Vision Empower & XRCVC

Teacher Instruction KIT

Zero

Syllabus: Karnataka State Board Subject: Mathematics Grade: 1 Textbook Name: Text cum Workbook (Revised)-First Standard Chapter Number & Name: 4. Zero

1. OVERVIEW

1.1 OBJECTIVE AND PREREQUISITES

Objectives:

• To develop the concept of zero.

Prerequisite Concept

- Counting
- Numbers
- Addition

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 the topic Activity 1: Singalong rhyme-Five Little Monkeys * 3.2 INTEREST GENERATION ACTIVITY Understanding Number Zero Activity 2: The Concept of 0* 3.3 LET'S DISCUSS: RELATE TO DAILY LIFE 4. EXERCISES & REINFORCEMENT

4.1 REINFORCEMENT

Activity 3: Hopping Zero* 4.2 IMPORTANT GUIDELINES

2. LEARN

2.1 KEY POINTS

Zero (0) is the numeral used to denote the absence of quantity.

2.2 LEARN MORE: NONE

3. ENGAGE

3.1 INTEREST GENERATION ACTIVITY Introduction to the topic Activity 1: Singalong rhyme-Five Little Monkeys * *Materials Required*: None Prerequisites: Understanding of numbers 1to 9

Activity Flow

Read out / sing / play the following song to the children and teach them the actions written in the brackets:

Five little monkeys (Hold up five fingers.)

Jumping on the bed. (Jump up and down.)

One fell off and bumped his head. (Fold in the thumb and tap the head.)

Mama called the doctor, and the doctor said, (Put thumb and pinky to ear like a telephone.)

"No more monkeys jumping on the bed." (Wag the index finger.)

Four little monkeys (Hold up four fingers.

Jumping on the bed. (Jump up and down.)

One fell off and bumped his head. (Fold in the pinky and tap the head.)

Mama called the doctor, and the doctor said, (Put thumb and pinky to ear like a telephone.)

"No more monkeys jumping on the bed." (Wag the index finger.)

Three little monkeys (Hold up three fingers.)

Jumping on the bed. (Jump up and down.)

One fell off and bumped his head. (Fold in the ring finger and tap the head.)

Mama called the doctor, and the doctor said, (Put thumb and pinky to ear like a telephone.)

"No more monkeys jumping on the bed." (Wag the index finger.)

Two little monkeys (Hold up two fingers.)

Jumping on the bed. (Jump up and down.)

One fell off and bumped his head. (Fold in the middle finger and tap the head.)

Mama called the doctor, and the doctor said, (Put thumb and pinky to ear like a telephone.)

"No more monkeys jumping on the bed." (Wag the index finger.)
One little monkey (Hold up the index finger.)
Jumping on the bed. (Jump up and down.)
She fell off and bumped her head. (Fold fingers into a fist and tap the head.)
Mama called the doctor, and the doctor said, (Put thumb and pinky to ear like a telephone.)
"No more monkeys jumping on the bed." (Wag the index finger.)
No little monkeys (Hold up closed fist.)
Jumping on the bed. (Shake the head.)
None were there to bump their heads.
Mama called the doctor, and then she said, (Put thumb and pinky to ear like a telephone.)
"No little monkeys jumping off the bed."

does zero mean? (it means "nothing").

3.2 INTEREST GENERATION ACTIVITY

Understanding Number Zero

Activity 2: The Concept of 0*

Materials Required: Basket, few real life objects like apples, toys, books. Prerequisites: Understanding of numbers from 1to 9

Activity Flow

Place two or three apples in each basket.

Talk with children about the quantity of apples in each basket: "How many apples are in this basket?" Count them one by one.

Take one or two apples out of one basket and put them in the other. Ask again how many apples are in each basket and count them.

Place all the apples in one basket, and leave the other empty. Have children count the apples in the full basket.

Compare the number of apples in the two baskets. Use words such as empty and nothing . Say, "Another name for nothing is zero, . We have five apples in one basket, and zero apples in the other basket."

3.3 LET'S DISCUSS: RELATE TO DAILY LIFE

Real life is full of opportunities for children to denote the absence of a quantity. Now, using the children's own daily lives and routines at school and at home, discuss how we use THE NUMBER 0 in our everyday lives. Here are some examples you could talk about: "You have 3 toy cars. How many will you have left if you let your friend play with all 3 of them?" "What if you are full and someone asked you how many more chapattis you want? What would you say?"

What about money? When your parents pay for something while shopping they are giving money for it. What would happen if they bought things for all the money they had in hand? How much would they have left?

Ask the children to give examples of their own.

4. EXERCISES & REINFORCEMENT

4.1 REINFORCEMENT **Activity 3: Hopping Zero*** *Materials Required:* Number cards from 0 to 9 Prerequisites: Understanding of numbers from 1 to 9

Activity Flow

Gather the children in a circle. Demonstrate a hop to them. Explain that each time you call out a number, they have to hop those many hops. Show them the number cards and tell them you are going to be picking numbers from the deck.

Call out the numbers. Occasionally, call out a zero as well and watch to see if the children hop for it or stay in their places.

Now shuffle up the cards and call out the numbers very fast.

Teaching Tips

None

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

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