# Vision Empower & XRCVC Teacher Instruction KIT Knowing Our Numbers

Syllabus: Karnataka State Board Subject: Mathematics Grade: 6 Textbook Name: Math Text cum workbook Chapter Number & Name: 1 & Knowing our Numbers

# **1. OVERVIEW**

# 1.1 OBJECTIVE AND PREREQUISITES **Objective**

Students will be able to:

- Compare numbers
- Make 4 digit numbers without repetition
- Shift digits from one place to another
- Expand 5 digit numbers
- Write 5 and 6 digits greatest number
- Read and write large numbers
- Estimate to the nearest tens by rounding off
- Estimate to the nearest hundreds by rounding off
- Estimate to the nearest thousands by rounding off
- Estimate sum or difference
- Use and expand brackets

# **Prerequisite Concept**

• Concept of 5 digit number, the concept of large numbers, place value, estimation and role of brackets.

TIK\_MATH\_G5\_CH1\_5-Digit number. TIK\_MATH\_G4\_CH11\_Measurement\_Length.

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Kindly Note: Activities marked with \* are mandatory

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# 2. LEARN

#### 2.1 KEY POINTS

- Estimation: To estimate means to find something close to the correct answer. In other words, you are approximating. We estimate for these reasons: To provide an order-of-magnitude size/cost/date about the project, so we have a rough idea of the size/cost/date for planning purposes.
- 2. Given two numbers, one with more digits is the greater number. If the number of digits in two given numbers is the same, that number is larger, which has a greater leftmost digit. If this digit also happens to be the same, we look at the next digit and so on
- 3. The smallest four digit number is 1000 (one thousand). It follows the largest three digit number 999. Similarly, the smallest five digit number is 10,000. It is ten thousand and follows the largest four digit number 9999

2.2 LEARN MORE

# **3 ENGAGE**

**3.1 INTEREST GENERATION ACTIVITY** 

#### **Activity 1: Numbers**

Materials Required: None Prerequisites: None

- Ask the students, where do we use numbers and the uses of numbers. Numerals are used for things like telephone numbers and pincode. Numbers are also used for identification rather than for mathematical calculation.
- Ask the students to think of examples where numbers are used as identifiers. Examples, In index - page numbers and chapter numbers are used as identifiers. Account number - Every customer has a unique account number.

House number - Number used as identifier.

• In mathematics, numbers are used to count, calculate and measure

# **3.2 CONCEPT INTRODUCTION ACTIVITIES**

## **Comparing Numbers**

Activity 2: Comparing numbers Materials Required: Taylor Frame Prerequisites: Place value

# Activity Flow

*Note: For succeeding number, preceding number, the greatest number and smallest number, refer to TIK\_MATH\_G5\_CH1\_5-digit number, activity 5,6,7,8.* 

To recall, ask the following questions to the students, to find the smallest and greatest in 4 and 5 digit numbers. Which is greatest among these:
 (i) 4536, 4892, 4370, 4452.
 The greatest number is 4892.
 The smallest number is 4370.

(ii) 15623, 15073, 15189, 15800. The greatest number is 15800. The smallest number is 15073.

- Explain the identification of greatest and smallest numbers with an example.
- The greatest number has the most thousands and the smallest is only in hundreds or tens.
- Ask the students, how do they compare 4875 and 3542?
- Then, ask the students to write these numbers in Taylor frame and compare the digits in each place value.
- Explain that these two numbers have the same number of digits. They both are in thousands. But the digit at the thousands place in 4875 is greater than that in 3542.
  - The number 4875 has 4 thousand.
  - The number 3542 has 3 thousand.
  - Therefore, 4875 is greater than 3542.
- Ask the students to compare 4875 and 4542.
- Explain, here the numbers have the same number of digits. Further, the digits at the thousands place are the same in both.
  - *Ie, both the numbers have 4 thousand.*

- So ask the students to move to the next digit, that is to the digit at the hundreds place. The digit at the hundreds place is greater in 4875 than in 4542.
  - The number 4875 has 8 hundred.
  - The number 4542 has 5 hundred.
  - Therefore, 4875 is greater than 4542.
- Ask the students to find the greatest and the smallest numbers. Let them write these numbers in Taylor frame to compare and to find the answer.

(i) 35286, 35245, 35270, 35210.
The greatest number is 35286.
The smallest number is 35210.
(li) 28951, 23787, 24569, 24659.
The greatest number is 28951.
The smallest number is 23787.

# Four-digit Numbers

## Activity 3: Making 4 digit numbers without repetition

Materials Required: Taylor Frame

*Prerequisites:* Ascending order, descending order and concept of 4- digit number. Refer to TIK\_MATH\_G5\_Number, activity 10.

Activity Flow

• Ask the students to write the greatest and smallest 4 digit numbers for the following digits. Also to write the preceding and succeeding number for the greatest number.

(i) 9, 5, 0, 1.
The greatest number is 9510.
The smallest number is 1059.
The preceding number is 9509.

Succeeding number is 9511.

b) 8, 4, 3, 5
The greatest number is 8543.
The smallest number is 3548.
The preceding number is 8542.
Succeeding number is 8544.

- Give the following digits to the students. The digits are 1,8,9,0.
- Using these digits, ask the students to make different 4-digit numbers in such a way that no digit is repeated in them. Thus, 1890 is allowed, but 1180 is not.
- Ask them to make as many 4-digits numbers as they can.
  - We get: 1908, 9180, 9810, 1089, 1098.

- Ask the greatest and smallest numbers which they can get?
  - The greatest number is 9810 and the smallest is 1089.
- Ask them to think about the arrangement of the digits in both the numbers.
- Ask the students, how the largest and smallest numbers are formed? Numbers arranged in descending order will give the largest number and numbers arranged in ascending order will give the smallest number.
- Ask the students to use the given digits without repetition and make the greatest and smallest 4-digit numbers in Taylor frame.

2, 8, 7, 4 (i) *Greatest number- 8742* Smallest number- 2478 9, 7, 4, 1 *(ii)* Greatest number - 9741 Smallest number - 1479 (iii) 4, 7, 5, 0 Greatest number- 7540 Smallest number - 4057 (Hint: 0754 is a 3-digit number). (iv) 1, 7, 6, 2 Greatest number - 7621 Smallest number – 1267

# **Introduction to 10000**

## Activity 4: Introduction to 10,000 Materials Required: Taylor Frame

Prerequisites: Concept of 4-digit number

- Ask the students to form the smallest 5 digit number using 0 and 1 with repetition on the Taylor frame and let them explain how they will do it? The answer is 10,000. Since zero cannot be placed in the ten thousand place so that it will be a 4 digit number. Therefore, we should write 1 in ten thousand place and rest all are zeros.
- Explain the following to the students.
   Beyond 99 there is no 2-digit number. 99 is the greatest 2-digit number. Similarly, the greatest 3-digit number is 999 and the greatest 4-digit number is 9999.
- Ask the following questions:
  - What if you add 1 to 9?
  - What if you add 1 to 99?

• What if you add 1 to 999? Look at the pattern : 9+1=10=10 times 1 99+1=100=10 times 10 999+1=1000=10 times 100

Explain to the students that the greatest single digit number + 1 = smallest 2 digit number.. Similarly,

Greatest 2 digit number + 1 = smallest 3 digit number.

Greatest 3 digit number + 1 = smallest 4 digit number.

Ask the students, what will you get if you add 1 to 9999?
 Adding 1 to the greatest 4-digit number, you would get the smallest 5-digit number, that is 9999+1=10000. The new number which comes next to 9999 is 10000. It is called ten thousand.

*Further*, 10000 = 10 times 1000.

#### **Place Value**

#### Activity 5: Revisiting the place value

*Materials Required:* Braille number cards of 1, 10, 100, 1000, 10,000, Taylor frame. *Prerequisites:* Place value.

#### Activity Flow

*Note: Refer to TIK\_MATH\_G4\_CH2\_Numbers.* 

- Ask the students to read and write the expanded form for the number 57,630 in Taylor frame.
  - Expanded form is,

5 times 10,000 + 7 times 1,000 + 6 times 100 + 3 times 10 + 0 times 1

- Make two groups, and give 10 braille cards of each place value 1, 10, 100, 1000, 10,000 to group 1.
- Let group 2 give the 5-digit numbers to group 1 so that group 1 should read aloud and pick those many place value cards corresponding to each digit in a number. For example, for the number 47,370 they have to pick 4 ten thousand cards, 7 thousand cards, 3 hundred cards, 7 ten cards and 0 one cards.
- After a few rounds, give the place value cards to group 2 and tell the group 1 to give the 5-digit numbers.

#### Activity 6: Place value - Game

*Materials Required:* Braille number cards of 1, 10, 100, 1000, 10,000. *Prerequisites:* None

## Activity Flow

- Let them play a game to see, how many have understood the concept of the place value of a 5 digit number?
- Make a group of 5 students where each of them represents a place value of 5 digit number 1, 10, 100, 1,000, 10,000.
- Let them sit in a circular form then shuffle all 5 sets of braille number cards of place value from 1 to 10,000 and put it in the middle. Ask each of them to take 5 cards randomly.
- Now, the teacher should name each of them with place value secretly, so that none of them will know who is what except their own place value.
- Teachers should give 5 digit numbers ranging from 11,111 to 55,555. Suppose the number is 54,321, then each student with respect to their place value has to collect those many place value cards among themselves by passing only one card at a time. So, whoever collects the required number of cards first for the given number will be the winner. For example, if a thousand place value student has collected all 4 cards of thousands then he will be the winner, otherwise need to play until they collect.
- The student who collects the required card first wins and gives away the cards that he/she doesn't need.
- Hence, give the following numbers to the students 43,342 and 15,432. let them play and learn.

# Introduction to 1,00,000

# Activity 7: Introduction to 1,00,000

*Materials Required:* None *Prerequisites:* Introduction to 10000. Refer to activity 4.

- Ask the students, what will be the number, if you add 1 to the greatest 5 digit number? Answer is 1+99,999 = 1,00,000.
- Explain them adding 1 to the greatest 5-digit number, which will give the smallest 6digit number : 99,999 + 1 = 1,00,000. This number is named as one lakh. One lakh is the next place value of ten thousand. Which is also called a succeeding number of 99,999.
- Ask the following questions to the students.
  - 1 times 1,00,000 which number ? Answer is 1,00,000.
  - 10 times of which number = 1,00,000. The answer is 10,000.

- *Which number times 1000 = 1,00,000. The answer is 100.*
- Explain the expanded form of 6-digit number.
   Expanded form of 2,46,853 is
   2 times 1,00,000 + 4 times 10,000 + 6 times 1,000 + 8 times 100 + 5 times 10 + 3 times 1
- Now, ask the students to write the expanded form for the following numbers.
   4,07,928 = 4 times 1,00,000 +0 times 10,000 +7 times 1,000
   +9 times 100 +2 times 10 +8 times 1

6,00,829 =6 times 1,00,000 +0 times 10,000 +0 times 1,000 +8 times 100 +2 times 10 +9 times 1.

#### Introduction to large numbers

#### **Activity 8: Introduction to large numbers**

*Materials Required:* Braille number cards of 1, 10, 100, 1000, 10,000 and Taylor frame *Prerequisites:* Concept of 2-digit, 3-digit, 4-digit.

Activity Flow

Ask students to complete the following pattern orally. Complete the pattern : 9+1=10
99+1=100
999+1= which number? Answer is 1,000
which number + 1=10,000. The answer is 9,999.
99,999 + which number =1,00,000. The answer is 1.
9,99,999+1= which number? Answer is 10,00,000.
which number + 1=1,00,00,000. The answer is 99,99,999.

Do the following activity:

- Make two groups, and give 10 braille cards of each place value 1, 10, 100, 1000, 10,000, 1,00,000, 1,00,000 to group 1.
- Let group 2 give the following numbers to group 1 either on the Taylor frame or orally, so that group 1 should read aloud and pick those many place value cards corresponding to each digit in a number.
- For example, for the number 1,34,890 they have to pick 1 lakh card, 3 ten thousand cards, 4 thousand cards, 8 hundred cards, 9 ten cards and 0 one cards.
- The numbers are 2,46,853, 4,00,029, 6,57,34,543.

## Activity 9: Large numbers in practice

*Materials Required:* Tactile ruler, braille measuring tape, marked liter mugs. *Prerequisites:* Measurement. Refer to TIK\_MATH\_G5\_CH11\_Measurement\_length.

Activity Flow

- Ask the following questions to students.
  - What is the unit of measuring length and distance?
  - Answer: Millimeter, Centimeter, Meter, Kilometer.
- In the market, Geetha has brought 20kg of rice and 50g of chilies. What does kg and g stand for?

Answer: Kg is kilogram and g is gram. These are the units to measure weight.

• If you take 10 liters of milk every day, then what will be the total amount of milk required for a week?

*Answer: Milk required per week* = *milk consumed per day times number of days in week. i.e.* 10 times 7 = 70 liters

Here, liter is a unit to measure liquids.

• Ask the students to give examples for the units centimeter, kilogram and liter.

Let them know in detail about the measuring units.

- Ask the students to observe and count the number of small markings between the 1st and 2nd centimeter in a tactile ruler. There are 10 small markings added up to give 1 centimeter. That is10 millimeter = 1 centimeter
- Ask them to measure the length of a stylus using a tactile ruler. So, the length will be less than a centimeter. So anything less than a centimeter will be measured as millimeters.
- Ask the students to measure the length of the book and Taylor frame.
- Explain to the students, to measure the length of the classroom or the school building, centimeters are too small so we use meters for this purpose. 1 meter = 100 centimeters
- Explain the following to the students,

10 millimeter = 1 centimeter

- 10 centimeter =  $10 \times 10$  millimeter; 10 centimeter = 100 millimeter
- 100 centimeter =  $10 \times 100$  millimeter, i,e 100 centimeter = 1000 millimeter
- Similarly, 1 meter = 100 centimeters. 1 meter = 100 centimeters = 1000 millimeters.
- To measure the distance between cities, the meter is too small. We use kilometers to measure the long distance.

1 kilometer = 1000 meters

Ask the students how many millimeters make 1 kilometer?
 1 meter = 1000 millimeter,

Since 1 kilometer = 1000 meter = 1000 times 1000 millimeter =10,00,000 millimeter

• We buy rice or wheat in kilograms. But items like ginger or chilies which we do not need in large quantities, we buy in grams.

1 kilogram = 1000 grams and 1 gram = 1000 milligram.

• Ask the students, if they require 12 liters of cooking oil for 7 days, then how many liters of oil is required for 3 weeks.

Answer: Number of liters of oil required for 3 week = 3 times the number of liters of oil for 1 week = 12 times <math>3 = 36 liters.

Similarly, what is the capacity of a bucket for holding water? It is usually 20 liters. Capacity is given in liters.

But sometimes we need a smaller unit, the milliliters. A bottle of hair oil or medicine and quantity of liquids in milliliters (ml).

1 liter = 1000 milliliters.

## Estimation

# Activity 10: Estimation

*Materials Required:* Marbles *Prerequisites:* Addition, multiplication and measurement.

#### Activity Flow

#### NEWS

Approximately, 2000 people were killed and more than 50000 injured in a cyclonic storm in coastal areas of India and Bangladesh.

- Explain to the students that the quantities given in the above example are not exact counts, but are estimates to give an idea of the quantity.
- The word approximately itself shows that the number of people were near about these numbers.
- Ask the students where do we approximate? Give the following example.
- In marriages, the host doesn't know the exact number of visitors/guests, so he/she estimates the number of visitors to prepare/ arrange food for them.
- Ask the students to guess or approximate the number of holes in Taylor frame? Then ask them to count and verify with the exact number of holes in a frame.
- Place a jar filled with marbles in front of the class. Ask them to touch the height and width of the jar to guess the number of marbles occupied in the jar.

.

• *Give the following problem and discuss with the students to solve the problem.* 

# Example:

Sunil is working on his garden. He has decided to plant a new cabbage garden that measures 63 centimeters by 49 centimeters. He is at the garden center, hoping to buy some new 10 cabbage plants, and each cabbage has to be planted 12 centimeters away from other cabbages.

Sunil needs to work out how many cabbages to buy.

Each row is about 60 centimeters long, so Sunil will be able to plant about 5 cabbages in each row (12 times 5 = 60). The garden is about  $48 = 4 \times 12$  centimeters wide, so Sunil can plant 4 rows of cabbages. Altogether, Sunil can plant about  $5 \times 4 = 20$  cabbages, so he needs to buy 20 cabbages.

# Estimating to the nearest tens by rounding off:

- Ask the students to write numbers from 10 to 20 and ask the following questions.
  - *How would you round off 17 to the nearest tens?*
  - Ask the students which ten is nearest to 17.(20 or 10?)
  - 17 is closer to 20, if you add 3 to 17, you will get 20. Between 17 and 20, only 2 numbers are there.
  - 10 is far from 17, between 10 and 17, 6 numbers are there.
  - 20 is closer to 17, so we round off 17 to 20.
- Now consider 12, which also lies between 10 and 20. However, 12 is closer to 10 than to 20. So, we round off 12 to 10, correct to the nearest tens.
- Explain to the students that the numbers 1,2,3 and 4 are nearer to 0 than to 10. So, we round off 1, 2, 3 and 4 as 0. Number 6, 7, 8, 9 are nearer to 10, so we round them off as 10. Number 5 is equidistant from both 0 and 10; it is a common practice to round it off as 10.

# Activity 11:Estimating to the nearest hundreds by rounding off:

Materials Required: None

*Prerequisites:* Estimation to the nearest tens.

Activity Flow

Estimating to the nearest hundreds by rounding off:

Ask the students, is 310 nearer to 300 or to 400?
 Between 300 and 310, 9 numbers are there. They are 301, 302, 303, 304,....309.
 Between 310 and 400, 90 numbers are there. They are 311, 312, 313, ...,399.
 310 is closer to 300, so it is rounded off to 300, correct to the nearest hundred.

- 589 lies between 500 and 600. It is nearer to 600, so it is rounded off as 600 correct to nearest hundred. Numbers 1 to 49 are closer to 0 than to 100, and so are rounded off to 0. Numbers 50 to 99 are closer to 100 than to 0, and so are rounded off to 100. Number 50 is equidistant from 0 and 100 both. It is a common practice to round it off as 100.
- Check if the following rounding off is correct or not. Correct those which are wrong.
  - 841 rounded off to 800. Answer is correct
  - 9537 rounded off to 9500. Answer is Correct
  - 9870 rounded off to 9800. Answer is wrong, and the correct answer is 9900.
  - 49730 rounded off to 49700. Answer is Correct

## Similarly,

- Estimating to the nearest thousands by rounding off:
- The numbers 1 to 499 are nearer to 0 than to 1000, so these numbers are rounded off as 0. The numbers 501 to 999 are nearer to 1000 than 0 so they are rounded off as 1000. Number 500 is also rounded off as 1000.
- Ask the students to check if the following rounding off is correct or not :
  - 2573 rounded off to 3000. Answer is correct
  - 53552 rounded off to 53000. Answer is wrong and the correct answer is 54000.
  - 6404 rounded off to 6000. Answer is correct.
  - 65437 rounded off to 65000. Answer is correct.

#### Activity 12: To estimate sum or difference and product.

#### Materials Required: None

*Prerequisites:* Round off to tens, hundreds and thousands.

#### Activity Flow

To estimate sum or difference:

There are many instances where we need to find the answers more quickly. For example, when you go to the market with your parents, there you can help your parents by estimating the money they need to buy the vegetables.

• Ask the students to solve the problem given below.

*Estimate:* 7,290+27,986

Solution : 27,986 > 7,290. Round off to thousands. 27,986 are rounded off to 28,000 and 7,290 are rounded off to 7,000. Therefore the estimated sum is 28,000+7,000 = 35,000.

To estimate products:

- What is the estimate for  $15 \times 76$ ? It is obvious that the product is less than 2000. Why? If we approximate 15 to the nearest tens, we get 20 and then approximate 76 to nearest tens, we get 80 and  $20 \times 80 = 1600$
- Ask the students to solve the problems given below.
  - 578×161
  - Answer: 578 is rounded off to nearest 600 and 161 is rounded off to 170.
  - *So, 600 times 170 is 1,02,000.*
  - $5281 \times 3491$ 
    - Answer: 5281 is rounded off to 5000 and 3491 is rounded off to 3000.
    - So, 5000 times 3000 is 1,50,00,000.

#### Activity 13: Use of brackets.

Materials Required: None Prerequisites: None

#### Activity Flow

- Ask the following question to the students and ask what are the ways each will solve the problem.
- Explain the use of brackets.
   Surya bought 8 notebooks from the market and the cost was 12 per notebook. His sister Seema also bought 7 notebooks of the same type. Find the total money they paid. Seema calculated like this:12 times 7 + 12 times 8 = 84 + 96 = 180.
   Surya calculated the amount like 12 times 7 + 12 times 8 = 12 times (7+8) = 12 times 15 = 380.
- Even though both the methods will give the correct answer, we can reduce the step while calculating by taking common number putting brackets. Here Surya made use of the brackets to group 6 and 7 where 12 is common to both of them and would be able to calculate it fast, whereas Seema didn't use it and it took comparatively more time than Surya.
- Make two groups and give them the following questions, let us see which group solves fast.
- Shania and Rita work for 6 days; Shania works 5 hours a day and Rita 8 hours a day. How many hours do both of them work in a week? Answer: Total number of hours both of them work in a week

Answer: Total number of hours both of them work in a week =(5+8) times 6=14 times 6=84 hours.

- 2. Write the expressions for each of the following using brackets.
  - Four multiplied by the sum of nine and two. Answer is 4 times (9+2)

- Divide the difference of eighteen and six by four. Answer is (18-6) divided by 4.
- 3. Raju has a habit of buying 10 chocolates every day in a week and he will share 3 chocolates with his sister every day. What is the total number of chocolates he has left with him for the whole week.

Answer: 7 times (10-3) = 7 times 7 = 49.

Expanding brackets:

Now, explain how use of brackets allows us to follow our procedure systematically.

i) 7 times 
$$109 = 7$$
 times  $(100 + 9)$   
= 7 times  $100 + 7$  times 9  
= 700 + 63  
= 763  
102 times  $103 = (100 + 2)$  times  $(100 + 3)$   
= 100 times  $100 + 2$  times  $100 + 100$  times  $3 + 2$  times 3  
= 10,000 + 200 + 300 + 6  
= 10,000 + 500 + 6  
= 10,506

Similarly, solve this step by step, 234 times 79 = (200+30) times (70+9)

Answer is 5570.

# Roman Numerals Activity 14: Roman Numerals

*Materials Required:* Nemeth code of all the Roman numerals : I, II, III, IV, V, VI, VII, VII, IX, X, L, C, D, M which denotes 1,2,3,4,5,6,7,8,9,10,50,100,500 and 1000 respectively.

Prerequisites: None

Activity Flow

What are the Roman numerals?

Roman numerals are graphic symbols, that is letters, that were used in the ancient civilization of Rome and then in Europe until the Arabic numbers were introduced, around 1300 AD. For almost 2000 years, this was how the numbers were written in the Roman Empire and Europe.

Numbers that we use today are the so-called Arabic numbers. Example of Arabic numbers: 1, 2, 3, 30, 2013, 5047. They are called so because they entered Europe through the Arab

civilization, advanced at that time. Arabs took the numbers from the Indians (Hindu). Indian mathematicians invented (or copied from other unknown sources) the concept of zero, nonexistent in other known civilizations. Their system, very simple, yet very powerful, based on only 10 symbols (0 through 9), was on a fast track to be adopted worldwide. The Romans had no representation for zero, they used a word to replace it: "nulla".

Examples of Roman numerals

*I* = 1, *II* = 2, *III* = 3, *IV* = 4, *V* = 5, *VI* = 6, *VII* = 7, *VIII* = 8, *IX* = 9, *X* = 10 and so on.

## How Roman numerals are used now

Around 1300, after some 2,000 years of history, Roman numerals were abandoned in favor of the more efficient Arabic numbers. But they continued to be used, in various forms, until today, to represent watch hours, dates, centuries, for numbering chapters in books, writing names of leaders and monarchs, or even to make reading numbers impossible for the layman.

Ask the students to form numbers using Roman numerals and Arabic numerals(decimal number system) and discuss which number system is better to form a greater number.

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

Numbers play an important role in our daily life. Almost all the things we do involve numbers.

For example:

- 1. Roman numerals are still in use. To count or show the number of years and also in clock we have Roman numerals to represent time.
- 2. To handle money, we need to know numbers and the place value of digits. For example: using 100 rupees, how many 10 rupees pens can you buy?
- 3. In the local market, the shop owner rounds off the value to its nearest ten. When someone buys vegetables for 102 rupees, the shop owner rounds it off to 100.

# 4 EXERCISES & REINFORCEMENT

4.1 PRACTICE EXERCISES Activity 15: Practice and Recall Materials Required: None Prerequisites: None

- 1. Fill in the blanks:
  - (a) 1 lakh = \_\_\_\_\_ ten thousand.
  - (b) 1 million = \_\_\_\_\_ hundred thousand.
  - (c) 1 crore =\_\_\_\_ ten lakh.
  - (*d*) 1 crore =\_\_\_\_ million.
- 2. Write the numerals:
  - (a) Seventy three lakh seventy five thousand three hundred seven.
  - (b) Nine crore five lakh forty one.
  - (c) Seven crore fifty two lakh twenty one thousand three hundred two.
  - (d) Fifty eight million four hundred twenty three thousand two hundred two.
  - (e) Twenty three lakh thirty thousand ten.
- 3. A book exhibition was held for four days in a school. The number of tickets sold at the counter on the first, second, third and final day was respectively 1094, 1812, 2050 and 2751. Find the total number of tickets sold on all the four days.
- 4. Shekhar is a famous cricket player. He has so far scored 6980 runs in test matches. He wishes to complete 10,000 runs. How many more runs does he need?
- 5. Kirti bookstore sold books worth 2,85,891 rupees in the first week of June and books worth 4,00,768 rupees in the second week of the month. How much was the sale for the

two weeks together? In which week was the sale greater and by how much?

- 6. Find the difference between the greatest and the least 5-digit number that can be written using the digits 6, 2, 7, 4, 3 each only once.
- 7. A student multiplied 7236 by 65 instead of multiplying by 56. By how much was his answer greater than the correct answer?

# Activity 16: Exercises

*Materials Required:* None *Prerequisites:* Estimation, Round off to nearest hundreds

- 1. Estimate each of the following using general rule:
  - (a) 730+998
  - *(b)* 796–314
  - *(c)* 12,904 + 2,888
  - (*d*) 28,292 21,496

- 2. Give a rough estimate (by rounding off to nearest hundreds) and also a closer estimate (by rounding off to nearest tens) :
  - (*a*) 439+334+4,317
  - (b) 1,08,734-47,599
  - *(c)* 8325-491
  - (*d*) 4,89,348-48,365
- *3. Estimate the following products using general rule:* 
  - (a) 578×161
  - (b) 5281×3491
  - (c) 1291×592
  - (d)  $9250 \times 29$

# 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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