

Vision Empower & XRCVC
Teacher Instruction KIT
Numbers – 11 to 20

Syllabus: Karnataka State Board

Subject: Mathematics

Grade: First

Textbook Name: Text cum Workbook(Revised)-First Standard

Chapter Number & Name: 9. Numbers-11 to 20

1. OVERVIEW

1.1 OBJECTIVE AND PREREQUISITES

Objective

- Learning to write numbers from 11 to 20.
- To identify and write before, after between numbers (up to 20).

Prerequisite Concept

- Numbers and counting up to 10

Content Index

*Kindly Note: Activities marked with * are mandatory*

OVERVIEW

1.1 OBJECTIVE AND PREREQUISITES

LEARN

2.1 KEY POINTS

ENGAGE

3.1 INTEREST GENERATION ACTIVITY

RECAPITULATION OF NUMBERS 1-10

Activity 1: Sing along rhyme –One little, Two little, Three little Indians*

3.2 CONCEPT INTRODUCTION ACTIVITIES

INTRODUCTION TO NUMBERS 11 To 20

Activity 2: Counting objects and identifying the number*

Activity 3: Writing numbers 11 to 20*

Activity 4: Missing numbers, after, before and in between numbers*

Activity 5: Smaller and bigger numbers*

GROUPING INTO UNITS AND TENS

Activity 6: Grouping numbers 11 to 20 into tens and units*

3.3 LET'S DISCUSS: RELATE TO DAILY LIFE*

4. EXERCISES & REINFORCEMENT

REINFORCEMENT

Activity 7: Count your steps*

Activity 8: Representing numbers 11 to 20 using ten frames*

Activity 9: Playing with Ganith mala to reinforce the concept of before, after, in-between

4.1 IMPORTANT GUIDELINES*

2. LEARN

2.1 KEY POINTS

Present one number at a time, beginning with number 11 till 20. This may help incorporate the concept of a ten frame. Using the number line will help children visualize the progression of numbers.

2.2 LEARN MORE

None

3. ENGAGE

3.1 INTEREST GENERATION ACTIVITY

RECAPITULATION OF NUMBERS 1-10

Activity 1: Sing along rhyme –One little, Two little, Three little Indians*

Materials Required: None

Prerequisites: None

Activity Flow

The teacher should motivate the class to rote count 1-10. The teacher can sing along with children the One little, Two little, Three little Indians.

ONE LITTLE, TWO LITTLE, THREE LITTLE INDIANS

One little, two little, three little Indians
Four little, five little, six little Indians
Seven little, eight little, nine little Indians
Ten little Indian boys.

Ten little, nine little, eight little Indians
Seven little, six little, five little Indians
Four little, three little, two little Indians

One little Indian boy.

3.2 CONCEPT INTRODUCTION ACTIVITIES

INTRODUCTION TO NUMBERS 11 To 20

Activity 2: Counting objects and identifying the number*

Materials Required: Pencils/sticks/marbles

Prerequisites: Oral Numbers 0-10, Counting skill

Activity Flow

The teacher starts the session by telling the children that she has a small group of objects set up on her table. Let's all count. The teacher encourages the children to count along. The teacher can have 10 objects to begin with. The teacher can add one more object to the lot and again count the total number of objects. Let's all count again. 1,2,3,4....10 and then comes 11 (Eleven). So the number after 10 is 11. This one-to-one counting is an important skill that needs to be practiced often.

In a similar manner, the teacher can introduce numbers till 20. Repeated oral counting helps children hear what the numbers sound like and learn the order.

Writing numbers 11 to 20

Activity 3: Writing numbers 11 to 20*

Materials Required: Slate & Stylus

Prerequisites: Nemeth code

Activity Flow

The teacher can introduce the nemeth code for numbers 11 to 20. The teacher can reinforce practice of these numbers using the slate and stylus.

Activity 4: Missing numbers, after, before and in between numbers*

Materials Required: Rope, clothespins/clips, braille number cards (11 to 20)

Prerequisites: NA

Activity Flow

The rope ends need to be tied up steadily and at a height, where children can reach comfortably. The teacher can start by clipping braille number cards from 11 to 20 one by one on

the clothesline and also encourage children to rote count from 11 to 20. The teacher can willingly make mistakes by saying out a wrong number in the sequence and allow the children to correct. For example, I think number 16 comes after 14.

The teacher can then distribute the braille number cards to students and then have children come up and clip the number cards on the clothesline. In the similar way the teacher can remove a few number cards from the clothesline and distribute them to the students and then the children clip the number cards on the clothesline.

The concept of missing numbers, before, after and between numbers can be taught to children through this activity.

Activity 5: Smaller and bigger numbers*

Materials Required: Building blocks, braille number cards (11to 20)

Prerequisites: rote counting and number sense (11to 20)

Activity Flow

The teacher can demonstrate the concept of small and big to class through the building blocks tower. One tower can have 11 blocks stacked up and the other tower can have 15 blocks stacked together and name them as tower A and B. Allow every child to touch and feel it. The teacher can then ask the class; which among the two towers is big or small? Tower B is big as it has more number of blocks stacked up. So, more the number of blocks, larger the number.

GROUPING INTO UNITS AND TENS

Activity 6: Grouping numbers 11 to 20 into tens and units*

Materials Required: Ice-cream sticks/toothpicks, rubber bands, paper cups

Prerequisites: rote counting and number sense (11to 20)

Activity Flow

Place a pile of sticks (say 11 sticks) on a table and tell children that it is easier to count objects when we group them into tens. Let's first make a bundle of ten sticks. Class count along (1,2,3...10) as I pick the sticks. Let's place a rubber band around the bundle of 10 sticks. I have 1 more stick remaining in the pile. Can we make another bundle of 10 with this 1 stick? No. So, then I have a total of 10 and 1 stick that will be 11(Eleven). So 11 is made up of 1 ten and 1 ones. Here we have two paper cups. The cup on your right is the unit's house and the cup on your left is the tens house. Let's place one bundle of ten sticks in the tens house and the remaining 1 stick in the unit's house. The teacher can continue this activity with the other numbers too.

Teach children that all the numbers from 11 to 19 are made up of one ten and a number of additional units. The number 20 is made up of two whole tens.

3.3 LET'S DISCUSS: RELATE TO DAILY LIFE*

- Daily transaction
- Counting and quantifying

4. EXERCISES & REINFORCEMENT

4.1 REINFORCEMENT

Activity 7: Count your steps*

Materials Required: None

Prerequisites: Counting and number recognition of numbers

Activity Flow

Have children count their steps (just by walking from one side of a room to another), or have them jump up and down 20 times. This will help reinforce counting till 20.

Activity 8: Representing numbers 11 to 20 using ten frames*

Materials Required: Two ten frames (egg cartons can also be used), 20 small objects of the same kind.

Prerequisites: Oral numbers and counting skill

Activity Flow

Give children two ten frames and 20 objects of the same kind. Have them create the number 11: one full ten frame, and a second ten frame with just one unit in it. Have them create the other numbers. This can be done in a reverse process too, starting with full ten frames and taking objects away.

Activity 9: Playing with Ganith mala to reinforce the concept of before, after, in-between

Materials Required: Ganith mala

Prerequisites: Oral numbers and counting skill

Activity Flow

Tie the two ends of the Ganith mala. Tell the children that all the beads on the Ganith mala have to be on the left side. As we move the first bead from the left to the right we count it as 1, when

we move the second bead, count two and so on till 20. Let children touch and feel the Ganith mala. In the process of counting the teacher needs to encourage children to practice counting. The teacher can frame questions like which number comes in between, which number comes before and after a particular number?

Teaching Tips:

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

References: None

4.2 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