## International Pre-Primary



## Teaching Guide Year 1 Workbooks A and B



## Yasmeen Mehboob Arif Karedia

OXFORD

UNIVERSITY PRESS

## Introduction

The International Pre-Primary series of workbooks provides and consolidates key mathematical skills and concepts for pre-primary children.

Each focused unit has a variety of activities presented with clear instructions and images to support children's understanding.

This teaching guide is a helpful tool for teaching maths to young learners.
Each workbook page has a lesson plan and group (large and small) and individual activities that help the teacher to develop his/her teaching strategy well before the class.

The activities in these workbooks are part of a child's wider experience in learning mathematical skills and concepts, and support the importance using of models, images, and language to help their understanding. The activities in the guides build on these to consolidate learning.

Both class work and home assignments are given so that parents can also gauge the progress made by their child. The Student Learning Objectives page in the workbooks is a check for the progress the child makes.

Classroom resources should be arranged prior to the session planned. The use of number flashcards and picture cards is essential at this age level. Make sure they have practical resources available to use alongside the workbooks. The pictures throughout the workbooks giving rich opportunities for talk. Additional worksheets in the guides are resources that the teacher may need to use.

The time suggested for teaching each topic can vary according to the school calendar. And teachers may arrange lesson plans according to their requirement.

Enjoy teaching the young learners!

## Teaching Guide

 Year 1 Workbook A

## Yasmeen Mehboob <br> Arif Karedia

## Contents

## Introduction

| Unit I Objective | Sorting <br> - sort objects according to their colour, size, use and type | 2-6 |
| :---: | :---: | :---: |
| Unit 2 Objective: | Matching <br> match objects by looking for things that re the same and the things that ore different | 7-11 |
| Unit 3 Objective: | Comparing <br> - compare objects according to their colour, size <br> similarities, and differences | 12-15 |
| Unit 4 Objective: | Patterns <br> - identify/recognize patterns such as spots, <br> straight, curved, and wavy lines | 16-19 |
| Unit 5 Objectives: | Numbers I to 3 <br> - Write numbers 1,2 , and 3 - count how many <br> there are in groups of up to 3 objects | 20-23 |
| Unit 6 Objectives: | Numbers I to 5 <br> - write numbers 1 to 5 - count how many there <br> are in group of up to 5 objects | 24-27 |
| Unit 7 Objectives: | Flat shapes <br> - identifyrecognize 2 D shopes square, retangle, triangle, and circle | 28-30 |
| Unit 8 Objectives: | Counting I to 5 <br> - write numbers 1 to 5 - count how many there <br> are in groups of up to 5 objects | 31-33 |
| Unit 9 Objectives: | Numbers I to 9 <br> - write numbers 1 to 9 - count how many there are in groups of up to 9 objects <br> are in groups of up to 9 objects | 34-37 |
| Unit 10 | A look back at... | 38 |
| Workshee |  | 39-43 |

## Sorting

## Introduction:

Sorting is a math skill that forms the foundation for preprimary children. This skill helps children understand differences and/or similarities between things and how to classify them into particular groups.
At an early age, this skill develops an understanding of numerical concepts, grouping numbers and more complex concepts like making sets in later classes. Such activities encourage young children to apply their logical thinking to math in everyday life. Children may have their own ideas of how these objects are related.

## Lesson I: Sorting

Pages: 2 and 3 Suggested time:
40 minutes to I hour

## Notes

For making candies, take 8 empty small and big thread reels. Wrap 2 big and 2 small reels with red glazed paper. In this way make 3 more sets with three different colours, i.e. green, blue, and yellow.

## Objectives:

- to identify and sort similar and different objects, by observing their physical characteristics such as shape, size, and colour
- to classify similar and different objects into groups


## Resources:

4 baskets covered with red, blue, green, and yellow glazed paper; 8 empty thread reels in small and big sizes; glazed papers of different colours for making candies; a pair of scissors; a scotch tape; Workbook A.

## Vocabulary:

sort, colour, red, blue, green, yellow, size, type, same, different, big, small

## Motivational activity:

- Show candies of different sizes and colours to the children.
- Ask children to group the candies according to size and colour.
- The children can also:
- sort their favourite colourd candy
- put each sorted candy in the basket that matches its colour.

In this way, the teacher can engage more children for sorting and categorizing candies.
Call a few volunteers to sort the sweets and call another group to put the sorted sweets in the respective coloured baskets.

## Student activity:



- Divide the children into groups of three and give each group a basket of toys. Ask them to sort the toys according to type, colour, and size as per their choice.
- Show workbook pages 2 and 3 to the children and ask the following questions:
- How many boxes are there?
- What are the colours of these boxes?
- How many boxes are big and how many boxes are small?
- Which toys do you see here?
- How many cars can you see?
- What are the colours of the cars?
- How many cars are big and how many cars are small?

In the same way, ask questions related to the rest of the toys.

- Draw a few toys similar to those on pages 2 and 3 on the board and demonstrate how children should sort toys in the boxes by drawing lines. Then ask a child to sort the toys into the respective boxes by drawing a line.


## Written work:

Ask the children to open pages 2 and 3 and facilitate them in completing the task independently.

Lesson 2: Objects that go together
Page: 4
Suggested time: I hour

## Objectives:

- to examine a group of objects and explore possible ways to categorize them
- to recognize shapes and size


## Resources:

big empty cartons or boxes; a pair of scissors; a marker; Workbook A

## Notes

Cut buttons of different shapes and sizes from cartons or boxes. Make holes and outlines of the buttons with the help of a marker to make it prominent.

## Vocabulary:

button, oval, square, round, holes, same, different

## Motivational activity:

- Show buttons of different shapes to the children and ask them to identify their shapes.
- Hold a round-shaped button and ask:
- Which shape is this?
- How many holes can you see in this button?
- Hold one large and one small button of the same shape and ask children whether they are the same or different and how?
In the same way, ask questions related to other shapes.
- Involve the whole class in the next activity. Children can:
a sort buttons according to size
a sort buttons according to number of holes.


## Student activity:

- Show workbook page 4 to the children and ask the following questions:
- How many buttons are there?
- Which shape is this? (Point towards a square-shaped button.)
- Are these two shapes the same or different?
- How many holes are there in this button?

In the same way ask questions related to all other shapes.

- Reproduce page 4 on the board and demonstrate how children should sort out buttons which go together by drawing lines. Invite a child to sort same shaped buttons on the board.



## Written work:

Ask the children to open to page 4 and facilitate them in completing the task.
Lesson 3: Objects that go together Page: 5 Suggested time: 30 minutes

## Objectives:

- to examine a group of objects and explore possible ways to categorize them
- to recognize designs


## Resources:

Workbook A

## Vocabulary:

design, cups, saucers, match

## Notes

Make flashcards of different shoes to help children to differentiate between shoes, sandals, and boots.

## Student activity:

- Show workbook page 5 to the children and ask the following questions:
- How many cups are there?
- What is the colour of this cup? (Place your finger on a blue cup.)
- Can you see the same colour saucer? (Ask a volunteer to point out the same colour saucer.)
In the same way ask questions related to the rest of the dishes.



## Unit2 <br> Matching

## Introduction:

To develop mathematical thinking children must identify patterns, make connections, and recognize relationships. When they explore and begin to notice why things are same or different, they can match objects that have the same characteristics such as colour, size, shape, texture, and sound.

Once children have experienced matching concrete objects it is easier for them to match pictures and master the skill of matching by trying more complex math activities.

Lesson I: Find out the difference Page: $6 \quad$ Suggested time: I hour

## Objectives:

- to distinguish between similar and different objects according to their colour and shape
- to match the same objects
- to differentiate between objects according to their type


## Resources:

seashells; poster colours; a small mat; Workbook A

## Vocabulary:

match, pair, same, different

## Motivational activity:

- Show different coloured seashells to the children and ask them to:
- identify their colour
- match them with a similar shell of different size (big or small).
- Call 4 volunteers and ask them to pick up one shell with their eyes closed. Ask them to open their eyes and pick up a shell similar to the one they already have.
- Put one pair of similar shells on the mat and ask:
- What is the colour of these shells?


## Notes

Take 8 seashells of different sizes. Paint red and black dots on 2 shells, green and orange dots on 2 shells, yellow and purple dots on 2 shells, and blue and pink dots on 2 shells..

- How are both shells the same?
- Put another pair of different coloured shells on the mat and ask the same questions.

Repeat that these shells are different.
Help children to learn the concept of pairs.
Share with children that two similar things make a pair, and then ask them what body parts are in pairs (eyes, legs, hands, etc.).

## Student activity:

- Show Workbook page 6 to the children and ask the following questions:
- What are these?
- What are the colours of these shoes? (Point out one shoe at a time.)
- What is the colour of the shoes with laces?
- How many children have sandals at home?
- How many children wear buckled shoes?

In the same way ask questions related to the rest of the shoes.

- Draw a pair of matching shoes on the board and demonstrate how children should match shoes which go together by drawing lines.


## Written work:



Ask the children to open to page 6 and facilitate them in completing it.

Lesson 2: Matching Pairs
Page: 7
Suggested time: 30 minutes

## Objectives:

- to match the same objects


## Resources:

Workbook A

## Vocabulary:

match, pair, same

## Notes

As a home exercise for this page, the children can be asked, a day ahead, to check at home for their sandals, shoes with laces, etc.

## Student activity:

- Show workbook page 7 to the children and point out the objects and ask the following questions:
- What are these?
- Why is Ali confused?
- What is the colour of this sock?
- Can you find the pair for this sock? (Point towards one sock.)
In the same way, ask questions related to the rest of the socks.


## Written work:

Ask the children to look at page 7 once they are able to point out a pair and ask them to complete the task independently.


Lesson 3: Identify different objects
Page: 8
Suggested time: I hour

## Objectives:

- to identify different objects


## Resources:

I plastic fork; 4 plastic spoons; 3 cars; I doll; 3 pencils; I marker; a small mat; a counter; Workbook A

## Vocabulary:

different

## Motivational activity:

Show the different resources mentioned above and ask the children to name them.
Put 4 spoons and a fork on the mat and ask:

- How many spoons are there?
- How many forks are there?
- Where can you see these things?
- Are they all the same?
- What is the one thing different in them? (Ask a volunteer to put a counter on the object that is different.)

In the same way, ask questions related to the rest of the sets (3 pencils and one marker, 3 cars and one doll).

## Student activity:

- Show workbook page 8 to the children and ask the following questions for the first activity:
- What are these?
- Are all objects the same?
- Which one is different?

In the same way, ask questions related to the rest of the sets.

- Draw a group of objects on the board and demonstrate how children should draw a circle around the odd object. Ask a child to identify the odd ones by drawing a circle around them.


## Written work:



Ask the children complete page 8 of the workbook.
Lesson 4: Find out the difference
Page: 9
Suggested time: I hour

## Objectives:

- to identify differences


## Resources:

pictures of two sceneries; white board marker; Workbook A

## Vocabulary:

different

Notes
Use two A4 size card boards to make a simple scenery with mountains, the Sun, a house in the centre of the page, two trees, a cat sitting under a tree and a girl skipping a rope. In the other scenery, miss out some of the objects like one tree, girl without rope, and no Sun. Plastic coat or laminate both the sceneries.

## Motivational activity:

- Show one of the sceneries and ask the children to name the objects they see in the picture.
- What are these? (Point out to the mountains.)
- Where is the cat?
- What is the girl doing?
- How many trees are there?

Paste the second picture on the easel board next to the first picture so that the children are able to observe and compare. Ask the following questions:

- What are these? (Pointing towards the mountains in the second picture.)
- Can you see mountains in picture I? (Say: "So there are mountains in both the pictures.")
- How many trees can you see in the second picture? Let's count.
- How many trees in the first picture? Let's count again. (Say: "So there are three trees in the second picture and two trees in the first picture.")
a Are both pictures the same?
Ask similar questions to compare both the pictures. Invite a volunteer to come and circle the missing objects.


## Student activity:

- Show workbook page 9 to the children and ask the following questions:
- What can you see in this picture? (Pointing to picture I.)
- What is this? (Point to the helicopter.)

Ask similar questions for other objects. For example, point towards the house and ask what the shape of the window is. Or point to the same house in picture 2 and ask if both the houses are the same or different? How are they different?

## Written work:

Facilitate the children in completing the task on page 9.


## Comparing

## Introduction:

Comparing is an important and valuable skill when learning the concepts of length, weight, and capacity. While comparing, children observe and identify specific properties of different objects and then make judgments about how they are similar and how they are different.
Starter activities should involve comparing objects that children are familiar with. These activities are important for children as they promote the use of the five senses.
Lesson I: Comparing
Page: 10
Suggested time: I hour

## Objectives:

- to identify and compare similar objects by observing their physical characteristics such as shape and size
- to classify similar objects into groups


## Resources:

mystery bag; small mat; objects such as cups, pencils, sticks; tower of blocks; any available material of three different sizes (small, medium and big); Workbook A

## Vocabulary:

compare, size, type, different, short, shortest, small, smallest, long, longest, tall, tallest

## Motivational activity:

- Put all the above mentioned objects in the mystery bag.
- Ask the children to sit in a circle.
- Put similar objects of different sizes on the mat and ask the following questions:
- What are these? (Show pencils of different sizes.)
- What is the colour of the pencils?
- Ask two children to compare the pencils.
- Hold the longest pencil in one hand and the shortest in the other and repeat the vocabulary of longest and shortest.
- Introduce the word tall in the same way by using blocks.
- What are these? (Show block towers of different sizes.)
- What is the colour of the blocks?
- Ask a volunteer to compare tower blocks and point out the tallest one among them.

In the same way ask questions repeating the words 'tallest' and 'shortest' for the rest of the toys.

## Student activity:

- Divide the children into groups of three and give each group a mystery bag. Help the children by asking them to compare toys according to size.
- Show workbook page 10 to the children. Pointing towards the objects, ask the following questions:
- What are these?
- Where do you find them mostly?
- What is the colour of this fish? (Point out a specific fish.)
- Which is the smallest fish?
- Which is the largest fish?
- How many green fish are there?
- How many blue fish are there?


Keywords= campare longest inertent
talest uratest lergest
10) Cuncon

In the same way, ask questions related to the rest of the fish.

Lesson 2: Comparing
Page: II
Suggested time: I hour

## Objectives:

- to identify and compare objects by observing their size


## Resources:

cut-outs of shapes of different sizes; Workbook A

## Vocabulary:

compare, size, different, large, largest, small, smallest

## Notes

Take empty boxes of biscuits and cut out basic shapes of different sizes, i.e. big, small, and medium.
(4 to 5 of each size)

## Motivational activity:

- Show shapes of different sizes and colours to the children and ask them to identify the colours and differentiate by size (large and small).
- Ask two volunteers to pick their favourite shape, and then ask:
- Which shape is this? (Point to a square.)
- What is the colour of this square?
- Compare the sorted shapes by using the vocabulary of large and small.
- Engage more children in the activity. Repeat the vocabulary of large and small.

In the same way ask questions related to the rest of the shapes.

## Student activity

- Divide children into groups of three and give cut-outs of shapes to each group. Help the children by asking them to compare shapes according to size.
- Show workbook page II to children. Pointing towards the objects, ask the following questions:
- What are these? (turtles)
- Where do you see them mostly?
- What is the colour of...? (Point to a specific turtle.)
- Ask a volunteer to point out the largest and the smallest turtle.
- Demonstrate how children should match turtles by drawing lines. Then ask a child to match the turtles by size by drawing a line.
In the same way, complete the activity of
 matching the eggs.


## Written work:

Ask the children to turn to page II and facilitate them in completing the task.

## Objectives:

- to identify and compare objects by observing their size


## Resources:

## Notes

The same cut-outs will be used for this activity.
cut-outs of shapes in different sizes; Workbook A

## Vocabulary:

compare size, different, large, largest, small, smallest

## Motivational activity:

- Show squares of different sizes to the children.
- Ask a volunteer to identify the largest among them.
- Do the same activity by showing other shapes of different sizes.


## Student activity:

- Show workbook page 12 to the children. Ask the following questions:
- What are these? (tractors)
- Where do you see them mostly?
- What is the colour of the tractor?
- Ask any volunteer to point out the largest tractor.
- Demonstrate how children should circle the largest object.


## Written work:

Ask the children to open to page 12 and facilitate them in completing the task independently.

Home assignment:
Assign page 13 for homework.


## Unit 4 Patterns

## Introduction:

Patterns are all around us; repeating patterns are found in nature too. In pre-school, identifying and creating patterns is just the beginning of mastering skills upon which many mathematical concepts are based.
Learning to identify patterns helps children in developing critical thinking and reasoning skills. Times tables, addition, and skip counting all require an understanding of patterns.

Lesson I: Comparing
Page: 14
Suggested time: I hour

## Objectives:

## Notes

- to recognize patterns
- to explore patterns


## Resources:

handmade paper or cloth napkins (with any design); Workbook A

## Vocabulary:

line, wavy, straight, dots, curved

## Motivational activity:

- Ask children to sit in pairs.
- Put all the handkerchiefs in a basket.
- Ask a child to pick any handkerchief from the basket and describe it with his/her partner, by asking:
- What is the colour of the handkerchief?
- What is made on it?
- Help the children in identifying the patterns by using the correct vocabulary.
- Ask any pair of volunteers to come up in front and share their findings.
- Children may know the word design but may not be familiar with the word pattern. If they are unable to describe the handkerchief, help them to do so correctly.
- Repeat the same activity with 2 or 3 pairs of volunteers.
- Put any handkerchief on an easel board or the class notice board and help children describe it by asking close-ended or simple questions such as:
- What is the colour of the handkerchief?
- What is the colour of the flower on it?
- How many flowers are there?
- Tell children that the handkerchief has a pattern of flowers.

In the same way ask questions related to I or 2 other patterns.

## Student activity:

- Show workbook page 14 to the children. Ask the following questions:
- Where are the shops?
- Have you ever visited a market?
- Why do we go to the market?
- What is the colour of this cloth? (Point to a specific cloth.)
- What is made on it? (Yellow squares)
- Ask any child to point out the blue cloth and then ask:
- What is the pattern on it?
- Which cloth do you like the most?

In the same way ask questions for the rest of the cloths, repeating the word pattern.


Lesson 2: Match the Pattern
Page: 15
Suggested time: 30 minutes

Objectives:

- to identify and match patterns
- identify patterns in the class


## Resources:

flashcards; Workbook A

## Vocabulary:

line, wavy, curved, dots, straight

## Notes

Decorate the classroom soft board with borders. Cut out card paper strips and create designs with flowers, leaves, lines in different colours etc.

## Motivational activity:

- Show different flashcards to the children.
- Ask them to identify the picture. (Straight lines)
- Show another card of the wavy lines and ask what type of lines these are.

If children just say 'line', encourage them to be more specific. Give them the key words such as wavy lines, or zigzag lines. Words such curved or loop can also be introduced.

## Student activity:

- Show workbook page 15 to the children. Pointing towards the objects, ask the following questions:
- What are these? (T-shirts)
- Where do you see them mostly?
- What is the colour of this T-shirt? (Point to a specific T-shirt.)
- What is made on it?
- Ask the same questions for the other T-shirts.
- Demonstrate how children can match the T-shirts by drawing lines. Then ask a child to match a T-shirt.


Lesson 3: Trace lines
Page: 16
Suggested time: I hour

## Objectives:

- to identify animals and their homes
- to recognize different types of lines


## Resources:

flashcards of animals and their homes

## Vocabulary:

fish bowl, hive, stable, pond, straight, curve, wavy

## Motivational activity:

- Show flashcards and ask the following questions:
- What is this? (Show a flashcard of a horse.)
- What is the colour of the horse?
a Where have you seen a horse?
- Where do horses live?
- Show the picture of a stable and ask which animal lives here.

State that a horse lives in a stable.

- Show flashcards of different animals and their homes. This topic integrates well with general knowledge and is a good activity to recognize animals and their homes.


## Student activity:



- Show workbook page 16 to the children, paste flashcards on the board, and, pointing to a flashcard, ask the following questions:
- What is this? (Point to the fish.)
- Where do fish live?
- Tell the children that the fish has lost her home and we can help her find her home by tracing a curved line.
- Call a volunteer to match another animal with its home by asking the above mentioned questions.


## Written work:

Ask the children to open to page 16 and facilitate them in completing the task independently.

## Home assignment:

Assign page 17 as homework.

## Numbers I to 3

## Introduction:

Basic number concepts taught in a pre-school classroom set the foundation for learning more advanced mathematical concepts. Early exposure to number activities helps children to build their confidence.
The first step in number awareness is learning what the 10 numerals ( 0 through 9 ) look like. This requires strong visual discrimination skills since many numbers (such as 6 and 9 , or $I$ and 7 ) look very similar. Once a child is able to recognize and know each number name, he/she develops an understanding of the quantity each number represents.

Lesson I: Count how many Pages: 18 and 19 Suggested time: I hour

## Objectives:

- to recognize numbers
- to count up to 3 objects


## Resources:

3 toy cars; 2 balls; 3 markers; I bear; a big basket with toys from the classroom; flashcards of numbers I, 2, 3; a sand tray; Workbook A

## Vocabulary:

number, count

## Notes

To help children in tracing, fill a plastic tray with sand to make a sand tray.
Since this is the first workbook, focus on numerals and do not confuse children with numbers in words.

## Motivational activity:

- Ask the children to sit in a circle.
- Show toys to the children and ask the following questions:
- What is this? (Show a bear.)
- Do you have a teddy bear?
- How many teddy bears do I have? Let's count.
- Take out 3 teddy bears, count them loudly, and put the number 3 flashcard besides them.
- Ask questions related to other objects and engage the children in counting objects from their surroundings. For example:
- How many doors are there?
- How many fans are there?

In the same way ask questions related to the rest of the toys.

## Student activity:



- Divide the children into groups of three and give each group a toy basket and a set of flashcards. Encourage active learning by asking the children to count out the toys.
- Pointing to the toys, ask the following questions:
- What are these? (Point to the house.)
a How many houses are there? Let's count.
- What are these? (Point to the pencils.)
- How many pencils are there? (Say 2 pencils and write 2 in front of it.)
- What are these? (Point to the water bottles.)
- How many water bottles are there? (Say 3 water bottles and write 3 in front of it.)
- Count each object by showing the flashcard and calling out the number in words.
- Show page 18 to the children, and pointing towards the objects, ask the following questions:
- What is this? (a car)
- How many cars?

In the same way ask questions related to the rest of the objects.

- Trace I on the sand tray and then call every child to trace I on the sand. Help the children to trace all three numbers.


## Written work:

Ask the children complete pages 18 and 19 independently. Help where needed.

## Lesson 2: Number 2 <br> Page: 20 <br> Suggested time: 30 minutes

## Objectives:

- to recognize the number 2
- to count two objects


## Resources:

2 bags; 2 books; 2 handkerchiefs; toys from the classroom; flashcard of the number 2; sand tray; paper; crayons; Workbook A

## Vocabulary:

## Notes

Make cut-outs of numbers as follows:

- Trace numbers on a cardboard and on a sandpaper.
- Cut them out.
- Paste the sandpaper cut-out on the cardboard.
These number cut-outs help children to trace.
two, count, number


## Motivational activity:

- Ask the children to sit in a circle.
- Show an object and ask the following questions:
- What is this? (Show I bag.)
- Do you have a bag?
- How many bags do I have? Let's count.
- Show the flashcard of the number I and call out the number I.
- Add one more bag and ask:
- How many bags do I have now? (Count I, 2 and show the flashcard of 2.)

In the same way ask questions related to the rest of the objects and engage the children in counting objects from their surrounding.

## Student activity:



- Divide the children into groups of three and hand each group a sheet of paper. Ask them to draw any two things.
- Ask all groups to show their work.
- Draw pictures of some objects on the board in quantities of I, 2, and 3. Ask a volunteer to come and count the objects and circle the set with two objects.
- Write the number 2 on the board and demonstrate how to trace it.
- Write 2 on the sand tray and call children to trace the same number in the sand.
- Show workbook page 20 to the children, and pointing towards the objects, ask the following questions:
- What is this? (Point towards a starfish.)
- How many starfish are there?

In the same way ask questions related to the rest of the objects.

## Written work:

Ask the children to complete the task on page 20 independently.
Home assignment:
Assign page 21 for homework.

## Unit 6 Numbers I to 5

## Introduction

Understanding the significance of numbers will directly contribute to a child's success in the classroom. As an example, children in the classroom may be asked to "draw 5 circles", "pick 3 pencils", or "ask I question."

Lesson I: Count how many<br>Pages: 22 and 23<br>Suggested time: I hour

## Objectives:

- to recognize numbers
- to count up to 5 objects
- to write the numbers 4 and 5


## Resources:

any objects available in the classroom such as pencils, erasers, lunch boxes, notebooks, flashcards of numbers I to 5 sand tray; Workbook A

## Vocabulary:

one, two, three, four, five, numeral, number, count

## Motivational activity:

- Ask the children to sit in a circle.
- Put the material basket in front of the children and ask the following questions:
- What is this? (Show a notebook.)
- How many notebooks do I have? Let's count.
- Add one more notebook and ask the children to count. Repeat this till number 3.
- Ask a volunteer to count the objects and call another one to match the object with the number flashcard.
In the same way, ask questions related to the rest of the material and review numbers I to 3.
- By taking the same material, add one more notebook and ask the children to count. Keep adding notebooks to introduce the numbers 4 and 5. Show flashcards of the numbers 4 and 5 and ask the children to repeat the numbers.
- Ask questions related to other objects and engage the children in counting objects in the surroundings. For example: "how many chairs are there in the class?", "clap 5 times", "snap your fingers 4 times", etc.


## Student activity:



- Divide the children into groups of three and ask them to select a number card.
- Take them to the garden and ask each group to collect different things according to the number they have. For example, if a group has the number 3, they should collect 3 leaves.
- Guide the active learning process by counting the objects and matching them with the flashcard.
- Count all the objects by showing the flashcards and calling out the numbers. Paste the flashcards on the soft board for review.
- Pointing towards the objects on page 22 ask the following questions:
- What are these? (Point towards the pineapple.)
- How many pineapples are there? (Say 'one pineapple'.)
- How many apples are there? (Say ' 4 apples' and write 4 in front of them.)
- Help the children to trace and write the numbers 4 and 5 , one number at a time.


## Written work:

Ask the children to complete the task on page 22 independently. Help where needed.

## Home assignment:

Assign page 23 for homework.

Lesson 2: Matching numbers

## Objectives:

- to review numbers I to 5
- to count up to 5 objects


## Resources:

5 empty matchboxes; coloured computer or glazed paper; pebbles; buttons; marker; Workbook A

## Vocabulary:

one, two, three, four, five, count, number

## Notes

Take empty matchboxes and cover them with coloured computer or glazed paper in such a way that the inside part easily moves in and out. Write one number inside each box.

## Motivational activity:

- Ask the children to sit in a circle.
- Sing the poem: "one, two, three, four, five; once I a caught a fish alive". Count with the help of fingers.
- Open the matchbox and ask the children to read the number written inside. Call a volunteer to pick out the same number of buttons or pebbles.
- Repeat the same activity with other matchboxes and more volunteers.


## Student activity:



- Show workbook page 24 to the children, and pointing towards the objects, ask the following questions.
- What are these?
- Have you seen the flag of Pakistan?
- What is the colour of the flag of Pakistan?
- Where else have you seen a flag?
- Draw some objects on the board and ask any child to come and count the objects and match them with the correct number. Repeat with other children.

Written work:
The children should complete page 24 independently.

## Home assignment:

Assign page 25 as homework.

## Flat shapes

## Introduction:

Shape is one of the very noticeable attributes of the world around us. We notice rectangular buildings, square windows, round wheels, etc.
Learning shapes is important for a number of reasons. When children learn about shapes they start using words to describe their environment and possessions. It also develops their logical skills as they begin to learn the concepts of "same" and "different." Being able to identify differences and similarities also increases their analytical skills.
Shapes and letters have much in common. By understanding different shapes, children can easily form letters. It helps in understanding numbers, as counting plays an important part in identifying the number of sides a shape has.
Lesson I: Flat Shapes
Page: 26
Suggested time: I hour

## Objectives:

- to recognize shapes
- to identify and sort similar and different shapes by size


## Resources:

12 big cartons/boxes; 12 to 18 small, thin cartons/ boxes; paints and brushes; newspaper/recycled papers; glazed/coloured computer papers; a pair of scissors; scotch tape or glue; Workbook A

## Vocabulary:

circle, square, triangle, rectangle, same, different

## Motivational activity:

- Ask the children to sit in a circle.
- Show the children shapes of different sizes and colours.
- Ask them to identify the shapes and state the difference between their sizes (big or small).


## Notes

Take 3 big cartons/boxes cover them with coloured glazed paper. (Paint the box if recycled paper or newspaper is used.)
Cut a square shaped window in one side of the box. Prepare 3 boxes for each shape in the same way with a circle, a rectangle, and a triangle.
Paint the blank side of the small, thin cartons/boxes, and make cut-outs of 12 square shapes of different sizes. In this way make 12 cuts-out each for rest of the shapes.

- Ask a volunteer to sort the circles.
- In this way call three more volunteers to sort other shapes.
- Ask another four childern to put the sorted shapes in different boxes.
- Engage the children in active learning by doing the same activity independently in small groups.
- Give each group four big boxes, one of each shape and 16 cut-outs (four of each shape).


## Student activity:

- Show workbook page 26 to the children, point out the shapes and ask the following questions:
- How many boxes are there?
- What are the colours of these boxes?
- What shape is made on this box?
- Which is the biggest square?
- Which shape is this? (Point towards a rectangle.)
- Hold up a square and a rectangle and ask, "Are these shapes same or different?"
- Explain that a square has all equal sides but a rectangle has two equal opposites sides.
- Ask related questions in the same way for the rest of the shapes.
- Turn to page 26 and with the help of a coloured chalk or marker demonstrate how
 to sort shapes in the boxes by drawing lines. Ask a volunteer to sort the shapes to the respective boxes by drawing lines.


## Written work:

The children should now complete the task on page 26 independently.

## Lesson 2: Match shapes

Page: 27
Suggested time: 30 minutes

## Objectives:

- to recognize shapes
- to identify and match shapes from their surroundings


## Resources:

flashcards of shapes; 3D objects (related to 2D shapes); circle-shaped clock; square or rectangular-shaped picture or a painting; Workbook A

## Vocabulary:

circle, square, triangle, rectangle, same

## Motivational activity:

- Ask the children to sit in a circle.
- Show different objects to the children and ask them to identify the shapes. For example, a circular clock or a rectangular box of candies.
- You can also ask, "Can you find anything in the class that looks like a circle? In this way, engage more children in sorting and matching shapes from their surroundings.


## Student activity:

- Show workbook page 27 to the children and pointing towards different shapes, ask the following questions:
- What shape is this? (Point out one shape at a time.)
- What is this? (Point towards a clock.)
- What is the shape of the clock?
- Do you have a clock at home?
- What is its shape?

In the same way ask questions related to the rest of the shapes and objects.

- Turn to page 27 and with the help of a coloured chalk or marker demonstrate how to match shapes with the objects by drawing lines. Ask a child to match a shape to the respective object by drawing a line.



## Written work:

The children should now complete the tasks on page 27 and 28 independently.

## Home assignment:

Assign page 29 for homework.


## Unit 8 <br> Counting I to 5

## Introduction:

This unit is an extension of Unit 6. Repetitive counting help children in knowing their numbers well.

## Lesson I: Count how many <br> Pages: 30 and 31 <br> Suggested time: I hour

## Objectives:

- to review numbers
- to count up to 5 objects,


## Resources:

two sets of numbers I to 5 flashcards; two sets of picture cards with I to 5 objects; basket; Workbook A

## Vocabulary:

 one, two, three, four, five, how many, count
## Motivational activity:

- Ask the children to sit in a circle.
- Pass the basket around contaning the number and picture slips.
- Ask the children to pick up a slip, rotate the basket till all the children get one slip.
- Ask them to open the slip and see what is written on it.
- Ask any volunteer:
- What is written on your slip? (for example, he/she has number 3)
- Now ask who has the slip with 3 objects?

The question will be reversed if he/she has 3 objects, then ask who has the number 3.

- Make pairs of children.
- Ask the children to stand up, move around to find their partner with the same number or object. Those who find their correct partner can sit in the circle.
- Facilitate children to find their partners.

To make flashcards, take a quarter of an A4-size paper to make the number and picture slips. Write number I on one slip. Draw a picture of I object on another paper and fold the paper so that children cannot see what is written on it. In the same way make slips for numbers and objects 2 to 5 . Make sets according to the number of children.

## Notes

## Student activity:

- Write the numbers I to 5 on the board and ask the children to read these numbers.
- Draw objects on the board in quantites I to 5. Pointing towards the objects, ask the following questions:
- What are these? (shells)
- Where do you see shells?
- How many shells are there? Let's count.

- Show workbook page 30 to the children and ask them to count the shells.
- When the children colour the last shell in each raw, tell them that this is the total count. Let the children complete page 30 independently.


## Written work:

Do page 31 in the same way. It shows tracing and drawing activities.
Lesson 2: Trace and match numbers I to 5 Pages: 32 and 33

Suggested time: 40 minutes

## Objectives:

- to review numbers
- to trace numbers I to 5
- to count up to 5 objects


## Resources:

a big sand tray; board and marker; flashcards of numbers I to 5; Workbook A Vocabulary:
one, two, three, four, five, trace, count

## Motivational activity:

For writing practice, divide the class into two groups and do this activity with one group at a time to give individual attention.

- Ask the children to sit in a circle.
- Show a flashcard for a number.
- Ask them what the number is (for example, I).
- Ask a child to write I in the sand tray or on the board.

In this way, engage more children in writing numbers up to 5 in the sand tray or on the board to check the formation of the number.

## Student activity:



## Written work:

The children should complete the task on page 32 independently.

## Home assignment:

Assign page 33 as homework.

## Unit 9 <br> Numbers I to 9

Lesson I: Count how many

## Objectives:

- to review numbers I to 9
- to count up to 9 objects
- to state that 0 (zero) has no value


## Resources:

slips of numbers I to 9 ; pencils; spoons; books; handkerchiefs; shells; pebbles; markers; small baskets; sand tray; any available objects with quantity more than nine; Workbook A

## Vocabulary:

one, two, three, four, five, six, seven, eight, nine, zero, count

## Motivational activity:

- Ask the children to sit in a circle.
- Pass the basket around with the number slips.
- Ask the children to pick up a slip. Rotate the basket till all the children get one slip.
- Ask them to open the slip and see what is written on it.
- Ask the any child: "What is written on your slip?"
- Now ask other children one by one to tell what is written on their slips.
- Ask the children to stand up, move around, and collect any object of their choice from the baskets according to the number written on their slip.
- Those who collect the object sit in the circle.
- Facilitate the children to find the exact number of objects if they are unable to do it on their own.
- Once all children sit in the circle again, ask the children to show the number card and collected objects and count it with the whole group.
- Share that you have also collected the material according to your number card, show your basket of objects, and ask:
- How many objects are there? (nothing)
- Show the number card.
- What number is it? (Zero)
- Do I have any material in my basket? (No)
- Tell the children, "Zero means nothing".
- Play a game with the children. Tell them whatever number is called out they should clap accordingly.
- Number I (clap I time)
- Number 5 (clap 5 times)
- Number 3 (clap 3 times)
- Number 0 (clap 0 times)


## Student activity:

- Ask the children to sit in a circle.
- Show one flashcard.
- Ask them what number it is. (for example 6)
- Ask a child to write 6 in the sand tray or on the board.
- In this way, engage more children in writing numbers up to 9 in the sand tray or on the board to check the formation of the number.
- Write numbers from 0 to 9 on the board and ask the children to read these numbers.
- Show page 34 and pointing towards the objects, ask the following questions:
- What are these? (trees)
- Where do you see trees?
- How many trees are there? Let's count.
- Write number with the picture.
- In the same way repeat all 9 numbers and draw related pictures on the board to review.



## Written work:

Facilitate the children in completing the task on page 34 independently.
Treat page 35 similarly, asking the children to work on their own. Stop by each child to check the working.


## Home assignment:

Assign page 36 as homework.

Lesson 2: Match numbers I to 9
Page: 37
Suggested time: 30 minutes

## Objectives:

- to review numbers
- to count objects 0 to 9


## Resources:

IO empty shoeboxes; ice cream sticks;
Workbook A

## Notes

Cover all shoeboxes with coloured paper. Write a number on one side, so that the children can see.

Prepare 10 boxes by writing one number on each box (from 0 to 9 ).

## Vocabulary:

one, two, three, four, five, six, seven, eight, nine, zero, count

## Motivational activity:

- Ask the children to sit in a circle.
- Show a shoebox and ask the following questions:
- What is this? (A box)
- What number is written on it? (number 5)
- Invite a child to count 5 ice cream sticks and put them in the box.
- Ask another child to come and put the ice cream sticks in the box according to the given number.
- Show the shoebox with zero written on it and ask if sticks should be in it?
- Repeat that zero is nothing. The children should say "no sticks" or "zero."


## Student activity:

## Written work:

Facilitate the children in completing the task on page 37 independently.

## Home assignment:

As a home assignment, ask the children to draw a large zero on a cardboard and bring it to the class.


## A look back at...

- Unit 10 reviews all the concepts that are covered in Workbook A.
- Reinforce the concepts and explain each page with similar examples on the board.


## For example:

- On page 38 the topic is 'Sorting'; therefore the teacher should draw on the board and invite one child to tick the toys that are the same.
- Facilitate the children to do the task independently.
- This procedure is suggested for all the topics/pages of this unit.



## Sorting and matching

Tick ( $\checkmark$ ) the same shapes.
Cross ( $X$ ) the different shape.


Circle the cups with the same pattern.


Write how many balls are there for each type.
Colour the balls.


## -- - Worksheet 2

## Comparing

Colour the big cat, brown.
Colour the small cat, black.


Draw a big tree.
Draw a small tree.


Photocopiable material

Worksheet 3

## Patterns

Trace over the patterns.


# -- - - Worksheet 4 

## Count and match the number. Colour the worksheet.



3


$$
2
$$



## 5



Photocopiable material

Worksheet 5
Shapes
Colour the shapes as follows:


Photocopiable material

# Teaching Guide Year 1 Workbook B 



## Yasmeen Mehboob Arif Karedia

OXFORD<br>UNIVERSITY PRESS

## Contents

| Unit I Objectives: | Counting up to 10 <br> - write numbers 1 to $10 \bullet$ count how many there are in groups <br> of up to 10 objects $\cdot$ recognize | 46-48 |
| :---: | :---: | :---: |
| Unit 2 Objectives: | Counting sets <br> - write numbers 1 to 10 • count how many there are in <br> groups of up to 10 objects • learn one-to-one correspondence | 49-51 |
| Unit 3 Objective: | Solid shapes <br> - identify/recognize 3D shapes: cube, cuboid, cylinder, <br> sphere, and cone | 52-54 |
| Unit 4 Objectives: | Sorting and matching <br> - sort tojects occording to their shape, colour, size, se, and type • match obiects by looking for things that or the some ond things that tre different by colout same and things that are aifferent by colour | 55-57 |
| Unit 5 Objective: | Matching numbers <br> - match numbers to objects according to their quantity | 58-60 |
| Unit 6 Objectives: | How many? <br> - judge 'how many' objects in a group • count accurately | 61-64 |
| Unit 7 Objective | One more <br> - recognize and write 'one more' than a given number | 65-67 |
| Unit 8 Objective: | Comparing lengths <br> - compare lengths with the help of the key words | 68-70 |
| Unit 9 Objectives: | Numbers Ito 10 <br> - count and write numbers one (1) to ten (10) • link <br> numbers with symbols | 71-73 |
| Unit 10 | A look back at... | 74 |
| Workshee |  | 75-79 |

## Counting up to 10

## Introduction:

Counting is an all-important maths concept for the pre-primary children. As they progress from I to IO, to II and beyond, they will become experts at counting.

Lesson I: Counting up to 10 Pages: 2 and 3 Suggested time: 1 hour

## Objectives:

- to review and count numbers I to 10
- to relate numbers with quantity


## Resources:

thermopile (styrofoam) sheet; blue glazed or crepe paper; pictures of crabs, sea horses, fish and seashells; a basket of number flashcards; basket of picture cut-outs; Workbook B

## Vocabulary:

count, how many, one, two, three, four, five, six, seven, eight, nine, ten

## Notes

Cover a thermopile sheet with blue glazed/crepe paper in order to give the effect of the sea.
Prepare four sheets with 9 to 12 fish, sea horses, crabs, and shells (one object per sheet). Make their cut-outs and put them in a basket.
Prepare one basket for number cards and one for numbers ( 0 to 10 ) written in words.

## Motivational activity:

- Put the basket containing sea animals and seashell cut-outs on the table.
- Sing the rhyme:
'I 234 5, once I caught a fish alive'. (While singing, slide down the fish cut-out with the help of a string.)
'6 789 I0, then I let it go again' (bring up the fish cut-out).
Why did you let it go?
because it bit my finger so,
Which finger did it bite?
This little finger on the right.
The same rhyme enactment will continue for crabs and sea horses. For example: I 2
345 once I caught a crab alive...
- Ask the children to sit in a circle.
- Put all three baskets containing sea animals and seashell cut-outs, number cards, and cards with numerals written in words in front of them.
- Invite a child to take out crabs only from the basket and count them.

For example if he/she takes out 5 crab cut-outs; then ask another child to take out the number 5 card from the number basket and put it next to the 5 crab cut-outs.

- Ask another child to take out the card with the number 5 written in words from the other basket and put it next to the 5 number card.
- Do the same exercise for fish, sea horses, and seashells as well.


## Student activity:



- Divide the children into small groups and give them the object baskets.
- Involve the children in active learning by doing the above mentioned activity independently.


## Written work:

Show workbook pages 2 and 3 to the children and explain the activities.
Help them in completing the task independently.

$$
\text { Lesson 2: Counting up to } 10 \quad \text { Pages: } 4 \text { and } 5 \text { Suggested time: } 1 \text { hour }
$$

## Objectives:

- to relate numbers I to 10 with quantity
- to count objects from 0 to 10


## Resources:

a box of seashells or buttons or bottle caps; a tray/basket of numeric number cards; a tray/basket of number words on cards; Workbook B

## Vocabulary:

count, one, two, three, four, five, six, seven, eight, nine, ten, zero

## Motivational activity:

- Ask the children to sit in a circle.
- Show your hands to the children with all fingers folded and ask how many fingers are up. (They should answer, "none of the fingers is up.")
- Explain if none of the finger is up, it means zero, and zero means nothing.
- Raise one finger at a time ask how many fingers are up.
- Continue the activity till number 10 as mentioned on page 4.


## Student activity:



- Divide the children into small groups.
- Give two baskets to each group and ask the children to pick a number card from one basket and an object (seashells, bottle caps) of the same quantity from the other basket.
- For example, if a child takes out the number card 2 then he/she should pick two seashells from the other basket and put them besides the number card.


## Written work:

Explain pages 4 and 5 and then facilitate them in completing the task independently.

# Unit2 <br> <br> Counting sets 

 <br> <br> Counting sets}

## Introduction:

Counting in sets or groups is a major concept that children should learn from the start. They may have already observed animals in the zoo or birds in a park roaming in pairs or groups. This unit picks animals for this interesting activities.

## Lesson I: Counting sets Pages: 6 and 7 Suggested time: I hour

## Objectives:

- to review and count numbers 1 to 10
- to relate numbers with quantity


## Resources:

number cards; any object that can be used for counting such as pebbles or counters; Workbook B

## Vocabulary:

count, number, numbers I to 10 in words, match

## Motivational activity:

- Ask the children to sit in a circle.
- Take out the number I card from the number card basket and place one counter beside it.
- Then take out 2 from the number card basket and place two counters beside it.
- Do the same exercise for all 10 numbers.


## Student activity:



- Divide children into small groups and give them the object baskets.
- Involve children actively by explaining the activity on pages 6 and 7.
- Explain that objects counted collectively are called a group or a set.
- Separate the girls from the boys; explain that these are the groups or sets of girls and groups of boys.


## Written work:

Ask the children to do pages 6 and 7.
Lesson 2: Counting sets
Pages: 8 and 9
Suggested time: I hour

## Objectives:

- to relate numbers I to 10 with quantity
- to count objects from 0 to 10


## Resources:

empty matchboxes covered with coloured glazed/computer paper; beans or buttons;
Workbook B

## Vocabulary:

count, number, numbers I to 10 in words, match

## Motivational activity:

- Write numbers from 0 to 10 inside a matchbox (one number in each of the 11 matchboxes).
- Ask a child to pick up a matchbox, open it, and read what number is written on it.
- Call another child, asking him/her to take out the same number of beans/buttons from the basket and put them inside the matchbox.
- Repeat the same exercise for all the numbers one by one.


## Student activity:



- Divide children into small groups.
- Give three baskets of the material to each group.
- Let each child do the above activity independently.


## Written work:

Explain page 8 and ask the children to complete it.

## Home assignment:

Assign page 9 as homework.

## Solid shapes

## Introduction:

Children are used to seeing solid shapes from a very early age. The rattle, soft ball, doll and teddy bear have been present in the cradle. Telling them about different solid shapes during the early years is an extension to this exposure.
Lesson I: Solid Shapes Pages: 10, II and I3 Suggested time: I hour

## Objectives:

- to identify solid shapes
- to recognize solid (3D) shapes in our surroundings


## Resources:

a football; basketball; a cone-shaped birthday cap; a playing die; cereal box, a can or any other available solid (3D) object; a big storage bag with a ball or a cereal box inside; Workbook B

## Notes

Wrap any available 3D object shaped like a cube, cuboid, cone and cylinder with gift or computer paper. For example, cuboid-shaped biscuit or candy box, pack of crayons, box of pencils, die, ball, or a juice can.

## Vocabulary:

shape, same, different, solid, match

## Motivational activity:

- Ask the children to sit in a circle.
- Show the mystery bag to the children and tell them that the class will play a game.
- Put your hands in the mystery bag and say, "I am touching an object that is round. Can you guess what it is?"
- Take out the football and discuss its shape with the class.
- In the same way take out different objects from the bag such as a cereal box, die, cone-shaped birthday cap, or a can and share the properties of each solid shape.


## Student activity:



- Divide the children into small groups.
- Give each group the basket containing wrapped solid shapes.
- Ask the children to pick up one object and guess what shape it is by just touching it.
Written work:
Explain pages IO and II of the workbook and facilitate them in completing the task independently.
Lesson 2: Solid Shapes
Pages: 12
Suggested time: 30 minutes

Objectives:

- to relate numbers I to 10 with quantity
- to count from 0 to 10


## Resources:

a basket of fruits and vegetables; number card basket; Workbook B
Vocabulary: count, same different

## Motivational activity:

- Take a basket of fruits or vegetables to the class. (The basket could have 3 bananas, 2 apples, 4 oranges, I lemon, I onion.)
- Ask a child to pick up any of his/her favorite fruits from the basket.
- For example, if the child picks 2 bananas then ask another child to pick up the same number of fruits or vegetables from the basket and put them on the table.
- Ask other volunteers to do the same.


## Student activity:



- Draw some of the fruit on page 12 on the board and invite a few childern to do this exercise on the board.
- Ask them to feel the shape of the orange, apple, and watermelon, and explain that all these are like a ball and are solid shapes.


## Written work:

Children complete the task on page 12 independently.
Home assignment:
Assign page 13 as homework.

## Sorting and matching

## Introduction:

Sorting objects on the basis of their shape or characteristics plays an important part in the development of a child's inquisitiveness. Once things are sorted, then it is easier to match them for similarities in shape or colour, being part of a set, or on the basis of their use.

## Lesson I: Sorting and matching Pages: 14 and 15 Suggested time: I hour

## Objectives:

- to sort objects according to shape and properties
- to match objects according to shape


## Resources:

empty boxes of different shapes with their lids (e.g. perfume bottles; chocolate or biscuit boxes) etc.; stationery items such as crayons, pencils, erasers, sharpeners, plastic rulers; toys like cars, animals, etc.; Workbook B

## Vocabulary:

same, different, pair, together, match

## Motivational activity:

- Ask the children to sit in a circle.
- Show them one of the boxes and discuss its shape.
- Open its lid and show that the lid also has the same shape.
- Discuss the shapes of the other boxes and their lids.
- Now mix the lids of all the boxes and ask the children to take turns to match a lid with its box.


## Student activity:



To involve children actively in the learning process, divide them into four groups and give each group a basket containing different items. For example, one basket could contain different stationery items while another could contain plastic toys. Ask the children to sort the objects according to shape, colour, size, or use.

## Written work:

Explain the task on page 14 of the workbook and help the children complete it. Page 15 has been completed above as a group activity. Now let the children complete it in the workbook.

Lesson 2: Sorting and matching
Pages: 16 and 17
Suggested time:
40 minutes to I hour

## Objectives:

- to identify objects that are not the same
- to match number values


## Resources:

cups and glasses; spoons and forks; pencils and a scale; Workbook B

## Vocabulary:

count, same, different

## Motivational activity:

- From the classroom resources select some plastic spoons and forks, paper plates, plastic cups and glasses, pencils, rulers, etc.
- Now place 3 cups and I glass on a table and ask a child to identify the one that is different.
- Similarly put three pencils and I ruler on the table and invite another child to do the same task.
- Continue with different sets of objects.


## Student activity:



Ask the children to turn to page 17 .
It would be interesting to tell them some facts about ladybirds, about their velvetlike red skin, and how they appear after the rain. Ask the children if they have seen any.

## Written work:

Explain the task. The children should first count the spots on the ladybirds. They should then match the ladybirds with the same number of spots by drawing lines.

## Home assignment:

Assign page 16 as homework.

## Matching numbers

## Introduction:

Matching continues with numbers as well as with shapes. Counting also comes into play here. In maths, several concepts can be dealt with simultaneously; that is the beauty of this subject. Similar shapes are grouped together as a set; they are of the same colour and of a defined number. Children can learn counting, observe similar shapes, and colours, and see that a group is being defined.

Lesson I: Matching number Pages: 18 and 19 Suggested time: I hour

## Objectives:

- to match numbers and their values
- to match shapes


## Resources:

a set of number cards; different, colourful geometrical shapes made from cardboard; Workbook B

## Vocabulary:

count, match, number

## Motivational activity:

- The children sit in a circle.
- Place the shapes in a basket. Invite four children to sort the squares, triangles, circles, and rectangles into four groups.
- Ask another four children to count how many there are of each shape and pick the matching number card and place it beside the shape.


## Student activity:



Ask the children to open pages 18 and 19 of the workbook. They should easily complete this page once they have done the group activity above.

## Written work:

Ask the children to complete both pages once they have clearly understood what is required.

Lesson 2: Matching number Pages: 20 and 21 Suggested time: 30 minutes

Objectives:

- to match numbers and their values
- to match the shapes


## Resources:

blocks; counters; number cards; sheet of pink and brown paper; glue; a black permanent marker; Workbook B

## Vocabulary:

Take one sheet of brown paper and make 10 cones. Number the cones 1 to 10. Then take a sheet of pink paper and make 10 icecreams of such a size that each ice cream fits in the cone. Write numbers I to 10 on the ice creams as well.
count, same, different

## Motivational activity:

- Ask the children to sit in pairs in a circle.
- Place the blocks and counters in separate piles in front of them.
- Pick a pair and ask one child to count 5 blocks and place them separately. Ask the other child to count the same number of counters and place them beside the blocks counted by his partner.
- Ask other pairs to do the same activity with different numbers of items.


## Student activity:



For the cones and ice cream activity, select one child at a time. Pick a numbered cone and ask the child to find the matching ice cream from the pile of ice creams. He/she sticks it on the selected cone.
Complete the activity with other children.

## Written work:

Help children to complete the task on page 20.

## Homework assignment:

Page 21 is a matching numbers activity as well as writing practice. Assign it as homework.

## Unit 6 How many?

## Introduction:

In everyday life, there are many instances where estimating a quantity plays an important part. Children will have observed fruit or vegetables in greengrocers' shops or toys in shopping malls. They see the children of other classes lined up for assembly. They can see the numbers of cars parked on roadsides. Estimation skills observed for everyday objects give a better understanding of numbers. The teacher can help develop this skill by asking them to estimate an unknown quantity and comparing it to a known quantity.

Lesson I: Count how many
Pages: 22, 23 and 24
Suggested time: I hour

## Objectives:

- to count objects
- to estimate a quantity (How many?)


## Resources:

number flashcards; a basket; 5 pencils; 4 sharpeners; 3 notebooks; 8 rulers; 2 bags; (You can change the quantity according to availability of the items.); Workbook B

## Vocabulary:

how many, count, number

## Motivational activity:

- Ask the children to sit in a circle.
- Show the stationery items and ask the name of each item to make children familiar with them. For example:
- What is this? (It's a notebook.)
- What is this? (It's a sharpener.) and so on.
- Ask the children to count the stationery items.
- Take one item at a time, for example, pencils (5), hold them up in your hand and ask a child to say how many without counting.
- Now let the child count the items and ask how many there are. (5 pencils). Ask the child to pick the number card for 5 and show it to the class.
Note: By doing this, the teacher can assess whether the children recognize numbers.
In the same way, ask more children to count other sets of objects. Encourage children to estimate how many items. Praise the children who guess, even if they are incorrect.


## Student activity:



Show pages 22 and 23 and ask questions about the toys displayed. You can draw a few items on the board to make it clearer and encourage participation from the children.

- What are these? (aeroplanes)
- Where have you see aeroplanes?
- How many aeroplanes are there? Let's count!

Ask any child to write the correct number under the picture.
In the same way, point to another object and ask questions:

- What are these? (They're building blocks.)
- Do you have building blocks at home?
- What do you like to make with it?
- How many building blocks are there?

Can any one estimate how many building blocks are there?
After estimating, count with the whole group.

- Ask a volunteer to write the correct number under the picture.


## Written work:

The children should now turn to the workbook and complete pages 22 and 23. Help where needed.

## Homework assignment:

Assign page 24 as homework. Check in the next period.


## Lesson 2: Match numbers with objects <br> Page: 25 <br> Suggested time: <br> 30 minutes

## Objectives:

- to review numbers
- to match numbers with objects


## Resources:

flashcards of numbers 7 to I0; pictures of a few everyday objects like trees, chairs, spoons, in quantities of $7,8,9$, and 10 ; (Plastic toys can replace pictures if available.)

## Vocabulary:

seven, eight, nine, ten

## Motivational activity:

- Ask the children to sit in pairs.
- Ask each pair to pick up a number card.
- The pair collects that number of items from the classroom.
- Help each pair during the activity.
- Ask 2 or 3 pairs to show their collection to the whole group.


## Student activity:



Turn to page 25 and draw a similar picture on the board. Ask a volunteer to come and count the objects and match with the correct the number.

Written work:
Ask the children to complete the task on page 25 independently.

## Unit One more

## Introduction:

Counting is usually the first basic maths skill that young children learn. At this stage, children may have no understanding that numbers represent quantities and have relationships to other numbers. Addition helps children understand how numbers and quantities relate to one another. Basic addition skills give pre-nursery children a framework for mastering maths in later classes.

Lesson I: One more
Pages: 26 and 27
Suggested time: I hour

## Objectives:

- to count objects
- to add one more object to a set


## Resources:

toy cars; dolls; teddy bears; balls (any toys depending on availability); Workbook B

## Vocabulary:

one more, count, one, two, three, four, five, six

## Notes

Prepare for this lesson beforehand by cutting cardboard into cards and drawing on them sets of between I and 6 objects. For example, on one card draw 3 balls, on another card, 5 circles, and so on.

Motivational activity:

- Ask the children to sit in a circle.
- Show them some toys and ask the name of each to make the children familiar with them. For example:
- What is this? (It's a doll.)
- Would you like to play with the doll?
- Let's count these dolls.
- Tell a story:
a I have three dolls and my father buys me one more doll for my birthday. How many dolls do I have now?
- In the same way, ask questions related to other objects:
- What is this? (It's a bear.)
- Do you have a teddy bear?
- Let's count these bears.
- Another story could be:
a Sara has four teddy bears and her aunt gives her one more teddy bear (by adding one bear). How many teddy bears does she have now?


## Student activity:



- On the board, draw a few (let's say four) birds sitting on a branch. Ask the following questions:
- What are these? (They are birds.)
- Count how many birds are sitting on the branch.
- Count with the children and colour the same number with a board marker.
- Tell a story about four birds sitting on a branch and chirping; one more bird comes and joins them. How many birds are there now?
- Ask a child to come to the board and draw two balls. Ask the children: - How many balls are there? (two)
- Ask the child to draw one more ball and then ask:
- How many balls are there now?
- Now turn to page 26 of the workbook and explain the task.


## Written work:

Help the children to complete the task on pages 26 and 27.
Lesson 2: Draw one more Pages: 28 and 29 Suggested time: 30 minutes

## Objectives:

- to count objects
- to add one more to a given set of objects


## Resources:

flashcards of numbers I to 6; picture cards showing different quantities of different objects; white board marker; Workbook B

## Vocabulary:

one more, count, one, two, three, four, five, six

## Motivational activity:

- Ask the children to sit in a circle.
- Give one picture card to each child; ask them to count the objects.
- Observe their counting; ask some children to count and say how many objects are on the card.
- Now ask the children to draw one more object on their cards and then count how many there are now.
Observe the activity and help children if they face any difficulty.
Ensure that the children remain focused on the activity of 'one more' rather than on drawing.


## Student activity:



Turn to page 28 of the workbook and explain the task.

## Written work:

The children complete the task on page 28 independently.

## Homework assignment:

Assign page 29 for homework. Check it in the next period.

## Unit 8 <br> Comparing lengths

## Introduction:

Comparison of sizes like big or small, long or short, heavy or light, are concepts easily taught to the children. Comparative language/terms are essential in introducing this concept. This unit compares lengths. Children select long or short, or tall or short objects according to their lengths. Comparison can be between two of the same or different animals/objects or three of the same or different animals/objects. Explain that 'long' is used for objects lying horizontally, while 'tall' is for objects standing upright or vertically.

## Lesson I: Comparing lengths Pages: 30 and 3I Suggested time: I hour

## Objectives:

- to compare lengths
- to compare objects according to their physical features


## Resources:

toy animals or a zoo set; Workbook B

## Vocabulary:

long, longer, the longest, short, shorter, the shortest, the tallest, compare, length

## Motivational activity:

- Ask the children to sit in a circle.
- Show the animals and ask the children to identify them, e.g.
- What is this? (It's an elephant.)
- What is this? (It's a monkey.)
- What is this? (It's a giraffe.)
and so on.
- Where have you seen all these animals?

Now holding the monkey and the elephant:
a What colour is the monkey?

- What colour is the elephant?
- Which animal is taller? (monkey or elephant?)

The elephant is taller than the monkey.
Now add the giraffe to the animals and ask about the tallest of the three? (giraffe, monkey or elephant?)

The giraffe is the tallest animal.
Place the zebra and elephant side by side and point to their tails. Which animal has the longer tail? (zebra or elephant?)
The elephant's tail is longer than the zebra's.
Add the monkey and compare the tails of all three animals.

## Student activity:



Ask the children to turn to pages 30 and 31 of the workbook. Discuss the picture and ask the following questions:

- How many zebras are there?
- Where is the monkey?
- Which monkey has the longest tail?

Discuss the other animals in a similar way.

Lesson 2: Compare long and short Pages: 32 and $33 \quad$| Suggested time: |
| :--- |
| 30 minutes |

Objectives:

- to compare objects according to their physical features


## Resources:

different-sized candles; pencils; sticks; plants in pots; etc.; Workbook B

## Vocabulary:

long, longer, the longest, short, shorter, the shortest, the tallest, compare, length

## Motivational activity:

- Ask the children to sit in a circle.
- Show them two sticks and ask which stick is longer?

Now add a third longer stick and ask which is the longest of the three.

- Show two pencils and ask which pencil is longer and which is shorter.
- Select two children and ask them to stand in front of the class. Ask the other students to say which child is taller and which one is shorter.
- Next, call the tallest child in the class and ask the children to compare the heights of the three.
- Lastly, select five children randomly and ask them to line up according to their heights.
Note: The teacher should give any help needed. Call five more children and askthem to find their place within this group according to their height. In same way, the whole class can be asked to line up according to height.


## Student activity:



Turn to page 32 of the workbook and explain the task.

## Written work:

Help the children to complete the task on page 32.

## Homework assignment:

Assign page 33 as homework.

# Unit? <br> <br> Numbers I to 10 

 <br> <br> Numbers I to 10}

## Introduction:

This units revises counting numbers I to 10 , by relating everyday situations or events as the hockey being played as pages 34 .

Lesson I: Count how many<br>Pages: 34 and 35<br>Suggested time: I hour

## Objectives:

- to review numbers I tol0
- to count up to 10 objects


## Resources:

number flashcards; medium-sized pebbles; 10 to 12 zip-lock bags in a basket; Workbook B

## Notes

Put five pebbles in a transparent zip-lock bag, and 7 pebbles in another. In same way prepare ziplock bags of up to 10 pebbles for at least 10 groups of children.

## Vocabulary:

one, two, three, four, five, six, seven, eight, nine, ten, count

## Motivational activity:

- Divide the children into 10 groups and ask them to sit in a circle.
- Put the basket of number flashcards in front of the children.
- Pass the basket of zip-lock bags around and ask each group to pick one bag from the basket.
- Ask the groups to count the pebbles and select the corresponding number card.
- Supervise the children in doing this activity correctly.
- At the end, each group shows and counts its pebbles in front of the other children.


## Student activity:



Turn to page 34 in the workbook; tell the children about the game being played (hockey) and explain how it is played. Describe a few wins of the Pakistan hockey team in the past.
Point to the player with the number 2 T-shirt; similarly point to other players. Explain/elicit that the numbers are used to identify the players.

## Written work:

Ask the children to complete the task on pages 34 and 35 independently.
Lesson 2: Count how many
Pages: 36 and 37
Suggested time: 40 minutes

## Objectives:

- to count up to 10 objects
- to compare numbers with quantities


## Resources:

number flashcards; Workbook B

## Vocabulary:

one, two, three, four, five, six, seven, eight, nine, ten, count, basket

## Motivational activity:

- Select 10 children and ask them to sit in pairs.
- Ask each member of a pair to think of a number between I to 10.
- Put the I to $I 0$ flashcards upside down in front of the pairs. Ask each child to select a card.
- Now ask each to turn the card over and say if he/she has the same number as they had in mind. If a child gets the wrong card, he/she exchanges it with the correct one.
- Repeat with other pairs of children.


## Student activity:



Turn to page 36 and explain the task.

## Written work:

The children should complete the task on page 36 independently.

## Homework assignment:

The children should do page 37 at home.

## A look back at...

- Unit IO reviews all the concepts that have been covered in Workbook B.
- Explain each page in the revision section and help children to complete the tasks.


## For example:

- On page 38 the topic is match objects with numbers. The teacher should help to reinforce the concepts.
- Explain each activity and let the children complete them independently where possible.
- The revision pages can also be used for end-of-term assessments.



## Worksheet I---

## Counting

Count the birds in each set. Colour them.


Photocopiable material

## ----Worksheet 2

## Shapes

Tick ( $\mathcal{J}$ ) the flat shapes.
Cross ( $X$ ) the solid shapes. Colour them.


Photocopiable material
76

# Worksheet 3-- 

## Matching

Match the babies with their parents.
Colour the worksheet.


One more
Draw one more and colour the worksheet.

|


## Comparing lengths

Draw a longer pencil.


Draw a shorter ruler.


Draw and colour:
a long ribbon

a short ribbon
a short snake

a long snake


## Teaching Notes

