### Skill/Competency/Concept
- Knowledge
- Understanding
- Comparison
- Problem Solving Ability

### Target Learning Outcomes
- Draws different figures (sea creatures) using different shapes.
- Reads and writes large numbers.
- Can round off the numbers to nearest ten, hundred and thousand.
- Understands the relationship between speed, distance and time.
- Understands concept of loan, interest and saving
- Solves word problems based on large numbers.

### Suggestive Strategies
- Individual Task
- Demonstration Method
- Play Way

---

**Sample Activity – 1**

**TLO: Draws different figures using different shapes.**

Class may be divided into groups of three to five students and groups may be given task of picture frame based on theme “SEA”. For this students may be advised to use different sea creature.

One example is given here for their help.
Sample Activity-2  
TLO: Reads and writes large numbers

DICE GAME: Make your own dice having any number from 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 instead of only 0 to 6. Make such six different/similar dices to play the game. Throw six dices at a time and note down the number facing up side. By using these digits, form a greatest or smallest number of 6-digit.

Learning Assessment

1. The smallest 5-digit number is ___________.
2. Write the number name of 347856
   __________________________________________________________________________.
3. Write the place and place value of the underlined digit- 8632169
   Place = ___________ place value = ___________.
4. Write the number in expanded form:
   532985 = _____ + _____ + _____ + _____ + _____ + _____
5. Arrange the following numbers in ascending order
   a) 943586, 943576, 695350, 843586
6. By using following digits form 5-digit smallest and greatest number:
   2,5,0,9,6
   Smallest 5-digit Number : ______________________
   Greatest 5-digit Number : ______________________
7. Rounding the following numbers to the nearest ten and nearest hundred:
   (a) 452: nearest ten ___________ nearest hundred ___________
   (b) 1253: nearest ten ___________ nearest hundred ___________
8. Find :
   (a) Speed = 15 km/hr, Distance = 75 km , Time = ? (Time = Distance / Speed)
<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggestive Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Understands the concept of a ray, line, line segment.</td>
<td>Individual Task</td>
</tr>
<tr>
<td>Understanding</td>
<td>Distinguishes between corners, edges, straight and curved edges.</td>
<td>Group Task</td>
</tr>
<tr>
<td>Classification</td>
<td>Understands the meaning of an angle.</td>
<td>Demonstration Method</td>
</tr>
<tr>
<td>Measurement</td>
<td>Knows the different types of angles.</td>
<td>Play Way</td>
</tr>
<tr>
<td>Skills of using tools</td>
<td>Classification of angles as acute, obtuse and right angle.</td>
<td></td>
</tr>
<tr>
<td>Problem Solving Ability</td>
<td>Can properly use the protractor to draw an angle.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solves simple problems related to the measurement of different angles in real life.</td>
<td></td>
</tr>
</tbody>
</table>

Sample Activity – 1

TLO – Knows the different types of angles.

SURYA NAMASKAR – Show the yoga posters of Surya-Namaskar to the students. Make a group of six students and ask them to take position of first 6-steps of Surya-Namaskar and then the remaining 6-steps. All the remaining students of class will also follow the steps one by one.
Co-relate the yoga posture with the term angle.

Sample Activity – 2 TLO - Classification of angles as acute, obtuse and right angle.

Engage the students by asking them to quickly look around the classroom and identify five angles. The students can discuss their identified angles with their partners. Students should discuss if the angles are larger or smaller than 90 degree. Call the class together and allow a few students to share their findings.

Suggested Activity

1. Ask children to observe the small plants and identify different types of angles formed by branches of plant.
2. Write the name of your favourite cricket player by using straight lines only. Count and tabulate the number of different types of angles (i.e. acute, right and obtuse).

![KVS5](https://via.placeholder.com/150)

Learning Assessment

1. Angles are measured in ____________.
2. An angle whose measure is in between 0° and 90° is called ____________.
3. Two line segments with the common end points form an ____________.
4. Identify the types of angles of given measurement:
   a) 45° b) 85° c) 130° d) 180° e) 90°
5. Count the number of angles in each of the following figures:

![Diagram](https://via.placeholder.com/150)

6. Draw angles of given measurement by using protractor:
   a) 65° b) 150° c) 78°
Sample Activity – 1

TLO: Understands the concept of area and perimeter.

Field Activity – Mark the field for Kabaddi game by using measuring tape.
The ground shall be 11m X 9m.
For women and Juniors the measurement shall be 10m X 8m.
The mid line drawn divides the play ground into two courts.
There shall be strip of one meter wide on each side of the playfield, which is called Lobby.
In each half, at a distance of about 3m from the mid-line and parallel to it, lines of the full width of ground shall be drawn. These are Baulk lines.

Similarly students can mark the field for KHO-KHO and BADMINTON COURT. It gives the better idea of area and perimeter to the students.
Learning Assessment

1. Calculate and write the perimeter for each of these shapes shown below.

   - Triangle: 5 cm, 3 cm, 4 cm
     Perimeter = ______ cm
   - Square: 3 cm, 5 cm
     Perimeter = ______ cm
   - Pentagon: 4 cm, 4 cm, 8 cm
     Perimeter = ______ cm
   - Octagon: 6 cm
     Perimeter = ______ cm

2. Find the area of the shaded part. Each box represents 1 square cm.

<table>
<thead>
<tr>
<th>Figure</th>
<th>Area (in sq. cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
</tr>
</tbody>
</table>

3. The length of the boundary of a closed figure is called its ____________ .

4. The unit of perimeter is same as the unit of ____________ .

5. Perimeter of Δ PQR = ______ + ______ + ______
6. Perimeter of a square = ______ X ______

7. Perimeter of a rectangle = ______ X (______ + ______)

8. Area of square = ______ X ______

9. Area of rectangle = ______ X ______

10. Whose area is greater: a rectangle of length 8 m and breadth 5 m or a square of side 7 m?
Test Yourself

1. Write the Number:
   Twenty three lakhs four thousand three hundred nineteen__________________

2. Write the number in words 6,27,539.
   _______________________________________________________________________

3. Compare the given numbers and put > ,<, or _
   254320 _______ 2550236

4. If 5862304 – 2784955 = 3077349,
   What is 2784955 + 3077349 = _____________

5. The measurement of a straight angle is__________

6. When I open my fingers 4_______________ angles are formed between fingers.

7. Form the smallest and the greatest 5 digits number using the digits
   (Without repeating the digit)
   7,3,0,5,4 = Smallest ____________ Greatest ____________

8. Draw the angles of given measurement by using protractor:
   a) 75°  135°

9. Choose any one picture and draw by using plane figures in given space:

OR

10. Write the short form of  800000 + 70000 + 4000 + 20 + 5= _____________

11. Write the type of angle
   (a)  40° =____________ angle,
   (b)  90°=___________angle.

12. Calculate
   (a) area of a rectangle whose length = 11 cm and breadth = 7 cm
(A) (a) Ram rides his bike with a constant speed of 8 km/h. How long will he take to travel a distance of 14 kilometers?
   (speed = 8 km/hr, distance = 14 km, Time = ?)
   Sol: \[ \text{Time} = \frac{\text{Distance}}{\text{speed}} \]

(b) A van moves with a speed of 34 km per hour. How far can it travel in 4 hours?
   (speed = 34 km/hr, time = 4 hr, distance = ?)
   Sol: \[ \text{Distance} = \text{speed} \times \text{time} \]

(B) Draw the hands of clock when they make an angle which is less than a right angle. Also write the time.

   Time:

(C) The cost of one kg Guava is Rs. 60 and one Kg. Apple is Rs. 120.
   Calculate the total cost of half Kg Guava and half Kg Apple
   Sol.
   Cost of ½ kg of Guava =
   Cost of ½ kg of Apple =
   Total cost of ½ kg of Guava and ½ kg of Apple =

(D) Find the area of each of the shaded portion given below in 1 cm square grid.
### Skill/Competency/Concept
- Knowledge
- Understanding
- Comparison
- Conversion
- Problem Solving Ability

### Target Learning Outcomes
- Identifies fraction as a part of whole or a part of collection.
- Understands fraction as a division.
- Understands the different types of fractions –
  - Proper/improper fraction
  - Like/unlike fraction
  - Unit fraction
  - Mixed fraction
  - Equivalent fraction
- Converts improper fraction to mixed numeral and vice-versa.
- Generates equivalent fraction to a given fraction.
- Comparison of fraction with same denominator or with same numerator.

### Suggestive Strategies
- Individual Task
- Group Task
- Demonstration Method
- Play Way

---

### Sample Activity – 1

**TLO:** Identifies fraction as a part of whole or a part of collection

**Creating Fractions:**

Materials required: Cup with a lid and 15 two-sided counters (a colour on one side and a different color on the other). Kids shake the cup and pour the counters on the table. Then, without flipping any of their counters over, they count how many of each color landed face up.

For example, 6 red and 9 blue landed face up, with a total of 15 counters.

This game helps the student with addition skills and also with fractions.

![Example of fractions]

15 = 6 + 9  \( \text{fractions for red} = \frac{6}{15} \text{ and for blue} = \frac{9}{15} \)
Sample Activity – 2

TLO: Comparison of fractions with same denominator.

Word Fraction:

Collect the information from your friend and fill the table. One is done for you.

<table>
<thead>
<tr>
<th>Favourites</th>
<th>Words</th>
<th>No. Of Vowels</th>
<th>No. Of Consonants</th>
<th>Fraction for vowels</th>
<th>Fraction for consonants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports</td>
<td>Cricket</td>
<td>2</td>
<td>5</td>
<td>2/7</td>
<td>5/7</td>
</tr>
<tr>
<td>Fruit</td>
<td>Pineapple</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>Environmental Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cartoon</td>
<td>Mickey Mouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Now compare both the fraction of vowels and consonants by using the symbol <, > or =.

Learning Assessment

1. Compare the fraction and fill the correct symbol <, > or equal in circle.

   ![Comparison Symbols]

2. Arrange the following fraction in ascending order:
   a) $\frac{11}{16}, \frac{7}{16}, \frac{14}{16}, \frac{4}{16}, \frac{12}{16}$

3. Add / subtract
   a) $\frac{1}{7} + \frac{5}{7}$
   b) $\frac{6}{9} - \frac{3}{9}$

4. Convert the mixed numeral $7 \frac{3}{4}$ into improper fraction.
5. Write three equivalent fractions of $\frac{3}{4}$
6. Fill the shapes according to the given fractions.

   ![Shapes with Fractions]

7. There are 24 hours in a day and we should sleep for $\frac{3}{8}$ of the day. How much time should we sleep?
<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggestive Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Observes and describes the simple geometrical patterns.</td>
<td>Individual Task</td>
</tr>
<tr>
<td>Understanding</td>
<td>Identifies symmetrical (mirror halves images) and non symmetrical shapes, alphabets etc.</td>
<td>Demonstration Method</td>
</tr>
<tr>
<td>Observation</td>
<td>Understands the clockwise and anticlockwise $\frac{1}{2}$ turn, $\frac{1}{3}$ turn and $\frac{1}{4}$ turn.</td>
<td>Play Way</td>
</tr>
</tbody>
</table>

Sample Activity – 1

TLO: Identifies mirror halves images.

Use the mirror and put it on each line to check the symmetry or check it by folding the shapes from each line.
Learning Assessment

1. Complete the remaining half of the symmetrical images.

2. Find out which alphabets and mathematical digits look the same after ½ a turn.

3. Write YES or NO whether the dotted line on each shapes represents line of symmetry or not.

4. Draw what the following shape would look like on clockwise ¼ turn and ½ turn.
<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggestive Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Knowledge</td>
<td>➢ Understands the concept of factors and multiples of a number.</td>
<td>➢ Individual Task</td>
</tr>
<tr>
<td>➢ Understanding</td>
<td>➢ Understands the relationship between multiples and factors.</td>
<td>➢ Demonstration Method</td>
</tr>
<tr>
<td>➢ Ability to compute</td>
<td>➢ Sorts out the prime and composite numbers between the given numbers.</td>
<td>➢ Play Way</td>
</tr>
<tr>
<td>➢ Problem Solving Ability</td>
<td>➢ Can solve the simple problems based on L.C.M. and H.C.F.</td>
<td>➢ Pair task</td>
</tr>
</tbody>
</table>

Sample Activity – 1

TLO: Understand the relationship of factors and multiples.

Using the numbers from the earthen pot, find pairs that multiply together to give the following numbers then find the factors of given number:

(i) 36 (3 x 12, 4 x 9)  
So 3, 4, 9 and 12 are factors of 36.  
36 is the multiple of all these numbers.

(ii) 18

(iii) 24

(iv) 30

Sample Activity – 2

TLO: Understands the concept of factors.

GAME: First player chooses a number from the grid and circle it. This number is the score of first player.

Then its partner encircles all the possible factors of that number with different colours. The sum of those factors is the partner’s score for first round.
In next round the partner encircles a number and the first player circles the factors. The game ends when there are no more numbers left to circle. The player with the larger sum of factors is the winner.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td></td>
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<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td></td>
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<tr>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
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<td>36</td>
<td>37</td>
<td>38</td>
<td>39</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>42</td>
<td>43</td>
<td>44</td>
<td>45</td>
<td>46</td>
<td>47</td>
<td>48</td>
<td>49</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

i.e. First player’s score = 15  
Partner’s score = 1 + 3 + 5 = 9

Learning Assessment

1. One is a factor of ____________ numbers.
2. Every number is a ____________ of itself.
3. In 5 x 3 = 15, 5 and 3 are ____________ of the multiple ____________.
4. Numbers having only two factors are called ____________ numbers.
5. Write all the factors of 64: ____________________________
6. Find the first two common multiples of 4 and 6.
7. Find the L.C.M. of 8 and 15.
8. Find the smallest number that can be divided by 24, 72 and 96.
9. Complete the factor tree
<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggestive Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Observes and understands the patterns.</td>
<td>Individual Task</td>
</tr>
<tr>
<td>Understanding</td>
<td>Recognizes the basic unit which generates the pattern.</td>
<td>Demonstration Method</td>
</tr>
<tr>
<td>Observation</td>
<td>Makes patterns with numbers and letters.</td>
<td>Play Way</td>
</tr>
<tr>
<td>Logical thinking</td>
<td>Computes the given patterns using four basic operation of mathematics.</td>
<td></td>
</tr>
<tr>
<td>Art and craft skill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing skill</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sample Activity – 1

TLO: Recognizes the basic unit of pattern and make pattern.

Make different blocks for painting by using the potato. Some of the block is given here. Students can make their own blocks of different design. By using following blocks, students can make different patterns.
Learning Assessment

1. Complete the patterns for next two steps:

2. \(16 \times 1 + 3 = 19\)
   \(16 \times 2 + 3 = 35\)
   \(16 \times 3 + 3 = 51\)
   \(16 \times 4 + 3 = \_\_\_\_\) 
   \(+\) = 83

3. \(25 + \_\_\_\_ + \_\_\_\_ = 38 + \_\_\_\_ + 64\)

4. \(5 \times 10 \times \_\_\_\_ = 10 \times 3 \times \_\_\_\_\)

5. Use the calendar magic trick find the sum of 9 dates given in 3 x 3 box.

\[
\begin{array}{cccccccc}
\text{MON} & \text{TUE} & \text{WED} & \text{THU} & \text{FRI} & \text{SAT} & \text{SUN} \\
1 & 2 & 3 & 4 & & & \\
5 & 6 & 7 & 8 & 9 & 10 & 11 \\
12 & 13 & 14 & 15 & 16 & 17 & 18 \\
19 & 20 & 21 & 22 & 23 & 24 & 25 \\
26 & 27 & 28 & 29 & 30 & & \\
\end{array}
\]
Test Yourself

1. ................. is neither prime nor composite.

2. Fill the blank space: $14 + \ldots + \ldots = 34 + 14 + 20$

3. Convert $6\frac{4}{5}$ into improper fraction $6\frac{4}{5} = \ldots$

4. (a) Smallest prime number is .................

(b) Smallest composite number is .................

5. (a) Write the equivalent fraction to the $\frac{5}{7} = \ldots$

(b) In $\frac{12}{17}$, Numerator = \ldots \ldots and Denominator = \ldots \ldots\ldots

6. Continue the following pattern

7. Write down the first two common multiple of 4 and 6.
   Multiple of 4 = \ldots \ldots \ldots \ldots \ldots
   Multiple of 6 = \ldots \ldots \ldots \ldots \ldots
   Common Multiple of 4 and 6 = \ldots \ldots \ldots \ldots \ldots

8. Write all the factors of 24.
   Factors of 24 = \ldots \ldots \ldots \ldots \ldots

9. Put a (✓) mark on the following pictures which will look same on half a turn?

10. Write the fraction for given shape is shaded or not shaded:
    Shaded = \ldots \ldots
    Not shaded = \ldots

11. Match the following
(a) $\frac{1}{3}, \frac{2}{5}, \frac{11}{13}$ : LIKE FRACTION

(b) $\frac{7}{8}, \frac{4}{8}, \frac{3}{8}$ : PROPER FRACTION

(c) $2 \frac{1}{3}, \frac{4}{7}, \frac{5}{8}$ : UNIT FRACTION

(d) $\frac{1}{3}, \frac{1}{4}, \frac{1}{5}$ : MIXED FRACTION

12. Complete the factor tree

13. Look at this pattern of numbers and take it forward.

\[ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 9 \times 9 = 111111111 \]
\[ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 9 \times 18 = 222222222 \]
\[ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 9 \times 27 = 3333333333 \]
\[ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 9 \times 36 = \_\_\_\_\_\_\_\_\_\_\_\_ \]

14. Find the perimeter of the following shape.

Sol: Perimeter =

15. Draw what the following shapes would look like on $\frac{1}{4}$ turn.

<table>
<thead>
<tr>
<th>SHAPES BEFORE $\frac{1}{4}$ TURN</th>
<th>SHAPES AFTER $\frac{1}{4}$ TURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td></td>
</tr>
</tbody>
</table>
16. From a satin ribbon of 21 m length, how many pieces of length 3 ½ metres can be cut?

17. Look at the following price list and complete the following bill.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note book</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Fevicol</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Story book</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Bill**

Note book = Rs. 35  colour box = Rs. 60  fevicol = Rs. 15  story book = Rs. 25

**Total =**
<table>
<thead>
<tr>
<th>Subject-Mathematics</th>
<th>Level A2</th>
<th>Class V</th>
<th>Lesson-8, Mapping your way</th>
<th>Worksheet : 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill/Competency/Concept</td>
<td>Target Learning Outcomes</td>
<td>Suggested Strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td>Under Knowledge</td>
<td>Read a school map, city map and other maps.</td>
<td>Group activity</td>
<td></td>
</tr>
<tr>
<td>Understanding</td>
<td>Under Understanding</td>
<td>Understands the need of a scale in a map</td>
<td>Individual</td>
<td></td>
</tr>
<tr>
<td>Computation</td>
<td>Under Computation</td>
<td>Develops the concept of enlarging/reducing the area in the given map.</td>
<td>Demonstration</td>
<td></td>
</tr>
<tr>
<td>Problem Solving Activity</td>
<td>Under Problem Solving Activity</td>
<td>Understands the four directions and locates the areas asked</td>
<td>Map Sketching</td>
<td></td>
</tr>
</tbody>
</table>

**Sample Activity 1:**

TLO: Understands the four directions and locates the areas asked

1. Look at the floor plan of a house and answer the following questions.

   1cm = 5m

![Floor Plan Diagram]

- How big is the hall ______m ×_______m =_______sq.m
- What is the length of the kitchen? _________m
- How many squares have been marked as garden? __________
- What is the total areas of the two rooms? _________________sq.m
- What is to the southeast of the map? ________________
2. This is the road map of an island. Observe the map carefully and answer the following question.

scale 1cm = 100 Km

- Distance between Laughing land and Toyland on map. ____________
- Actual distance between these two points. ____________
- Deepak travels from just land to high point. What distance does he travel on road? ____________
a) Name any one state which is present in the east part of India

b) Name any one state which is present in the south-east part of India.

c) Name the states which touches border of Haryana.

d) Name the states which touches the border of Pakistan.
<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggested Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Knowledge</td>
<td>➢ Understands the concept of 2D and 3D shapes</td>
<td>➢ Group activity</td>
</tr>
<tr>
<td>➢ Understanding</td>
<td>➢ Differentiates between the 2D and 3D figures.</td>
<td>➢ Individual</td>
</tr>
<tr>
<td>➢ Identification</td>
<td>➢ Draws 2D and 3D shapes</td>
<td>➢ Demonstration</td>
</tr>
<tr>
<td>➢ Problem Solving</td>
<td>➢ Solves simple problems</td>
<td></td>
</tr>
</tbody>
</table>

Sample Activity 1: TLO: Understanding the concept of 2D and 3D shapes.

Trace the following figure on the tracing paper;

Make same figure on chart paper using the above used tracing paper.

Cut out the shape along dark or bold line and fold along the light lines

Solid figure, thus obtained, is having five faces without cover.

Observe and write

- Number of faces
- Number of edges
- Number of vertexes
Learning Assessment

1. Draw a 2-Dimensional figure by cutting and flattening the edges of a match-box of cuboids shape.

2. Draw any two 3-dimensional shapes.

3. Label 2 D and 3 D shapes for the given figures:
Sample Activity 1:

TLO: Develops understanding of decimal

Here is a grid of 100 squares. It has 10 columns. Colour each column in the table according to instructions.

Read the instructions for each column given below.

```
1  2  3  4  5  6  7  8  9  10
```
2. The graph displayed here has 100 small squares and 10 bars of which 9 have been coloured. Observe the coloured bars and answer the following questions.

<table>
<thead>
<tr>
<th>Column Number</th>
<th>Colour</th>
<th>Parts of whole</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Green</td>
<td>$\frac{1}{10}$</td>
</tr>
<tr>
<td>2</td>
<td>Blue</td>
<td>$\frac{6}{100}$</td>
</tr>
<tr>
<td>3</td>
<td>Red</td>
<td>$\frac{4}{100}$</td>
</tr>
<tr>
<td>4</td>
<td>Yellow</td>
<td>$\frac{1}{10}$</td>
</tr>
<tr>
<td>5</td>
<td>Orange</td>
<td>$\frac{10}{100}$</td>
</tr>
<tr>
<td>6</td>
<td>Brown</td>
<td>$\frac{2}{100}$</td>
</tr>
<tr>
<td>7</td>
<td>Pink</td>
<td>$\frac{8}{100}$</td>
</tr>
</tbody>
</table>

What fraction of the graph is orange? $\frac{9}{10}$
What fraction of the graph is blue? $\frac{6}{100}$
How much smaller is the pink bar compared to the brown bar? $\frac{3}{10}$
What fraction must be added to the light green bar to make it equal to the yellow bar? $\frac{5}{10}$
What fraction of the graph is white? $\frac{1}{10}$
What fraction of the graph is taken up by the blue and green bars? $\frac{16}{100} = \frac{8}{50}$
1. Shift the decimal in each of the following:

(a) \( 4.655 \times 10 = \) \___
(b) \( 4.655 \times 100 = \) \___
(c) \( 4.655 \times 1000 = \) \___
(d) \( 4.655 \times 10000 = \) \___
(e) \( 4.655 \div 10 = \) \___
(f) \( 4.655 \div 100 = \) \___
(g) \( 4.655 \div 1000 = \) \___
(h) \( 4.655 \div 10000 = \) \___

2. Solve mentally

(a) \( 0.6 - 0.25 = \) \___
(b) \( 5.8 - 2.7 = \) \___
(c) \( 0.38 - 0.12 = \) \___
(d) \( 18.6 + 6.4 = \) \___
(e) \( 32.8 \div 4 = \) \___

3. Write fraction of shaded part of the whole:
Test Yourself

1. Make them equal

\[ 14 + 20 + 10 = 20 + 10 + \phantom{1} \]

2. Fill in the blank

\[ 48 \times 13 = 13 \times \phantom{1} \]

3. Convert into decimal then write number name

\[ \frac{1}{5} \]

4. How many faces does a cube have?

Ans. \frac{6}{6}

5. How far is Delhi from Jaipur? If distance shown on the map is 2.5 cm. (scale on the map 1 cm = 100 km)

ANS. ________________________________

6. Write each of the following using decimals

(a) 15m 70cm _____________
(b) 75 paise _____________
(c) 10 kg 200g _____________

7. Study the tourist map of Rajasthan and answer the questions that follows;
Name two historical spots that are located in

- South Rajasthan ________________
- North Rajasthan ___________________

In which part of Rajasthan; are following located.

- Jai Samand Lake ____________
- Van Vihar ________________
<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggested Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Knowledge</td>
<td>➢ Understands the concept of area and perimeter</td>
<td>➢ Group activity</td>
</tr>
<tr>
<td>➢ Understanding</td>
<td>➢ Derives the formula for finding perimeter and area of a square and rectangle</td>
<td>➢ Individual Activity</td>
</tr>
<tr>
<td>➢ Computation</td>
<td>➢ Solves simple problems related to area and perimeter</td>
<td>➢ Demonstration Method</td>
</tr>
<tr>
<td>➢ Problem solving activity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sample Activity-1**

➢ **TLO:** Concept of area and perimeter

The lengths of 5 rectangles have been given in the table. The area of these rectangles are also given in the box. Match the area to its respective rectangle and complete the table.

<table>
<thead>
<tr>
<th>SIDE A</th>
<th>SIDE B</th>
<th>AREA</th>
<th>PERIMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>7m</td>
<td>m</td>
<td>sq.m</td>
<td></td>
</tr>
<tr>
<td>13m</td>
<td>m</td>
<td>sq.m</td>
<td></td>
</tr>
<tr>
<td>12m</td>
<td>m</td>
<td>sq.m</td>
<td></td>
</tr>
<tr>
<td>15m</td>
<td>m</td>
<td>sq.m</td>
<td></td>
</tr>
<tr>
<td>2m</td>
<td>m</td>
<td>sq.m</td>
<td></td>
</tr>
</tbody>
</table>

26, 56, 96, 16, 45
Learning Assessment

1. Find the perimeter of the following figure

![Hexagon](image1)  
![Triangle](image2)

2. Find the missing length

![Rectangle](image3)  
![Triangle with perimeter](image4)

3. A map has been drawn to scale; \(1/2\text{cm} = 1\text{Km}\)

Complete the following table by filling the appropriate answer.

<table>
<thead>
<tr>
<th>Distance on Map</th>
<th>Distance on ground</th>
<th>Area on ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>4cm</td>
<td>cm</td>
<td></td>
</tr>
<tr>
<td>320Km</td>
<td>6cm</td>
<td></td>
</tr>
<tr>
<td>Length=6cm</td>
<td>Length =</td>
<td></td>
</tr>
<tr>
<td>Breadth = 5cm</td>
<td>Breadth =</td>
<td></td>
</tr>
<tr>
<td>Length =</td>
<td>Length=26 Km</td>
<td></td>
</tr>
<tr>
<td>Breadth =</td>
<td>Breadth =12Km</td>
<td></td>
</tr>
<tr>
<td>500m</td>
<td>6cm</td>
<td></td>
</tr>
<tr>
<td>Skill/Competency/Concept</td>
<td>Target Learning Outcomes</td>
<td>Suggested Strategies</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Knowledge, Understanding, Application, Problem solving activity</td>
<td>Collects and records data, Represents the data in tabular form or bar graph, Draws conclusions and inferences from the data, Solves simple problems using charts/data</td>
<td>Group activity, Individual Activity, Demonstration Method, Survey</td>
</tr>
</tbody>
</table>

Sample Activity1: TLO: Draw conclusions from the data.

The following bar graph shows the top speed in Km/hr, different cars can attain. Fill in the blanks with the help of the Bar graph.

(a) The fastest cars are ________ and _________. They can attain a top speed of ________Km/hr
(b) The slowest car is ________ with a top speed of ________Km/hr
(c) The top speed of ________ is 45Km/hr less than that of the SX4.
(d) The ________ has a top speed of 30Km/hr more than that of the Verna.
(e) The Maruti 800 is ________Km/hr. slower than the Lancer and BMW.
1. The number of fruit juice packs sold in a school canteen in a week is given below. Complete the table and fill in the blanks that follow:

<table>
<thead>
<tr>
<th>SR.NO.</th>
<th>JUICE</th>
<th>TALLYMARKS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Apple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Orange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Pineapple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Guava</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Litchi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Mixed Fruit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### means 5. One for each tally I

a) The most favorite juice pack is .

b) Least favorite juice is .

c) The packs of________________________ and________________________ fruit juice sold were the same and ________________________ Packs of each juice were sold.
<table>
<thead>
<tr>
<th>Subject-Mathematics</th>
<th>Level A2</th>
<th>Class V</th>
<th>Lesson-13,(Way to multiply and divide) Worksheet :13</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggested Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge, Understanding, Computation, Problem Solving Ability</td>
<td>Can multiply 2 or 3 digit numbers, Divides a numeral by one or two digit numeral, Understands that division is repeated subtraction, Solves problems related to multiplication and division</td>
<td>Group activity, Individual Activity, Demonstration Method</td>
</tr>
</tbody>
</table>

Sample Activity1: **TLO: Multiplication (mental maths)**

Ryan’s puppy has escaped. Ryan can only move to a square that is equal to Rs 250(the cost of the puppy). Can you help Ryan find the path to the Puppy? You can move up, downward, or sideways.

<table>
<thead>
<tr>
<th>Ryan</th>
<th>Rs 10×5×5</th>
<th>Rs 40×6</th>
<th>Rs 30×7+Rs45</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30×7+Rs45</td>
<td>50×5</td>
<td>5×5×10</td>
</tr>
<tr>
<td></td>
<td>Rs 30×8+Rs20</td>
<td>Rs 20×25+Rs50</td>
<td>Rs10×5×4+Rs50</td>
</tr>
<tr>
<td></td>
<td>Rs30×9-Rs10</td>
<td>Rs100×2+Rs10</td>
<td>Rs 10×2×2×2×5+Rs50</td>
</tr>
</tbody>
</table>

puppy
Calculate the total cost of the items in each row then work out how much change you would get

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost per item</th>
<th>Quantity</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs 20</td>
<td>Rs 15</td>
<td>Rs 10</td>
<td>Rs 8</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Learning Assessment

1. Complete the bill and write the total money spent

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost per item</th>
<th>Quantity</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Bottles</td>
<td>Rs.50.00</td>
<td>4 waterbottles</td>
<td></td>
</tr>
<tr>
<td>Pencil Boxes</td>
<td>Rs.20.00</td>
<td>3 pencilboxes</td>
<td></td>
</tr>
<tr>
<td>Socks</td>
<td>Rs.35.00</td>
<td>2 pairs of socks</td>
<td></td>
</tr>
<tr>
<td>Shirts</td>
<td>Rs.75.00</td>
<td>3 shirts</td>
<td></td>
</tr>
<tr>
<td>Poster colours</td>
<td>Rs.40.00</td>
<td>4 postercolours</td>
<td></td>
</tr>
</tbody>
</table>

Write total money in words

2. Fill in the blanks
   (a) $12 \times 7 = \underline{84} \times 4$
   (b) $\underline{21} \times 7 = 147$
   (c) $78 \div \underline{5} = 13$

3. What is the missing operation? ×, +, - , ÷
   (a) $440 \underline{\times} 10 = 44$
   (b) $315 \underline{\times} 20 = 6300$
<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggested Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Understanding Basic Concepts</td>
<td>➢ Understands the concept of volume</td>
<td>➢ Group activity</td>
</tr>
<tr>
<td>➢ Ability In Computation</td>
<td>➢ Finds the volume by arranging cube and counting them.</td>
<td>➢ Individual Activity</td>
</tr>
<tr>
<td>➢ Problem Solving Ability</td>
<td>➢ Calculates volume of cube and cuboids of given dimensions</td>
<td>➢ Demonstration Method</td>
</tr>
</tbody>
</table>

### Sample Activity-1

**TLO:** Understands the concept of volume

**CALCULATING VOLUME**

*Volume of a Cube* = edge \( \times \) edge \( \times \) edge  

*Volume of Cuboid* = length \( \times \) breadth \( \times \) height

Calculate the volume of the following solids using the formula given above

(a)  

(b)  

(c)  

(d)
Learning Assessment

1. Fill in the blanks
   (a) The space occupied by an object is called its _______________
   (b) The unit of volume is _______________

2. A match box measures 8cm × 4cm × 2 cm. Find its volume.
   __________________________________________________________
   __________________________________________________________

3. A book is 26 cm long 20 cm wide and 1cm high. Find the space occupied by 5 such books.
   __________________________________________________________
   __________________________________________________________
Test Yourself

1. A container is 4m long, 3m wide and 2m deep. How much water can be stored in it.

________________________________________________________________________

2. Pinku a cook was at work for 30 days and for each day he was paid Rs 250. How much money did he get in all?

___________________________________________________________________________

3. Frame a word problem, using clue in ( )
(a) Fact; 973×19 (balls, bags)

___________________________________________________________________________

4. Sohan drinks 124 glasses of milk in the month of March. How many glasses of milk does he drink in a day?

________________________________________________________________________________

_______________________________________________________________

The pie chart shows the favourite snacks of the students of class V

(a) Which snack is most favorite?

(b) Which snack is least favorite?

(c) Which snack does student like more than samosa but less than Kurkure?
Compare the money of different countries with Indian rupee and answer the following questions.

<table>
<thead>
<tr>
<th>Country</th>
<th>Money</th>
<th>Change in to Indian Rupees</th>
</tr>
</thead>
<tbody>
<tr>
<td>British</td>
<td>Pound</td>
<td>0.01</td>
</tr>
<tr>
<td>Japanese</td>
<td>Yen</td>
<td>1.5</td>
</tr>
<tr>
<td>U.S.A (America)</td>
<td>Dollar</td>
<td>0.15</td>
</tr>
<tr>
<td>Nepal</td>
<td>Rupee(Nepal)</td>
<td>1.6</td>
</tr>
</tbody>
</table>

a) The money of which country will cost the most in Indian Rupees?

Ans.

b) Mithun’s uncle in America had sent him 15 USA dollars as a gift. Find its value in Indian rupees.

Ans.