

**Vision Empower & XRCVC**  
Teacher Instruction KIT  
**Data Handling**

Syllabus: Karnataka State Board

Subject: Mathematics

Grade: Second

Textbook Name: Mathematics-Text cum Workbook(Revised)-Second Standard

Chapter Number & Name: 12. Data Handling

## **1. OVERVIEW**

### **1.1 OBJECTIVE & PREREQUISITES**

#### **Objective**

- Collecting data by measuring.
- To discuss data and group them according to color, size and texture.
- To help draw conclusions from the data .

#### **Prerequisite Concept**

- Number sense, basic arithmetic.

#### **Content Index**

*Kindly Note: Activities marked with \* are mandatory*

#### 1. OVERVIEW

##### 1.1 OBJECTIVE & PREREQUISITES

#### 2. LEARN

##### 2.1 KEY POINTS

#### 3. ENGAGE

##### 3.1 INTEREST GENERATION ACTIVITY

###### INTRODUCTION TO DATA HANDLING

Activity 1: Story-How many chocolates did Akshay eat? \*

##### 3.2 CONCEPT INTRODUCTION ACTIVITIES

###### DATA REPRESENTATION

Activity 2: How many objects \*

##### 3.3 LET'S DISCUSS: RELATE TO DAILY LIFE

#### 4. EXERCISES & REINFORCEMENT

##### 4.1 REINFORCEMENT

Activity 3: Listing down the fruits \*

##### 4.2 IMPORTANT GUIDELINES

## 2. LEARN

### 2.1 KEY POINTS

Data means any information. Data handling refers to the process of gathering, recording and presenting information in a way that is helpful to others-for instance, in graphs or charts. This is useful in identifying patterns and trends and to predict and plan for the future (Griffiths, 2001). Data handling is also sometimes known as statistics and you will often come across it in the study of both Math and Science. Analyzing data to draw conclusions. We find data handling to be an integral part of children's mathematical understanding.

### 2.2 LEARN MORE

None

## 3. ENGAGE

### 3.1 INTEREST GENERATION ACTIVITY

#### INTRODUCTION TO DATA HANDLING

##### Activity 1: Story-How many chocolates did Akshay eat? \*

*Materials Required:* None.

*Prerequisites:* Days of the Week-Braille cards, pack of chocolates.

##### *Activity Flow*

Akshay loves to eat chocolates. His mother advises him not to eat too many chocolates as he might have a tummy ache. Akshay's father tells his mother that they should make a note each day of the number of chocolates Akshay eats? On a sheet of paper, they start to list down the days of the week starting from Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday and against that they make a note of the number of chocolates Akshay eats on each day. For example, on Monday-2 chocolates, Tuesday-3 chocolates, Wednesday-6, Thursday-5, Friday-1, Saturday-2 and Sunday-7.

Teachers can arrange the days of the week braille cards and encourage children to place that many chocolates eaten by Akshay each day.

Let children count the total number of chocolates consumed by Akshay in a week.

Questions:

What is the total number of chocolates Akshay had in a week? Answer:26

On which day did Akshay eat the most number of chocolates? Answer: On Sunday

On which day did Akshay eat the least number of chocolates? Answer: On Friday

This will help children get a fair idea about how a pictograph works.

### 3.2 CONCEPT INTRODUCTION ACTIVITIES

#### DATA REPRESENTATION

### **Activity 2: How many objects \***

*Materials Required:* Tactile table, bag/basket, pencils, pens, crayons, erasers, sharpeners, bindis.

*Prerequisites:* Number sense, basic arithmetic.

#### *Activity Flow*

To do this activity the teacher needs to keep ready the tactile table. Have a tactile table built with 2 columns, Column A & B and 5 rows approximately of size 2 \*2 inches. Let each child explore the empty tactile table using hand over hand mechanism and let them understand the rows and columns.

Read out the following:

Ananya celebrated her birthday yesterday and she had invited many of her friends to her birthday party. She received several gifts from her friends and she collected all her gifts and put them together in a bag/basket. She received pencils, pens, crayons, erasers, sharpeners. Let's see how many of each did she get and also the total number of gifts she received?

Here's the bag/basket of gifts. Encourage children to segregate the gifts accordingly.

Teachers should also instruct children how and what needs to be placed into each box. The first column can have the sample of each object present in the bag. In this case it would be pencil, pen, crayon, eraser, sharpener. So place the sample object in column A. Inform children that they have to count the objects and place the same number of bindis in the adjacent column beside the object.i.e. Column B, say for example- we have 4 pencils, children will need to place 4 bindis in Column B. Once children are done with placing bindis against all the objects, the teacher can pose the following questions.

1. What is the total number of gifts Ananya received?
2. Which gift is maximum in number?
3. Which gift is minimum in number?
4. When you compare pencils to the erasers, which among the two is more in number?
5. When you compare the number of crayons to sharpeners, which among the two is less in number?

### **3.3 LET'S DISCUSS: RELATE TO DAILY LIFE**

Information can be easily shown as charts and tables. This is mostly seen in books, on television, on the Internet or in newspapers.

## **4. EXERCISES & REINFORCEMENT**

### **4.1 REINFORCEMENT**

#### **Activity 3: Listing down the fruits \***

*Materials Required:* Fruits-Banana, Apples, Oranges, Guava, basket, tactile table, bindis

*Prerequisites: Counting, number sense, basic addition and subtraction.*

#### *Activity Flow*

Place a collection of fruits in the basket and let children list down the various kinds of fruits and place the bindis against the sample fruit in the table. Please refer to Activity 2 for more details. Let children work independently or in groups and teachers can check for understanding.

#### **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

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