Vision Empower & XRCVC Teacher Instruction KIT Number 10

Syllabus: Karnataka State Board Subject: Mathematics Grade: First Textbook Name: Mathematics-Text cum Workbook (Revised)-First Standard Chapter Number & Name: 7. Number 10

1. OVERVIEW

1.1 OBJECTIVE AND PREREQUISITES

Objective

- Identify and learn to write number 10
- Count the objects using numbers

Prerequisite Concept

- Numbers 1-10
- One-digit and two-digit numbers

Content Index

Kindly Note: Activities marked with * are mandatory

OVERVIEW

1.1 OBJECTIVE AND PREREQUISITES

<u>LEARN</u>

2.1 KEY POINTS

ENGAGE

3.1 INTEREST GENERATION ACTIVITY

INTRODUCTION TO NUMBER 10

Activity 1: Introducing number 10 through a nursery rhyme*

3.2 CONCEPT INTRODUCTION ACTIVITIES

UNDERSTANDING NUMBER 10 USING TEN FRAME

Activity 2: Introduction to Ten Frame*

UNDERSTANDING DOUBLE DIGIT NUMBER

Activity 3: Understanding single digit and double digit numbers*

Activity 4: Identify and Write Number 10*

3.3 LET'S DISCUSS: RELATE TO DAILY LIFE*

4. EXERCISES & REINFORCEMENT

4.1 REINFORCEMENT

Activity 5: Hopscotch with numbers* Activity 6: Counting till 10 using magnetic balls or /stackable blocks <u>Teaching Tips:</u> <u>References</u> 4.1 IMPORTANT GUIDELINES* <u>Exercise Reading</u> <u>Perform Textbook Activity</u>

2. LEARN

2.1 KEY POINTS

Number 10 is the smallest two-digit number which comes after 9 and lies to the right of number 9 on the number line. Number 10 symbolizes the completion of a cycle.

2.2 LEARN MORE None

3. ENGAGE

3.1 INTEREST GENERATION ACTIVITY

Provide Homework

INTRODUCTION TO NUMBER 10

Activity 1: Introducing number 10 through a nursery rhyme* Materials Required: use fingers Pre-requisites: None

Activity Flow

The teacher can sing along with children the following nursery rhyme and can encourage them to use their fingers on their hands against the number called out in the song. Like for example when the number 1 is called children can show 1 finger and so on.

One Little, Two Little, Three Little Fingers

One little, Two little, Three little fingers, Four little, Five little, Six little fingers, Seven little, Eight little, Nine little fingers, Ten little fingers on my hand.

One little, Two little, Three little fingers,

Four little, Five little, Six little fingers, Seven little, Eight little, Nine little fingers, Ten little fingers on my hand.

3.2 CONCEPT INTRODUCTION ACTIVITIES

UNDERSTANDING NUMBER 10 USING TEN FRAME

Activity 2: Introduction to Ten Frame* Materials Required: Ten frame, buttons/Rajma seeds/beads or ping-pong balls and egg carton Pre-requisites: Rote counting 1-10, number sense

Activity Flow

Ten frame is a two-by-five rectangular frame into which counters are placed to demonstrate numbers less than or equal to 10. It has a top row and a bottom row and each row can fill 5 objects. When both rows are full you have 10 objects. Counters can be arranged in different ways to represent different numbers.

An egg carton can also be converted to a ten frame and balls can be placed inside the sections to count.

The teacher can call out a number and the children can then place that many number of counters inside the ten frame. The teacher can emphasize the importance of number 10 by saying it symbolizes the completion of a cycle and also the reason for the choice of ten is assumed to be that humans have ten fingers(digits). A filled ten frame holds 10 ones and can also be called as 1 ten.

UNDERSTANDING DOUBLE DIGIT NUMBER

Activity 3: Understanding single digit and double digit numbers* Materials Required: Montessori Material-Golden beads-1-golden bead unit, 1 golden ten-bar

Pre-requisites: NA

Activity Flow

Show the children one golden bead and tell them this is one unit. Let all the children hold and feel it. Next the teacher can take one ten bar and tell the children this is a ten bar and it feels very different from the unit. At every step let the children feel the teaching aid displayed. Tell the children that numbers (0 to 9) are single digit numbers and number 10 is a double digit number. The numeral (symbol) for number ten is 10. There are two digits in the number 10. They are 0 and 1.

Activity 4: Identify and Write Number 10* Materials Required: slate & Stylus

Pre-requisites: Nemeth code

Activity Flow

The teacher can introduce the nemeth code for Number 10 and also the number name to the children. The teacher can reinforce practice of the number and number name using the slate and stylus.

3.3 LET'S DISCUSS: RELATE TO DAILY LIFE*

Nature gave us ten fingers, and so it is natural for us to count in tens and it forms the base of the decimal numeral system.

4. EXERCISES & REINFORCEMENT

4.1 REINFORCEMENT

Activity 5: Hopscotch with numbers*

Materials Required: A bubble wrap hopscotch will provide the necessary sensory experience and will help hear other player's movements. Another alternative could be making slightly raised outlines or borders for the players to feel the outline. The teacher should emphasize the number the children are stepping on and also encourage the children to count (1-10) as they play.

Pre-requisites: NA

Activity Flow

- Introduce players with the hopscotch squares by taking them one square at a time and allowing them to feel the border.
- Allow players to explore and understand the location of all the 10 squares by foot. Tell them wherever a square is divided into half, they would be able to rest both their feet at the same time. The numbers are counted as follows: 1, 2 and 3, 4, 5 and 6, 7, 8 and 9, 10
- Begin the session in the following manner:
 - Square 1 both feet together
 - Square 2 and 3 one foot in each square
 - Square 4 both feet together
 - Square 5 and 6 one foot in each square and so on until they reach Square 10.
- Turn back and follow the path in the same manner. Allow children to practice this until they are well familiar with the spaces.

Activity 6: Counting till 10 using magnetic balls or /stackable blocks Materials Required: Magnetic balls/stackable blocks Pre-requisites: NA

Activity Flow

The teacher can divide the class into two groups and hand over 10 magnetic balls/blocks to each group. As the teacher calls out a number the children can then stack that many number of balls/blocks and display it to the teacher. The game can be made interesting by rewarding points to the group that stacks the number called out by the teacher first. Let each child in the group take turns and stack magnets/blocks.

Teaching Tips:

If there are any additional teaching tips then utilize this section to mention them.

References

http://www.infomontessori.com/mathematics/decimal-system-intoduction-to-quantity .htm https://info.kingsley.org/montessori-math-materials

4.1 IMPORTANT GUIDELINES

Exercise Reading

It is very important that the children practice their learnings as well as their reading. Hence have the children read out the newly learned concepts from their textbooks or other available resources.

Perform Textbook Activity

It is good practice to have the children perform the textbook activities. Your textbook activities might not be accessible hence go through this resource to learn how to make textbook content accessible.

Provide Homework

To evaluate their understanding and to help the student revise and implement the new learnt concept ensure to provide them with homework. Students should perform one or two of the questions mentioned above or from the textbook exercises with the teacher in

Class and the remaining may be given for homework. Also, ensure that the student knows their special skills linked to independently using their accessible books as it will be critical to doing homework independently

End of Document