Subject – Mathematics | Level A2 | Class -III | Lesson – 1 (Where To Look From )
Worksheet - 1

<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>➢ Identifies and understands shapes and symmetries.</td>
<td>➢ Individual Task</td>
</tr>
<tr>
<td>➢ Understanding</td>
<td>➢ Recognizes the mirror halves</td>
<td>➢ Group Task</td>
</tr>
<tr>
<td>➢ Problem Solving Ability</td>
<td>➢ Can understand the different views, how the objects look like from different sides?</td>
<td>➢ Demonstration Method</td>
</tr>
<tr>
<td></td>
<td>➢ Can draw different rangoli patterns using dots.</td>
<td>➢ Play Way</td>
</tr>
<tr>
<td></td>
<td>➢ Can create different shapes or masks through paper folding and paper cutting</td>
<td></td>
</tr>
</tbody>
</table>

Sample Activity – 1
TLO: Identifies and understands shapes and symmetries

Using paper folding skill, to test for lines of symmetry is a hands-on activity that allows students to explore the meaning of the concept 'line of symmetry'.
Make a picture of lion given here by using the concept of symmetry.

Sample Activity – 2
TLO: Can understand the different views (Top view, Side view)

While you are sitting on a ride in Disney World how the things look like from top. Draw pictures of any two things.
Learning Assessment

1. Draw top view of (i) a pair of shoes (ii) a car

2. Draw a dotted line to divide the given picture in similar halves?

3. Complete the other half of the picture:
<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
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<th>Suggestive Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Reads the number with 3-digit and state their sequence (Ascending or Descending).</td>
<td>Individual Task</td>
</tr>
<tr>
<td>Understanding</td>
<td>Writes the number in expanded form</td>
<td>Group Task</td>
</tr>
<tr>
<td>Ability to Compute</td>
<td>Looks at the arrangement of objects and uses the strategy of counting in groups.</td>
<td>Demonstration Method (Use Of Arrow Cards)</td>
</tr>
<tr>
<td>Problem Solving Ability</td>
<td></td>
<td>Play Way</td>
</tr>
</tbody>
</table>

Sample Activity – 1

TLO: Read the number with 3-digit and state their sequence

GAME: Formation of 3-digit number

Make 10 flash card of digit 0, 1, ........9 and mix them. After shuffling the cards both the students are advised to draw three cards from the deck one by one.

Our aim is to make the greatest possible 3-digit number by using the drawn cards.

The student, whose number is greater, gets 5 points. We give five chances to each child. The child who gets the highest point is declared as winner.

Sample Activity – 2

TLO: Expanded form of 3-digit numbers.

Use of Arrow Cards to show any 3-digit numbers starting from 100 to 999.
Learning Assessment

1. Write the numbers for the following number names:
   a) Four hundred ninety six : _________________
   b) Nine hundred nineteen  : _________________

2. Draw beads to show the numbers:
   a) 304
   b) 523
   c) 430

3. Write the numbers in the expanded form:
   a) 958 = _________________
   b) 209 = _________________

4. Write the place value of underlined digit.
   a) 469 : _________________
   b) 843 : _________________

5. Circle the greatest number: 923, 465, 647
   Circle the smallest number: 501, 510, 150

6. Arrange the following numbers in ascending order:
   a) 863, 836, 806, 860 : ___________________________________________________
   b) 932, 239, 329, 392 : ___________________________________________________

7. Mental Maths
   a) Greatest 3-digit numbers. _____________
   b) Smallest 3-digit numbers. _____________
   c) How many tens are there in 548? _____________
   d) Which is greater: 300 + 4 or 400 + 3?
   e) Do you know any number which is neither odd nor even? _____________
   f) How many even numbers are there between 200 and 210? _____________
Sample Activity - 1  
**TLO : Adds 3-digit numbers without grouping**

Make a special number which reads the same from both the way left to right and right to left.

- Write any 2-digit or 3-digit number. (237)
- Write the digit in reverse order. (732)
- Add them. (237 + 732 = 969)
- Sum of these two numbers is 969 which a special number.

You can work on these numbers also: 235, 354, 142 etc.

Sample Activity – 2  
**TLO : Adds 3-digit numbers with grouping**

Add up each row and column in the grids and place the sum in the boxes on the sides and bottoms.

<table>
<thead>
<tr>
<th>2</th>
<th>5</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>
Sample Activity - 3

Look at the table of Aman’s Family and answer the questions:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Family Members</th>
<th>Age (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FATHER</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>MOTHER</td>
<td>39</td>
</tr>
<tr>
<td>3</td>
<td>SISTER</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>AMAN</td>
<td>9</td>
</tr>
</tbody>
</table>

Who is the youngest in Aman’s Family: ______________
Who is the oldest in Aman’s Family: ______________
What is the difference of their ages= ______ - ______ = ______

Learning Assessment

1. Add the following without regrouping:
   a) 2 5 9
      + 1 3 0
   b) 4 2 3
      + 2 3 5

2. Solve and compare the sum by using <, > or =
   a) 413 + 124 ______ 314 + 214
   b) 100 + 156 ______ 56 + 200

3. In a public telephone booth, 365 calls are made before noon and 189 calls are made after noon. Find the number of calls made in a day.

4. An animal care society tested 356 pet animals. 27 were infected by diseases. Find the number of healthy pet animals that participated in the medical tests.

Mental Math:
   a) Find the difference of the place – value of two 4s in 8442.
   b) Subtract the smallest 2-digit number from the greatest 2-digit number.
1. Draw side view of a shoe.

![Diagram of a shoe]

2. Make a dotted line to divide the picture in two mirror halves:

![Diagram with dotted line]

3. Write the following numbers in words.
   a) 197 .................................................................
   b) 203 .................................................................

4. Jump 10 steps Forward

   110, 120, 130, ...., ........, ........, ........, ........,

5. Complete the century 87 + ........

6. (a) 4 and 37 more is .............
   (b) 9 added to 28 gives .............

7. Write the number in expanded form:

<table>
<thead>
<tr>
<th>Hundred</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) 552</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Match with numbers.
   (a) I have 9 in my name and am very close to 90 : 100
   (b) I am equal to ten notes of 10 : 89
9. Make a Rangoli design of your choice in square grid.

10. Look at the table below and fill in the blanks.

<table>
<thead>
<tr>
<th>Children</th>
<th>Number of postal stamps collected by them</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reeta</td>
<td>42</td>
</tr>
<tr>
<td>Ganga</td>
<td>74</td>
</tr>
<tr>
<td>Indu</td>
<td>45</td>
</tr>
<tr>
<td>Ravi</td>
<td>24</td>
</tr>
<tr>
<td>Sita</td>
<td>83</td>
</tr>
</tbody>
</table>

(a) ............... .. collected the most stamps.

(b) Reeta will collect ............... more stamps to be equal to Indu.

(c) If Ganga gets 6 more stamps, she will have .................stamps.

(d) How many children have more than 50 stamps? ...............
Subject – Mathematics  
Level A2  
Class III  
Lesson – 4 (Long And Short)  
Worksheet - 4

<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggestive Strategies</th>
</tr>
</thead>
</table>
| Knowledge  
Understanding  
Problem Solving Ability |  
Knows about the tools used for measuring length i.e. a ruler, a measuring tape, metre-scale.  
Knows how to use a ruler.  
Finds distance between two points.  
Estimates and then verifies the distance by measuring.  
Measures length using appropriate standard units (cm, m etc.)  
Understands that the basic unit for measuring length is ‘metre’ |  
Individual Task  
Group Task  
Play Way Method  
Demonstration Method |

Sample Activity – 1

**TLO: Estimation of length of different objects**

Ask the children to take out their pencils, erasers, pencil boxes and keep them on their desk.
Now ask the group to arrange the pencils in any order that they like. Let the group explain how and why they have arranged in this manner.
Ask children to arrange the pencils in the following order:
1. Shortest to longest
2. Longest to shortest
3. Longest in the middle and decreasing in size in both directions
4. Shortest in the middle and increasing in size on both the sides.

Similar activity with their pencil boxes, erasers, notebooks etc.

Sample Activity – 2

**TLO: Knows about the tools used for measuring length i.e. a ruler, a measuring tape, metre-scale**

By using measuring tape find the length of things present in classroom.

- Top of the table
- Black board
- A tile
- Cupboard
- Book
Sample Activity – 2
Find out the height of your friends and tell who is taller and who is shorter in your class.

Learning Assessment

1. Measure the length of the objects given below
   a) Eraser is _______ cm long.
   b) Crayon is _______ cm long.
   c) Note Book is _______ cm long.

2. Write the unit (cm/m/km) used to measure each of the following:
   a) Coconut tree
   b) rope
   c) bottle
   d) road

3. Fill in the blanks:
   a) 1 m = _______cm
   b) 700 cm = _______ m
   c) 1 km = _______ m
   d) Length of the thermometer is 10 _______.

4. Add the following:
   a) 5 m 30 cm + 4 m 40 cm
   b) 6 m 10 cm + 4 m 50 cm
|-----------------------|-----------|-------------|------------------------------------------|

<table>
<thead>
<tr>
<th>Skill/Competency/Concept</th>
<th>Target Learning Outcomes</th>
<th>Suggestive Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge, Understanding</td>
<td>Recognizes the shapes like, triangles and rectangles. Understands the term 2-D shapes and 3-D shapes. Can draw 2-D shapes Associates the objects like pencil, glass, book, lunch box, ice cream cone etc. with the 3-D shapes. Observes the properties of 3-D shapes. (like-flat and curved surface, edges, corners) Differentiates the 2-D shapes and 3-D shapes. Groups the objects on the basis of their shapes.</td>
<td>Individual Task, Group Task, Demonstration Method (Use Of Arrow Cards), Play Way</td>
</tr>
</tbody>
</table>

Teaching Aids required:
Shapes and designs chart, Kite/book/chair, Shapes with curved/straight edges in a chart, Tan gram (5/7 pieces, Gift wrapper, Geo board, Plain paper, Sari piece etc.

Sample Activity -1

TLO: Children recognize the shapes like, triangles and rectangles.

Draw a picture in given box by using the different geometrical shapes – circle, rectangle, square and triangle. One picture is given for you.
Make the shapes using match sticks:

(i) Triangle          (ii) Rectangle          (iii) Square

**Learning Assessment**

1. Tick ( ) the shapes which are made up of straight line only and put the cross (X) on others.

   ( )   ( )   ( )   ( )

2. Write the name of 3-D shape which looks like:
   (a) an ice-cream cone: __________
   (b) a cricket ball: __________
   (c) a can or a pencil: __________
   (d) a dice: __________

3. Count the number of edges and corners in following figures:

   Edges: __________
   Corners: __________

   Edges: __________
   Corners: __________

4. **MENTAL MATHS questions**
   a) What is the least number of matchsticks required to make a rectangle?
   b) Which of the following has no vertex? Triangle, rectangle, square, circle __________
   c) __________ sides of a square are equal in length.
Subject – Mathematics  
Level A2  
Class III  
Lesson – 7 (Time Goes On…..)  
Worksheet – 6

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

### Target Learning Outcomes
- Understands the
  - Use of time
  - Use of clock
  - Use of calendar
- Can draw the face of clock
- Makes own time line
- Solves problems based on time.

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

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**Sample Activity – 1**  
TLO: Understands the use of calendar

Look at the calendar for the year 2016.

a) Count the number of months.
b) Write the names of the month in correct order.
c) Write the number of days in each month.
d) How many months have 30 days? Name them.
e) How many months have 31 days? Name them.
f) Which month is the shortest month of the year?
g) Is this year the leap year?

---

**Sample Activity – 2**  
TLO: Estimation of time

Estimate the time needed for the following activities:

- **For bathing**
- **For eating breakfast**
- **Coming to school**
- **Sweeping your house**
Learning Assessment

1. How long do the following activities take? Chose the correct answer from the box.

<table>
<thead>
<tr>
<th>Seconds</th>
<th>minutes</th>
<th>hours</th>
<th>day</th>
</tr>
</thead>
</table>

a) To drink a glass of water : ___________

b) To blink your eyes : ___________

c) To do your home work : ___________

2. Write the time that each clock is showing:

3. Write each time in hours and minutes

<table>
<thead>
<tr>
<th>TIME IN WORDS</th>
<th>TIME IN HOURS – MINUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five minutes to ten</td>
<td></td>
</tr>
<tr>
<td>Quarter to nine</td>
<td></td>
</tr>
<tr>
<td>Half-past two</td>
<td></td>
</tr>
</tbody>
</table>

4. Mohan is 25 years old and his father is 30 years elder than him. What is his father’s age?

5. Mental Math
   a) There are ____________ hours in a day.
   b) There are ____________ days in a week.
   c) There are ____________ minutes in one hour.
   d) There are ____________ months in a year.
   e) There are ____________ days in a leap year.
Test Yourself

1. How many months a year has? ......................................
2. How many days make a week? ......................................
3. Draw a triangle and a kite.
4. 1 cm = ______ mm
5. Measure the length of the given things by using ruler:

   ________ cm

   ________ cm

6. Match the following.
(a) Ball have straight edge
(b) Box have curved edge

7. Write your date of birth in numbers (use dd/mm/yy format).
   Ans. ...........................................................................................................

8. Read the given calendar and answer the given questions:

   **August 2016**

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>15</td>
<td>independence day</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q.1. How many **Sundays** are there in this month?
   Ans. ...........................................................................................................

Q.2. What is the date on **Second Saturday**?
   Ans. ...........................................................................................................

Q.3. Which **National Festival** comes in this month?
9. Identify the single unit of a tile used to make this pattern.

10. Estimate the length of each object and circle the answer that gives the best estimate.

1 foot or 1 inch

7 feet or 7 inch

11. Ram cooked Chapati’s in 25 minutes. Then he made dal in 15 minutes. How much time did take to cook both things?

Ans. Time taken by Ram to cook Chapati’s=.................................................................

          Time taken by Ram to cook Dal =.................................................................

          Total time taken for cooking both the things=....................................................
Sample Activity – 1

TLO: Compares the weight of different things.

Four students of Rohan’s school selected for regional level boxing event. At regional level the officials first made them stand on the scale to check their weights for weight category.

a) Who is heavier in this group?

b) Who is lighter in this group?

c) Who comes in weight category of 35 kg to 45 kg weight?

d) What is the difference in weight of heaviest and lightest student in this group?

e) Write the weights of all the students in kg and g.

(i) _____ kg _____ g  (ii) _____ kg _____ g  
(iii) _____ kg _____ g  (iv) _____ kg _____ g
Sample Activity – 2 (TLO – Knows how to use balance?)

The children use disposable cups / old plastic cups and a stick/ scale to make a balance in groups. The children then compare the weight of things available with them. Like - eraser and sharpener, a pencil and chalk etc.

Learning Assessment

1. How much more is to be added to the 300 g to make it equal to 500g?
2. Which is heavier 500 g or four 100 g weights?
3. How many 50 g blocks together weigh equal to one 200 g block?
4. Write 50.250 kg in expanded form: ___________ kg ___________ g
5. Complete the table. How many weights of each value will be required to make it equal to 1 kg?

<table>
<thead>
<tr>
<th>1 kg</th>
<th>100 g</th>
<th>200 g</th>
<th>500 g</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

So

1 kg = _______ X 100 g
1 kg = _______ X 200 g
1 kg = _______ X 500 g
### Skill/Competency/Concept
- Knowledge
- Understanding
- Ability to Compute
- Problem Solving Ability

### Target Learning Outcomes
- Understands multiplication as REPEATED ADDITION and division as REPEATED SUBTRACTION
- Knows the symbol of X and ÷
- Can multiply by 10, 100, 1000
- Can arrange the objects in rows and columns
- Divides the objects equally in groups.
- Can solve word problems based on multiplication and division

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

### Sample Activity - 1
TLO: Understands multiplication as REPEATED ADDITION

Multiply the numbers by the centre number:

6 + 6 + 6 + 6 + 6 = 30
5 x 6 = 30

### Sample Activity - 2
TLO: Problem solving based on multiplication

Dice Game for multiplication

1. Roll a pair of dice.
2. Multiply both the numbers.
3. Colour the product in the number grid.
4. The first person who colours 4 numbers in a row, wins.
Learning Assessment

1. Write the multiplication factors for the repeated addition:
   a) \(2 + 2 + 2 + 2 + 2 = \) ______
   b) \(6 + 6 + 6 + 6 = \) ______

2. Complete the skip counting

<table>
<thead>
<tr>
<th>Count by 2s</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Count by 3s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count by 4s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Write the multiplication facts for division:
   a) \(12 \div 3 = 4\)  
      Multiplication Factor= _________ and _________
   b) \(45 \div 9 = 5\)  
      Multiplication Factor= _________ and _________

4. A broken scale reads 8 inches. Kathy uses the broken scale to measure the length of a rope. She finds the length of the rope is 112 times the length of the broken scale. Find the length of the rope.

5. A tray can hold 35 eggs. If there are 7 rows in a tray, how many columns are there?

6. Mental math:
   a) Division is repeated addition of the same number. Is it true?
   b) What do we get when we divide a number by 1?
   c) What do we get when we divide a number by itself?
   d) \(100 \times 5 = \)___________
   e) _____________ \(\times 1 = 563\)
<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>Identifies</td>
<td>Individual Task</td>
</tr>
<tr>
<td>Understanding</td>
<td>• simple patterns.</td>
<td>Group Task</td>
</tr>
<tr>
<td>Ability to Compute</td>
<td>• Patterns of odd and even numbers</td>
<td>Demonstration Method</td>
</tr>
<tr>
<td>Problem Solving Ability</td>
<td>• Patterns in surroundings (at home or in school)</td>
<td>Play Way</td>
</tr>
<tr>
<td></td>
<td>• Can make patterns and designs from straight lines and geometrical shapes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decodes the secret messages based on patterns.</td>
<td></td>
</tr>
</tbody>
</table>

Sample Activity – 1

TLO - Can make patterns and designs

Teacher tells the students about celebration of Children’s Day. He asked them to decorate the class and corridor along with their classroom. Make hangings by using geometrical shapes or any floral design.

Here is the space to make your own hanging strips.

One is done for you
Learning Assessment

Observe and complete the pattern for next three steps

1. 5  10  15

2. 12  14  16

3.

4.

5.

6. AB CD EF
Test Yourself

1. 1 kg = ________ gram
2. 1 dozen = ________ items
3. If we add 1 to any odd number we get and ________ (even/odd) number.
4. 6000 g = ________ kg
5. NAMAN is proud to have a special name. He says if you read it backwards it is still the same.
   Which of the following names have the same pattern? Circle them:
   HARSH, ANNA, KANAK, MUNNA, MALAYALAM
6. Write the name of the two things in which you find some pattern.
7. Compare the things – and encircle the heavier.
   a) a water bottle or a cricket ball
   b) your shoe or your pencil box
   c) your Math book or Hindi book
   d) chalk or duster
8. Make a list of four things weigh less than 1 kg.
9. Look for the rule and continue the following pattern
   a) 1, 3, 5, 7, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, _
Subject – Mathematics  
Level A2  
Class III  
Lesson – 11 (Jugs And Mugs)  
Worksheet – 10

<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 that only liquids can be measured by containers of known capacity.</td>
<td>Individual Task</td>
</tr>
<tr>
<td>Understanding</td>
<td>Compares different containers in terms of capacity.</td>
<td>Group Task</td>
</tr>
<tr>
<td>Estimation and comparison</td>
<td>Estimates and guesses the quantity.</td>
<td>Demonstration</td>
</tr>
<tr>
<td>Problem solving ability</td>
<td>Solves word problems based on capacity.</td>
<td>Role play</td>
</tr>
</tbody>
</table>

Sample Activity – 1

TLO – Compares different containers in terms of capacity.

Help the milkman Gopal to measure the milk by using appropriate litre.

<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>How many times the Gopal used litres of different capacity for given quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50 m/</td>
</tr>
<tr>
<td>2 L 500 m/</td>
<td></td>
</tr>
<tr>
<td>1250 m/</td>
<td></td>
</tr>
<tr>
<td>200 m/</td>
<td></td>
</tr>
<tr>
<td>3 litre</td>
<td></td>
</tr>
</tbody>
</table>
Learning Assessment

1. Capacity is measured in ___________.

2. 1560 ml means ______ l and ______ ml.

3. Arrange the following in ascending order:
   (a) 4 l 250 ml 2/500ml 30 ml

4. Compare using <, > or =
   (a) 3500 ml ___ 3 l
   (b) 1250 ml ___ 1 l 250 ml

5. A 1 litre bottle is half full. How many milliliters are there in the bottle?

6. One bottle holds 450 ml and another bottle holds 900 ml. How many total litres do both the bottles hold?
Skill/Competency/Concept | Target Learning Outcomes | Suggestive Strategies
--- | --- | ---
- Recognition | - Records data using tally marks. | - Individual Task
- Observation | - Records the data in terms of pictograph by choosing appropriate scale and unit. | - Group Task
- Collection and classification of data | - Presents the data in form of bar charts and tables. | - Survey
- | - Draws conclusions and solves problems based on given data. | |

Sample Activity – 1

TLO – Records the data in terms of pictograph by choosing appropriate scale and unit.

Meera collected a packet of different flavoured toffees/candies for distributing to her friends on her birthday. Meera's mother told her to collect the data and complete the information based on it.

<table>
<thead>
<tr>
<th>FLAVOUR</th>
<th>NUMBER OF TOFFEES/CANDIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANGO</td>
<td>15</td>
</tr>
<tr>
<td>ORANGE</td>
<td>35</td>
</tr>
<tr>
<td>STRAWBERRY</td>
<td>10</td>
</tr>
<tr>
<td>PINEAPPLE</td>
<td>25</td>
</tr>
<tr>
<td>GUAVA</td>
<td>15</td>
</tr>
</tbody>
</table>

Complete the information based on above recorded data:

a) How many orange flavoured toffees she had? ______________
b) Which flavoured toffee is minimum with Meera? ______________
c) Total number of toffee in a packet = ______________
Sample Activity – 2

TLO - Records the data in terms of pictograph by using appropriate unit.

SURVEY - Show the number of houses in a colony which have cars, any two-wheeler, refrigerator, sewing machine, washing machine, TV’s, Computers (laptop or desktop) and smart phone. The total number of houses included in the survey is 10. Show the detail of your survey in form of pictograph.

UNIT: \( \text{ } \text{ } \) represents one house.

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>NUMBER OF HOUSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARS</td>
<td></td>
</tr>
<tr>
<td>TWO WHEELER (bike, scooter, bicycle etc.)</td>
<td></td>
</tr>
<tr>
<td>REFRIGERATOR</td>
<td></td>
</tr>
<tr>
<td>SEWING MACHINE</td>
<td></td>
</tr>
<tr>
<td>WASHING MACHINE</td>
<td></td>
</tr>
<tr>
<td>TV</td>
<td></td>
</tr>
<tr>
<td>SMART PHONES</td>
<td></td>
</tr>
<tr>
<td>COMPUTER (desktop or laptop)</td>
<td></td>
</tr>
</tbody>
</table>

Suggested Topics For Survey

- Preferred food for lunch
- Best TV show
- The most liked subject
- The most liked CCA
- Like to get wet in the rain

Learning Assessment

1. Look at the table, which shows the number of books issued by a school library on a particular day. Draw a bar graph,

If \( \text{ } \text{ } \) represents 5 books.

<table>
<thead>
<tr>
<th>DAY</th>
<th>NUMEBR OF ISSUED BOOKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONDAY</td>
<td>20</td>
</tr>
<tr>
<td>TUESDAY</td>
<td>15</td>
</tr>
<tr>
<td>WEDNESDAY</td>
<td>25</td>
</tr>
<tr>
<td>THURSDAY</td>
<td>10</td>
</tr>
<tr>
<td>FRIDAY</td>
<td>30</td>
</tr>
</tbody>
</table>
2. Read the pictograph about the sale of cricket bats in 6 days and answer the given question:

<table>
<thead>
<tr>
<th>DAYS</th>
<th>SALE OF CRICKET BATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST DAY</td>
<td><img src="image1" alt="Cricket Bat Pictograph" /></td>
</tr>
<tr>
<td>SECOND DAY</td>
<td><img src="image2" alt="Cricket Bat Pictograph" /></td>
</tr>
<tr>
<td>THIRD DAY</td>
<td><img src="image3" alt="Cricket Bat Pictograph" /></td>
</tr>
<tr>
<td>FOURTH DAY</td>
<td><img src="image4" alt="Cricket Bat Pictograph" /></td>
</tr>
<tr>
<td>FIFTH DAY</td>
<td><img src="image5" alt="Cricket Bat Pictograph" /></td>
</tr>
<tr>
<td>SIXTH DAY</td>
<td><img src="image6" alt="Cricket Bat Pictograph" /></td>
</tr>
</tbody>
</table>

UNIT - ![Cricket Bat Pictograph](image7) represents two bats.

a) On which day the sale of bats was the maximum?
b) Find the difference in sales between the first day and the fourth day.
c) On which days the sale of bats was same?
### Skill/Competency/Concept
- Knowledge
- Understanding
- Ability to compute
- Application
- Problem solving ability

### Target Learning Outcomes
- Understands the need and value of money.
- Converts rupees to paisa and vice versa
- Writes money in short and long form.
- Can prepare bill.
- Can apply the concept of money in daily life.

### Suggestive Strategies
- Individual Task
- Group Task
- Demonstration
- Role play

---

**Sample Activity – 1**

The Teacher will interact with the children on the things they can purchase with money or the works they can do with money.

---

**Sample Activity - 2**

GAME – Play a game of "HEADS & TAILS"

How many times do they get heads? How many times do they get tails?

If the tails are more, victory. (Max no of tosses 10)

**Suggested Activity**

1. Raising money for charity

2. Role play – Handling money in a shop

Ask students to work in pairs. Together they should decide on a type of shop. One student becomes the *shop keeper* while the other is the customer.
Learning Assessment

1. Convert Rs. 5.60 in paise.
2. Convert 995 paise into rupees and paise.
3. Ravi has Rs. 125 in his piggy bank. He took out Rs. 65 form it. Find the amount left in his piggy bank.
4. A storybook costs Rs. 24. Find the cost of 5 such story books.
5. There are Raju’s grocery bills for two months. Find the total cost of each bill and find in which month did he spend more money and by how much.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COST (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPTEMBER</td>
<td></td>
</tr>
<tr>
<td>PULSES</td>
<td>60</td>
</tr>
<tr>
<td>TEA</td>
<td>40</td>
</tr>
<tr>
<td>BUTTER</td>
<td>80</td>
</tr>
<tr>
<td>OIL</td>
<td>55</td>
</tr>
<tr>
<td>SOAP</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COST (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTOBER</td>
<td></td>
</tr>
<tr>
<td>PULSES</td>
<td>75</td>
</tr>
<tr>
<td>TEA</td>
<td>30</td>
</tr>
<tr>
<td>BUTTER</td>
<td>60</td>
</tr>
<tr>
<td>OIL</td>
<td>45</td>
</tr>
<tr>
<td>SOAP</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>
Test Yourself

1. 1 rupee = _________ Paise [100/1000]

2. 1 liter = _________ ml [100/1000]

3. Division is the repeated addition of the same number? Is it true?

4. What do we get when we divide a number by itself?

5. A 2 litre bottle is half full. Write the quantity of liquid in the bottle. _____________

6. Count the following amount.

7. Match the following.
   - About 12 liters to measure milk
   - About 5 liters water tank
   - 1000 liters water surahi
   - ½ liter bottle
   - 1 litre bucket

8. Hari booked a railway ticket for Rs. 62.50. He gave a 100 rupee note. How much money will he get back with the ticket?

9. Sudha threw a dice 21 times. Observe the table and answer the questions that follow:

<table>
<thead>
<tr>
<th>Number on dice</th>
<th>Number of times its occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Which face of the dice was got least number of times? ________________

How many times the face did with 3 has come up? ________________
10. Leela and Ganga had visited a shopping mall and bought the following items whose rate per unit is given as under:

1 Ball = Rs. 8
1 Namkeen = Rs. 12
1 Lays = Rs. 5
1 Frooti (200ml.) = Rs. 20

Prepare a cash memo for the following things bought by them.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rate per item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs.</td>
<td>Paisa</td>
</tr>
<tr>
<td>3 Balls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Namkeens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Lays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Frooti</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total |     |       |