is. Allow children to share their ideas.
- 2. Show pictures or illustrations of cubes and briefly explain that a cube is a 3-dimensional shape with six square faces that are all the same size.
- 3. Hold up a cube and demonstrate how it looks from different angles, emphasizing its square faces and edges.
- 4. Ask the children to look around the room and see if they can spot any cube-shaped objects. Encourage them to share what they find.

# **Exploration Activity:**

- 1. Provide preschoolers with a variety of cubes in different sizes and colors.
- 2. Allow them to explore the cubes freely, feeling their surfaces and examining their features.
- 3. Encourage children to stack the cubes, line them up, or build simple structures using the cubes.
- 4. Walk around the room and engage in conversations with the children about what they are doing with the cubes.

#### Guided Discussion:

- 1. Gather the children back into a circle and facilitate a discussion about their observations and experiences with the cubes.
- 2. Ask questions such as:
  - What did you notice about the cubes?
  - How are the cubes similar or different?
  - Can you describe the shape of a cube?
  - What can you build or create with cubes?
- 3. Use the discussion to reinforce the concept of cubes as 3-dimensional shapes with square faces.

# Creative Activity:

- 1. Provide each child with drawing materials (crayons, markers) and a piece of paper.
- 2. Ask them to draw pictures of cube-shaped objects or structures they saw or created during the exploration activity.
- 3. Encourage creativity and imagination as they draw.
- 4. Allow children to share their drawings with the group if they wish.

# Extension Activity (optional):

- 1. Read a storybook featuring cubes, such as "The Shape of Things" by Dayle Ann Dodds or "The Greedy Triangle" by Marilyn Burns.
- 2. Set up a large cardboard box or use cube-shaped objects to create a play area where children can crawl inside or play imaginative games.
- 3. Explore other 3-dimensional shapes, such as spheres and cylinders, to compare and contrast with cubes.

#### Book work:

Go through page no. 62 of the book.

# Wrap up:

- 1. Review key concepts about cubes with the preschoolers, emphasizing their characteristics as 3-dimensional shapes with square faces.
- 2. Encourage children to continue exploring and noticing cubes in their environment.
- 3. Thank the children for their participation and enthusiasm.

# **MEASUREMENT**

# Long, longer and longest

# Learning Outcomes:

Students shall be able to:

H Compare items by length using the terms long, longer and longest correctly.

## Periods Required: 2

## Materials required:

☐ Items to compare by length

Mathematics Book

HPlaydough

#### Starter:

Put three snakes / ruler of different sizes in front of class.

Explain the meanings of "short", "shorter" and "shortest" to the students.

Explain the meanings of "long", "longer" and "longest" to the students.

Show the students three objects you have prepared and ask them to tell you which of them is longest; repeat this with other pairs.

Help students to measure different objects using hand spans.

#### Book work:

Introduce page no.63 and 64 and invite the students for book work.

# Wrap up:

Divide the class into three groups. Let them make pencils with playdough. Then put the tree pencils on the table and let the group name the longest one.

# Tall, taller, tallest

# **Objective:**

- Introduce preschoolers to the concept of height and comparative terms "tall, taller, tallest."
- Help preschoolers understand the concept of comparing heights using everyday objects.
- Engage preschoolers in hands-on activities to explore height differences and reinforce understanding.

### **Materials Needed:**

- Various objects of different heights (e.g., blocks, toys, books)
- Measuring tape or ruler
- Pictures or illustrations demonstrating height differences
- Drawing materials (crayons, markers)
- Optional: Stickers or labels with "tall," "taller," and "tallest" written on them

#### Starter:

- 1. Gather the preschoolers in a circle and introduce the topic of height.
- 2. Show pictures or illustrations of objects/people of different heights and ask the children what they notice.
- 3. Explain that today, they will learn about different words we can use to describe how tall things are.

# **Exploration Activity**

- 1. Place a variety of objects of different heights in the center of the room.
- 2. Invite preschoolers to explore the objects and compare their heights.
- 3. Encourage them to line up the objects from shortest to tallest or tallest to shortest.
- 4. Facilitate discussions as they explore, asking questions like:
  - Which object is the shortest? Which one is the tallest?
  - Can you find something that is taller than this object but shorter than that one?
  - How can we compare the heights of these objects?

#### **Guided Discussion**

1. Gather the children back into a circle and lead a discussion about what they observed during the exploration activity.

- 2. Introduce the terms "tall," "taller," and "tallest," explaining that they help us compare the heights of different things.
- 3. Show examples using objects in the room or pictures/illustrations.
- 4. Practice saying the words together and discuss their meanings.

## **Creative Activity**

- 1. Provide each child with drawing materials and a piece of paper.
- 2. Ask them to draw pictures of themselves or other people/objects, showing them getting progressively taller.
- 3. Encourage creativity and imagination as they draw.
- 4. Once they finish, invite them to share their drawings with the group and explain how they used the words "tall," "taller," and "tallest."

## **Extension Activity (optional):**

- 1. Use measuring tape or a ruler to measure the height of each child. Discuss the results and compare heights.
- 2. Create a "tall tower" activity where children can stack blocks or other objects to make the tallest tower they can.
- 3. Read a storybook that features characters of different heights, such as "Giraffes Can't Dance" by Giles Andreae.

#### Book work:

Go through page no. 65.

## Wrap up:

- 1. Review the key concepts of "tall, taller, tallest" with the preschoolers.
- 2. Encourage them to continue exploring height differences in their environment.
- 3. Thank the children for their participation and enthusiasm.

# High, higher and highest

# Learning Outcomes:

Students shall be able to:

Compare items by height using the terms high, higher and highest correctly.

## Periods Required: 2

### *Materials required:*

Pairs of items to compare by height, e.g.:

- Pictures of three buildings with different heights.
- H
   Pictures of three flags
- H Blocks

#### Starter:

Show the students a pair of buildings you have prepared with blocks and ask them to tell you the difference. Give them the concept of high and higher. Now introduce three buildings and introduce the concept of highest.

Show them the pictures of three flags and ask them to touch the highest one by one.

#### **Book Work:**

Introduce page no. 66 of the book and help them to complete the given task.

# Wrap up:

Divide the class into 3 groups and let each group build a building using blocks. Then place the three buildings in front of the class and let them name the highest one.

# Heavy, heavier and heaviest

# Learning Outcomes:

Students shall be able to:

Compare items by size using the terms "heavy", "heavier" and "heaviest" correctly.

# **Periods Required: 2**

# Materials required:

- Heavy and light objects.
- Pencils and erasers.
- Mathematics Book

#### **Starter:**

- Start by telling your child that you will be doing some science together. You'll begin by looking at some regular things and making guesses (hypotheses) about which one is heavier. Check your young scientist's knowledge: how will we know which items are heavier than others? (Expect the answer, "I'll hold them," and don't be surprised if your kid adds, "Duh.") Do continue, however: remind your child that to be absolutely accurate, he'll also need to weigh the items. Depending on your scale, you may even want to introduce the concept of weighing in either pounds or ounces, or in grams. Now help your child make an "observation" chart on his lined paper. Write "Heavy or light" on the top, and then fold the paper in half lengthwise. He'll use the chart to write the names of objects, or a picture of them if he prefers, and to record which is heavy or light.
- 1. **Gather the items.** Assemble all of the chosen objects on a table or countertop. Ask your child to name or point to two objects. Move those objects so they are next to each other and separate from the other objects. It's important for *you* to do this step, as your child will get a chance to handle the objects later in the activity.
- 2. **Make predictions.** Ask your child just to look at both objects she selected. Look at their height, length, shape, and any other distinctive features. Ask her to tell you, just from looking at them, which object she thinks is heavier.
- 3. **Evaluate.** Once your child has guessed, ask her to pick up the objects. Ideally one in each hand works the best, but if an object is too heavy, it may be picked up individually. Ask your child if she wants to change her guess or keep it the same.
- 4. **Weigh in.** Using a kitchen or bathroom scale (whichever is more appropriate) weigh the two objects. Was your child right? If not, can she figure out why their guess was wrong? Talk about how the scale measures the mass (weight) of an object, but some things may have lots of volume (size) with very little mass. Write the weight of each object below its name or picture on the observation chart.
- 5. **Repeat.** Place those objects aside and ask your child to pick two more to compare. Repeat these steps as long as your child is interested in the activity...and don't hesitate to pull it out as you explore new things, whether it's seashells from the beach or pinecones from the forest. The world is crammed with exciting reminders that when it comes to volume and mass, what you see is not always what you get...and that's a very cool thing indeed.

Now introduce three objects and let the students name the heaviest one.

#### Book work:

Introduce page no. 67 and help the students complete the given task.

## Wrap up:

Ask the students to look at the classroom objects and name the heaviest object.

# Light, Lighter, Lightest

## **Objective:**

- Introduce preschoolers to the concept of weight and comparative terms "light, lighter, lightest."
- Help preschoolers understand the concept of comparing weights using everyday objects.
- Engage preschoolers in hands-on activities to explore weight differences and reinforce understanding.

#### **Materials Needed:**

- Various objects of different weights (e.g., feathers, toys, books, rocks)
- Balance scale or a simple makeshift scale (e.g., a ruler balanced on a block)
- Pictures or illustrations demonstrating weight differences
- Drawing materials (crayons, markers)
- Optional: Stickers or labels with "light," "lighter," and "lightest" written on them

#### **Starter:**

- 1. Gather the preschoolers in a circle and introduce the topic of weight.
- 2. Show pictures or illustrations of objects of different weights and ask the children what they notice.
- 3. Explain that today, they will learn about different words we can use to describe how light or heavy things are.

# **Exploration Activity**

- 1. Place a variety of objects of different weights in the center of the room.
- 2. Invite preschoolers to explore the objects and compare their weights.

- 3. Encourage them to lift the objects and notice which ones feel lighter or heavier.
- 4. Facilitate discussions as they explore, asking questions like:
  - Which object feels the lightest? Which one feels the heaviest?
  - Can you find something that is lighter than this object but heavier than that one?
  - How can we compare the weights of these objects?

#### **Guided Discussion**

- 1. Gather the children back into a circle and lead a discussion about what they observed during the exploration activity.
- 2. Introduce the terms "light," "lighter," and "lightest," explaining that they help us compare the weights of different things.
- 3. Show examples using objects in the room or pictures/illustrations.
- 4. Practice saying the words together and discuss their meanings.

## **Creative Activity:**

- 1. Provide each child with drawing materials and a piece of paper.
- 2. Ask them to draw pictures of objects or scenes, showing them getting progressively lighter.
- 3. Encourage creativity and imagination as they draw.
- 4. Once they finish, invite them to share their drawings with the group and explain how they used the words "light," "lighter," and "lightest."

# **Extension Activity (optional):**

- 1. Use a balance scale or makeshift scale to compare the weights of different objects. Discuss the results and compare weights.
- 2. Create a "lightest object" hunt where children can search for the lightest object they can find in the room or outdoors.
- 3. Read a storybook that features characters dealing with weight, such as "Heavy Light" by Jolby & Rachel Bertacco.

#### Book work:

Go through page no. 68.

## Wrap up:

- 1. Review the key concepts of "light, lighter, lightest" with the preschoolers.
- 2. Encourage them to continue exploring weight differences in their environment.
- 3. Thank the children for their participation and enthusiasm.

# **Numbers in words**

## **Learning Outcomes:**

The students will be able to:

Read and write the numbers in words from 15 to 17 correctly.

## Periods Required: 2

### **Material Required:**

Mumber and words flashcards for 15 to 117.

#### **Starter:**

Use the flashcards to revise the numbers 0 to 17.

#### **Activities:**

- □ Divide the board into 2 columns.
- ☐ Write numbers in numerals in the first column and numbers in words in the other column.
- □ Now call students one by one, assign them a number and let them write in numeral and words on the board.
- Make the lesson interesting by writing the wrong spellings on the board and ask students to correct the words.
- Ask students to go through page no. 69.

#### Homework:

 Practice writing numbers in words in notebooks.

### Wrap up:

# **Patterns**

# **Learning Outcomes:**

The students will be able to recognize the concept of patterns.

# **Periods Required: 3**

### **Material Required:**

Board, marker, duster, pictures, and book

#### Starter

The teacher will show pictures of different objects to the students and help to recognize different patterns.

#### **Book Work**

The teacher will introduce the page no. 71 to 73 and help students recognize different patterns. She will introduce page no. 60 of the book and guide the students about it.

#### Wrap up:

The students will have a pattern hunt to find patterns around the classroom.

# **Numbers in words**

## **Learning Outcomes:**

The students will be able to:

Read and write the numbers in words from 0 to 20 correctly.

# **Periods Required: 2**

## **Material Required:**

□ Number and words flashcards for o to 20.

#### **Starter:**

Use the flashcards to revise the numbers 0 to 20.

#### **Activities:**

- □ Divide the board into 2 columns.
- ☐ Write numbers in numerals in the first column and numbers in words in the other column.
- □ Now call students one by one, assign them a number and let them write in numeral and words on the board.
- Make the lesson interesting by writing the wrong spellings on the board and ask students to correct the words.
- Ask students to go through page no. 74 and 75.

#### Homework:

☐ Practice writing numbers in words in notebooks.

# Wrap up:

# **Cylinders**

# **Objective:**

- Introduce preschoolers to the concept of cylinders as 3-dimensional shapes.
- Help preschoolers identify and describe cylinders in their environment.

- Engage preschoolers in hands-on activities to explore the characteristics of cylinders.

#### **Materials Needed:**

- Cylindrical objects of different sizes and colors (e.g., cans, cups, rolling pins)
- Pictures or illustrations of cylinders
- Large cardboard tube or cylinder-shaped objects (optional)
- Drawing materials (crayons, markers)
- Storybooks featuring cylinders (optional)

#### **Starter:**

- 1. Gather the preschoolers in a circle and begin by asking if anyone knows what a cylinder is. Allow children to share their ideas.
- 2. Show pictures or illustrations of cylinders and briefly explain that a cylinder is a 3-dimensional shape with two circular faces that are the same size.
- 3. Hold up a cylindrical object and demonstrate how it looks from different angles, emphasizing its circular faces and curved sides.
- 4. Ask the children to look around the room and see if they can spot any cylinder-shaped objects. Encourage them to share what they find.

# **Exploration Activity**

- 1. Provide preschoolers with a variety of cylindrical objects in different sizes and colors.
- 2. Allow them to explore the cylinders freely, feeling their surfaces and examining their features.
- 3. Encourage children to roll the cylinders, stack them, or use them in imaginative play.
- 4. Walk around the room and engage in conversations with the children about what they are doing with the cylinders.

#### **Guided Discussion**

- 1. Gather the children back into a circle and facilitate a discussion about their observations and experiences with the cylinders.
- 2. Ask questions such as:
  - What did you notice about the cylinders?
  - How are the cylinders similar or different?
  - Can you describe the shape of a cylinder?
  - What can you do with cylinders?
- 3. Use the discussion to reinforce the concept of cylinders as 3-dimensional shapes with circular faces.

# **Creative Activity**

- 1. Provide each child with drawing materials and a piece of paper.
- 2. Ask them to draw pictures of themselves or other people/objects, showing them interacting with cylinders.
- 3. Encourage creativity and imagination as they draw.
- 4. Once they finish, invite them to share their drawings with the group and explain how they used cylinders in their drawings.

# **Extension Activity (optional):**

- 1. Read a storybook that features cylinders, such as "Freight Train" by Donald Crews or "Curious George and the Dump Truck" by H.A. Rey.
- 2. Set up a large cardboard tube or use cylinder-shaped objects to create a play area where children can crawl through or play imaginative games.
- 3. Explore other 3-dimensional shapes, such as cones and spheres, to compare and contrast with cylinders.

#### Book work:

Go through page no. 70 of the book.

### Wrap up;

- 1. Review key concepts about cylinders with the preschoolers, emphasizing their characteristics as 3-dimensional shapes with circular faces.
- 2. Encourage children to continue exploring and noticing cylinders in their environment.
- 3. Thank the children for their participation and enthusiasm.

# Time

## Learning Outcomes:

Students shall be able to:

Read the clock

# **Periods Required: 3**

# Materials required:

- A selection of items, or pictures of items, associated with night and day, e.g. pyjamas, a torch, a hot water bottle, an alarm clock, a skipping rope, a lunch box, etc.
- Image: Image:
- Coloured pencils or crayons.

#### Starter:

- Ask students when they go to sleep and when they get up.
- Teach the terms day and night and use the pictures as a starting point to talk about the differences between day and night and day time and night time activities.
- Ask the students to tell you some of the things they do in the day / at night, the different clothes they wear, etc.

#### Activities:

- **Explain** a clock to the students.
- Talk about the uses of a clock.

#### **FUN ACTIVITY**

#### Make a Clock!

#### What You Need:

- Old frisbee, or a thick paper plate
- Markers
- Scissors or a drill
- Poster board or heavy paper
- Paper fasteners (available at any stationery store)
- Circle-shaped stickers
- Paper
- Pencil



- 1. Start by making a small hole in the center (With a plate, you can use scissors. With a frisbee, you'll need to use a drill). Let your child know he's going to make his very own clock and that the frisbee or paper plate will serve as the clock face. If you have an analog watch or clock somewhere in the house, bring it to the table to use as a model.
- 2. Ask your child to place one sticker at the top of the "clock face" and one directly opposite, on the bottom. With the marker, have him write the number 12 on the top sticker and the number 6 on the bottom sticker. Now ask him to place one sticker on each side, halfway in between the top and bottom. He should write 3 on the right-hand sticker, and 9 on the left-hand sticker. Then, referring your analog clock as a model, ask him to fill in the other numbers on the clock using the stickers and his marker.
- 3. Now it's time for the clock hands! Using the poster board, cut two arrows—a longer one for the minute hand, and a shorter one for the hour hand. Pierce the ends of the arrows with the paper fastener, slide it through the hole in the center of your clock face, and secure it at the back.
- 4. Pick a day of the week and, with your child's help, create a list of his activities. This might include going to school, a play date, a shopping trip with grandma...or just time spent eating a snack. Next to each entry, write the time the activity begins, rounding to the nearest half hour.
- 5. Make it concrete! Help your child identify the hour hand and the minute hand on the clock face. Remind her that the hour hand shows the hour and the minute hand shows the minutes. Now, make sure she knows which hand of the clock is longer (the minute hand) and which hand of the clock is shorter (the hour hand). Pick an activity and find its time on the clock. Start with the activities that begin on the hour and then move to the activities that are on the half hour.

6. If your child is having trouble, move the hands around the clock, naming each hour as you go. Then give your kid a go at it. Not quite there yet? Don't worry. Telling time always becomes easier with practice...and time of course!

# Wrap up:

Invite students to read the time to the class.

# Days of the Week and Solar Months

# Learning Outcomes:

Students shall be able to:

- Explain that there are seven days in one week.
- Begin to say the names of the days of the week in order.
- Mame the solar months.

### Periods Required: 2

# Materials required:

- □ A calendar.
- A large sheet of paper divided into 7 columns, each headed with a name of one of the day of the week.
- A smiley for each student.
- □ Glue sticks.
- A record of the students' birthdays.

#### Starter:

- Ask some student about their date of birth.
- Explain that a year is the amount of time between one birthday and the next, or that they will spend a year in a school class before moving to the next class.
- Because it is such a long period of time, it is broken down into twelve months and each month is further divided into weeks.
- Ask if they know the names of any months, for example the month in which they were born.
- Introduce the solar months and help the students to learn the names.
- Continue to explain that months are divided into weeks and there are four weeks in a month, and that each week is divided into seven days.
- Ask if they know the names of any of the days of the week.
- Explain that they come to school on week days but not on the two days that are

called the weekend.

I Sing the rhyme lamp of the week to them.

#### Activities:

- Ask the students to open their books and read the names of the days of the week.
- Try to relate each day to an activity that the students do on that particular day and ask them what they do on Saturdays and Sundays.
- Explain that the days of the week are always written with a capital letter at the beginning.
- Drill the names of the days with the whole class and then round the class.
- ☐ Go through page 76 to 81.

## Wrap up:

Ask students to sing the song of the days of the week.

# Money

# Learning Outcomes:

Students shall be able to:

- **Explain** what money is used for.
- Recognize the one, two and five rupee coins and different notes.
- Add sums of money.

# Periods Required: 4

# Materials required:

- Empty food packages / toys to set up a shop in the classroom.
- Price labels for each item in the shop.
- It Student sets of real or plastic 1, 2, and 5 rupee coins.

#### Starter:

- Talk to the students about going to the shops with their parents and elicit that it is necessary to pay for the things we take from the shops, and for this we need to use money.
- Explain that the shopkeeper will add up the cost of the items we wish to buy and the customer has to give him / her that amount of money in order to take the things away.
- Introduce the coins and notes and on recognition.

#### Activities:

- Ask the students to open their books at page 64 and look at the coins and notes.
- H Let them complete the book work.
- Explain that these are some of the coins and notes which are used in Pakistan and make sure that each student can see the amount of money stamped on each coin.
- Talk about the sizes and colours of the coins:
  - Which is largest / smallest?
  - Which would enable you to buy more? etc.
- If Show the students the real coins and give some to groups of students so that they can feel them and examine them closely.
- Ask the students to look at the book.
- Talk about the objects in the shop and the prices.
- Ask the students which two coins would make Rs. 6, etc.
- Work through the addition sums together.

#### Book work:

Do the activities as given on page # 82 to 89.

## Wrap up:

Encourage students to introduce coins and notes to each other.