Subject-Mathematics	Level A2	Class IV	Lesson-1 (Building with bricks)
			Worksheet 1

Skill/competency/concept	Target learning outcomes	Suggested Strategies
Knowledge	> Identifies and draws	Individual Task
Understanding	different wall and brick patterns, floor	Group TaskDemonstration
Computation	patterns, jaali patterns etc.	Method
Problem Solving Ability	 Draws lines of symmetry in different patterns/shapes. Solves problems based on patterns/shapes 	Play Way

Sample Activity 1:

TLO: Identifies and draws different wall and brick patterns, floor patterns, jaali patterns.

Join the dots as directed below:

5 . 6

.

4.

1

.7

3. .

2

•	Join 2 and 3			
•	join 3 and 4			
•	join 4 and 1			
	You have drawn a four sided figure. Can you tell what is it called?			
•	Now join 4 and 5			
•	Join 1 and 6			
•	Join 5 and 6			
	u have drawn another four side figure. Can you tell what is it led?			
	Now join 1 and 6			
	• join 2 and 7			
	• join 6 and 7			
	Is it similar to the first figure or the second figure?			
	You have now successfully drawn a brick.			

1. Draw side view of a brick.
2. Fill in the blanks-
(a) A brick has faces
(b) A brick has vertex.
(c) A brick has edges.
3. If cost of 1000 bricks is Rs1000. Find the cost of 3000 bricks?
4. If cost of 2000 bricks is Rs 4000. Find the cost of 1000 bricks?
5. Draw any three lines of symmetry in given shapes.

Subject-Mathematics	Level A2	Class IV	Lesson-2 (long and short)
			Worksheet-2

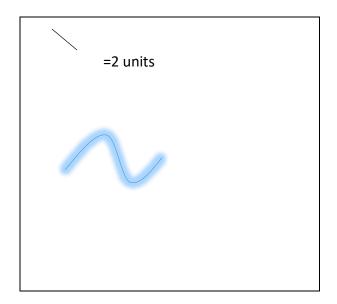
Skill/competency/concept	Target learning outcomes	Suggested Strategies
Knowledge	 Knows various units of 	➤ Individual Task
Understanding	length Converts higher units to	Group TaskDemonstration
Computation	lower units and vice versa	Method
Estimation	 Estimates the length of objects Solves basic problems based on length measurement. 	Play Way
Problem Solving Ability		

Sample Activity 1:

TLO: Estimation of length

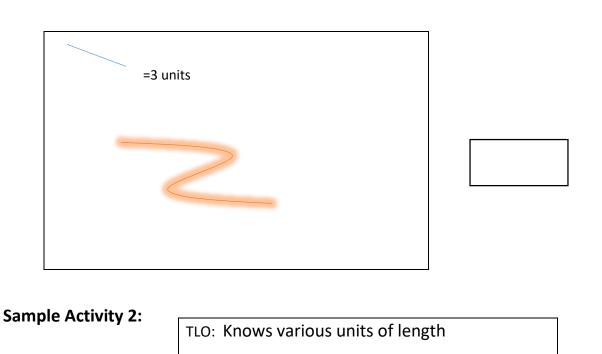
Observe the given unit of length and estimate the length of the curve.

❖ How long is the blue curve?





How long is the red curve?



Look at your shoes, shirt and trouser/skirt. Have you noticed that they have a number marked on them? This number is its size. Find out the size of your own and of your friend's uniform then fill in the table.

Name	Shoe size	Shirt size

Now complete these sentences:
Name the student(s) who has/have the biggest shoe size
Name the student(s) who has/have biggest the smallest shoe size
Name the student(s) who has/have biggest shirt size

1. Which unit will you use to measure the following? (cm, m or Km)
(a) The length of a building.
(b) The length of a belt
(c) The height of a man
(d) The distance between two cities
(e) The length of a goods train
2. Convert the following into cm.
(a) 5m2cm =
(b) 8m35cm =
3. Add following given lengths
(a) 2m 26cm and 9m 36cm
(b) 14m 39cm and 5m 28cm
4. Convert the lengths into centimeters and then subtract:
(a) 66m 79cm from 98m 56cm
(b) 15m 78cm from 24m32cm
5. A cloth merchant sold 155m 76cm nylon, 26m48cm poplin. How much cloth in total did he sell?

Subject-Mathematics	Level A2	Class IV	Lesson-3(A trip to Bhopal)
			Worksheet-3

Skill/competency/concept	Target learning outcomes	Suggested strategies
Skill/competency/concept Identification Understanding Computation Problem Solving Ability	 ➤ Understands the properties of addition, subtraction, multiplication, division. ➤ Solves number puzzles. ➤ Identifies greatest and smallest number from the given numbers. ➤ Solves basic problems 	Suggested strategies ➤ Individual Task ➤ Group Task ➤ Play Way
	related to everyday life based on numbers.	

Sample Activity 1:

Complete the multiplication table given below?

Х	25	26	27	28	29	30	31	32	33	34	35
1 X	25										
2 X		52									
3 X			81								
4 X				112							
5 X					145						
6 X						180					
7 X							217				
8 X								256			
9 X									297		
10 X										340	

1.	Who am	I? (Words game)							
i)	My One	es digit is 9							
	My Tens digit is 7 and my hundreds digit is 5								
	I am the	number							
ii)	My One:	es digit is 6							
	My Tens	digits is 2 more than my ones digit and							
	My Hundreds digit is 6 and my thousands digit is 9								
l ar	I am the number								
2 Write	2 Write in words.								
1.1	1.1989								
2. 2	2. 2999								
3. Mat	ch the ror	man number							
i)	158	LXXIV							
ii)	150	С							
iii)	74	CLVIII							
iv)	89	CL							
v)	100	LXXXIX							
4. Solve and compare the roman numerals: (Hints <, >, =)									
1)	LXXX	CXXIX							

5. By using digits, build the smallest and Greatest number possible repeat digits, If required?

No.	Digits	5 digit Smallest Number	5 digit Greatest Number
1	5,0,0,9		
2	3,0,5,3		
3	0,0,0,1		
4	6,2,3,0		

TEST YOURSELF

1. If 1 meter = 100 cm
So half meter = cm
300 m =km
2. Which number is exactly between 20 and 40.
Ans
3. A bus can carry 52 students . How many students can 5 buses carry ?
4. If cost of 1000 bricks is Rs 2000. Find cost of 500 bricks.
5. The doctor told Sunil to run 5km every day to stay fit. He took one round of this field. How far did he run?
1.5Km 1.5Km 1.5Km
6. I gave five apples each to five of my friends and four apples are left with me. How many apples did I have?
7. Draw a Floor Pattern

How far is Koilakh from Rampur ? If a person runs a tea stall and earns Rs.200 in a day. How much will he earn in 30 days.	Koilakh	17Km	57Km	Rampur
. If a person runs a tea stall and earns Rs.200 in a day. How much will he earn in 30 days.	How far is Koilakh from	Rampur ?		
	. If a person runs a tea stall	and earns Rs.200 i	n a day. How much w	ill he earn in 30 days.

Amit is going to Koilakh which is 17km away. Manraj is going towards Rampur which is

8.

57km away in the opposite direction.

Subject-Mathematics	Level A2	Class IV	Lesson-4(Tick-tick-tick)
			Worksheet-4

Skill/Competency/Concept	Target learning outcomes	Suggested Strategies
Understanding	Reads calendar and clock in various	➤ Individual Task
Computation	formats. Writes time in 12	Group TaskPlay Way
Problem Solving Ability	hours and 24 hours format.	Demonstration
	Converts time from 12 hours to 24 hours and vice-versa.	
	Solves problems related to time.	

Sample Activity 1: <u>TLO:</u> Estimation of time

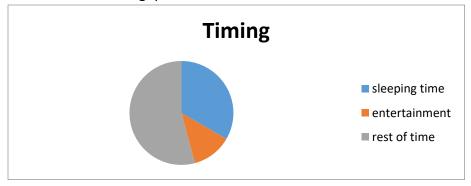
How much time you will require to run 50m

Let's run on the playground. Ask your friend to record time. How much time you have taken to run 50m

What is the time difference between your actual time duration and your estimation?

2 Graph given below shows the time utilised by Mast Deepak of class V.

Answer the following questions



- 1. Name the activity in which he spent minimum time?
- 2. Name the activity in which he spent maximum time?

Now students will be encouraged to make their own routine using hints given below

Name of activity	Time(hours)
Time spent in school	
Time spent in watching TV	
Time spent in playing outside school	
Time spent in studying	
Time spent in sleeping	
other	

1.		Fill in the blanks:- 24:00 hours is same as There are seconds in one hour. A leap year has weeks and days.
2.		Convert the following time using am/pm.
	a.	7:00 in the morning –
	b.	6:45 in the evening –
	c.	10:30 in the morning –
3.		Fill in the blanks:-
	a.	1 decade = years
	b.	1 century = Years
4	. C	onvert the lower unit of time into higher unit.
	a. 6	660 seconds into minutes
	b. 2	288 hours into days.
	5.	Draw the hands of clock as per given instruction and also write the time. (Neglect
	sec	conds hand)
	Но	ur hand on 4 and minute hand on 12

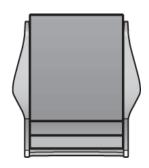
Subject-Mathematics Leve		el A2	Class IV	Lesson-5(The way the world looks.)
				Workshee	et-5
Skill/competency/conc	ept	Targe	t learning (outcomes	Suggested Strategies
Knowledge		0	Identifies d		➤ Group activity /
UnderstandingComputationProblem Solving Ability		views of an objects Reads school map, city map and other maps Draws simple maps and shapes Applies the concept of maps and shapes in real life		ol map, city her maps lle maps concept of	individual activityDemonstration methodVisual testing

Sample Activity 1:	TLO: Draws simple maps and shapes
Make route map from you	r class room to your principal room, resource room and staff room.

- 1. Draw top view and side view of your pencil box.
- 2. Draw top view and side view of a pressure cooker.
- 3. Colour the following shapes and write their views

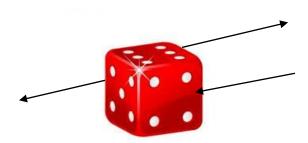






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4. Label the dice (Top, Side, Front view) and then enter the number of dots visible on each side:



- 1. FRONT.....
- 2. RIGHT.....
- 3. TOP.....

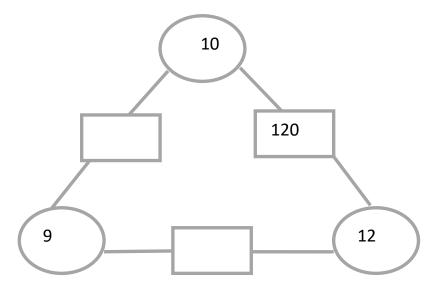
Subject-Mathematics	Level A2	Class IV	Lesson-6,11 (Junk
			seller,Tables and shares)
			Worksheet-6

Skill/competency/concept	Target learning outcomes	Suggested strategies
 Knowledge Understanding Computation Problem Solving Ability 	 Understands factors of a multiple Reads and prepares bills Applies concept in real life Solves problems related to multiplication 	 Group task Individual task Dramatization Demonstration activity

Sample Activity 1

TLO: Solving problems on multiplication

Write appropriate numbers in the boxes to complete number pattern.



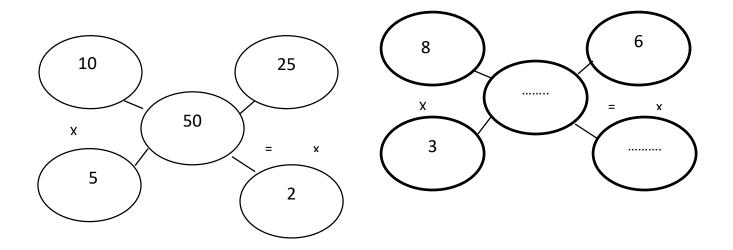
a	Ь	С	d	e	f	9	h	i	j	k	1	m
1p	2p	3р	4 p	5p	1p	2p	3р	4p	5р	1 p	2p	3р
n	0	р	q	r	S	†	u 1p	٧	W	X	У	Z

How much would it cost to buy the following animals?

Cat =3X1X5=15p
Goat =
Hen =
Dog =
Owl =

Learning Assessment

1. Write the answers applying mental math:



2	Fun	with	multi	plication	
۷.	ıuıı	VVILII	munu	piication	•

Each letter a, b, c here stands for a number.

		a	a	a	Mention the Value of
	X	a	a	а	_ b=a
		а	a	а	c=a
	a	a	a	x	
а	а	а	Х	X	<u> </u>
а	b	С	b	а	_

a			the			
≺ .	⊢ıII.	ın	tha	h	Ian	kc.
J.	1 111		uic	\mathbf{v}	ıaıı	NJ.

B. The product of 1 and a number is the -----.

C. The product of 0 and a number is always-----.

4. Solve the word problem?

(a) One set of complete sofa set costs Rs. 23157. How much money did a group of 30 persons pay to the shopkeeper, if all of them purchase sofa set from themselves?

(b) A Shopkeeper has a sale of 5080 gifts in a day. How many gift articles will he sell in six months?

Test Yourself

1.	Change into 24 hour clock time:	
(a)	5'o clock in the afternoon	
	3 o'clock in the afternoon	
2.	Name two things that you buy in litre:	
(a)		
(b)		
3.	200 ml +500 ml +300 ml=	litre
4.	Write am or pm for the following:-	
(a)	Breakfast at home 8:00	
(b)	Dinner at home 9:00	
5.	Convert given rupees into paise:-	
(a)	Rs 58	
(b)	Rs 11.2	
		toes for Rs 28, fruits for Rs 113 and sugar for Rs
	32.75. Prepare a bill for it. How much to	tal money is paid by Deenu?
7.	Multiply:	
	(a) 768	(b) 101
	X14	X10
8. Ram	's rate List:-	
Kind of	f Junk	Price per Kg
Potato		Rs 12

Kind of Junk	Price per Kg
Potato	Rs 12
Onion	Rs 20
Tomato	Rs 35
Cauliflower	Rs18
Pumpkin	Rs 10

(a) 2kg Potato
(b) 8 kg Tomato
(c) 0.5 kg Cauliflower
(d) 1.5 kg Onion

Find the cost of following items:-

Subject-Mathematics	Level A2	Class IV	Lesson-7(Jugs and mugs)
			Worksheet-7

Skill/competency/concept	Target learning outcomes	Suggested strategies
 Knowledge Understanding Application Problem solving ability 	 Understands the concept of volume / capacity Knows the units of capacity Estimates the volume of a container Measures the capacity of a container Solves problem related to capacity 	 ➢ Individual task ➢ Group task ➢ Demonstration ➢ Play Way

Samp	le	Activity	1	:	
------	----	----------	---	---	--

TLO: Identify unit of volume	to	be	used
------------------------------	----	----	------

1. Fill in the boxes. (The first one is done for you)

How many times the container will be used to measure	1 L	500 ml	200 ml	100 ml	50 ml
250 ml milk			1 time		1 time
700 ml petrol					
1 litre 750 ml oil					

2. The table shows the amount of water used in a day by family of 2 people.

Activity	Water used in Litre
Bathing	20L
Drinking	12L
Washing cloths	40L
Cleaning utensils	8L

If you have a measuring pan of volume 5L and 1L, then how will you measure and give water to this family?

E.g.
$$8L = 5L + 5L - 1L - 1L$$

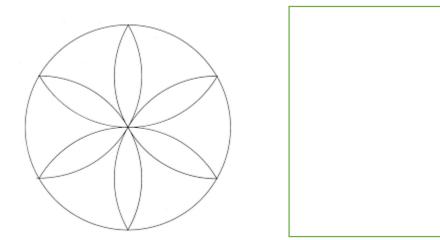
- 1. Convert the following into milliliters (ml). (1 L = 1000 ml)
- (a) 5L =
- (b) 8.2L =
- 2. Add the following volumes by converting them into ml
- (a) 8 L 26ml and 12 L 36ml
- (b) 14 L 39ml and 5 L 28ml
- 3. Subtract with conversion
- (a) 66 L 79ml from 98 L 56ml
- (b) 15 L 78ml from 24 L 32ml
- 4. Sunil bought 2L 500 ml of milk in the morning and 8L 500ml of milk in the evening. How much milk did he buy in all?
- 5. A bucket contains 5L 750ml of water. If 2L 50ml of milk is taken from it. What quantity of mixture will be left in the bucket.

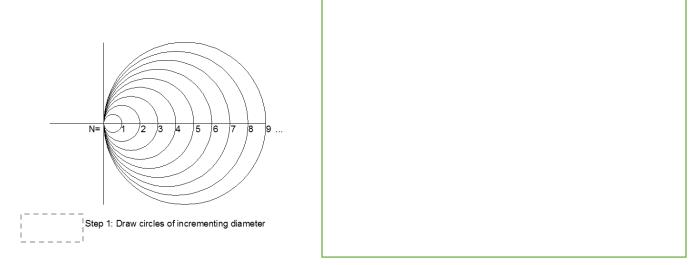
Subject-Mathematics	Level A2	Class IV	Lesson-8(Carts and wheels)
			Worksheet-8

Skill/competency/concept	Target learning outcomes	Suggested Strategies
 Knowledge Understanding Identification Computation 	 Understands the concept of circle and curve Knows the use of compass Identifies radius and diameter Draws circle and shapes with the help of circles 	 Individual task Group task Demonstration Play Way

Sample Activity:	TLO: Use of Compass

Using compass draw patterns in the space provided. Try making patterns of your own.





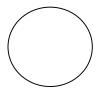
1. Complete the table (Diameter = 2 x radius)

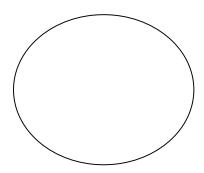
RADIUS	DIAMETER
2cm	
3.5cm	
5cm	
7.5cm	

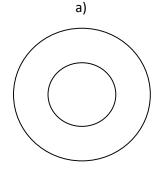
2. For the diameter given, calculate radius.

DIAMETER	RADIUS
2cm	
3.5cm	
5cm	
7.5cm	

- 3. Draw a circle of radius 2.5cm
- 4. Mark the centre, and draw the radius and diameter of the following images:







Subject-Mathematics	Level A2	Class IV	Lesson-11(Halves and Quarter)
			Worksheet-9

Skill/Competency/Concept	Target Learning Outcomes	Suggested Strategies
 Knowledge Understanding Computation Problem Solving Ability 	 Understands the concept of half and quarter using chapatti, cake etc. Estimates fraction of a whole Understands fraction as division. Knows concept of equivalent fraction. Solves problem related to fraction 	 Individual task Group task Demonstration method

Sample Activity-1:

TLO: Estimates fraction of a who	le
----------------------------------	----

1. Lalit has drawn some shapes and coloured part of the shape. What part of each shape is coloured? First guess and write the answer in the space provided then check (by using paper folding method) and write the answer in the space provided.

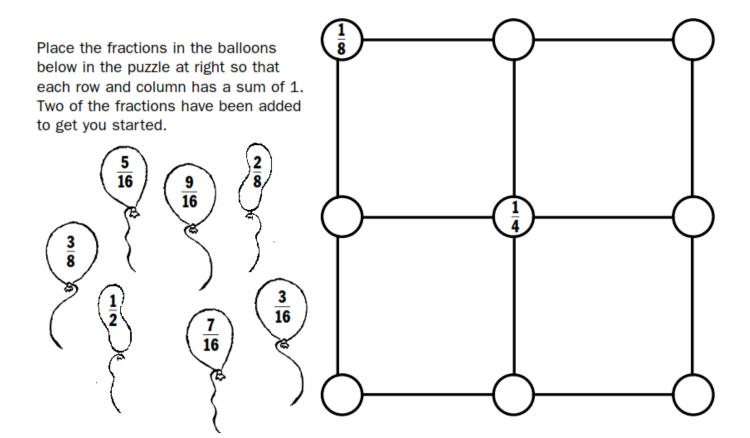
Guess		
After Checking		

Guess		
After Checking		

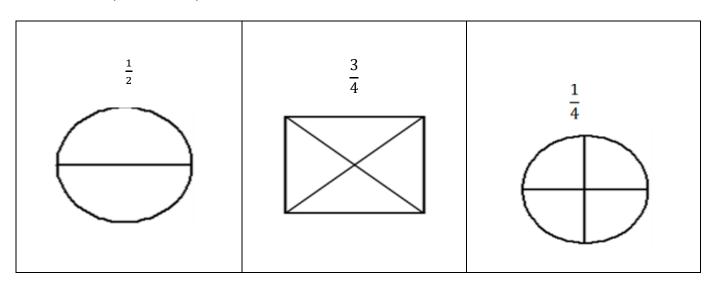
Sample Activity-2

TLO: Knows concept of equivalent fraction.

SUME FRACTION FUN



1. Shade the part/s of shapes :



2. Follow the instruction given in the table?

1. Draw a line to show halves.

Color
$$\frac{1}{2}$$

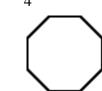


2. Draw lines to show one third.

Color
$$\frac{1}{3}$$



3. Draw lines to show one fourths.



Subject-Mathematics	Level A2	Class IV	Lesson-10(Play with patterns)
			Worksheet-10

Skill /Competency / Concept	Target learning outcomes	Suggested strategies
 Knowledge Identification Understanding Logical thinking 	 Identifies patterns Explores patterns in numbers / alphabets/ shapes etc. Codes and decodes patterns 	 Group activity Individual task Games Demonstration method

SAMPLE ACTIVITY-1

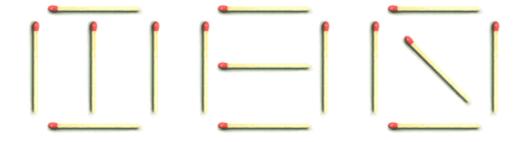
TLO: Identification of patterns

1. Use numbers 8 to 16 and fill in the squares.

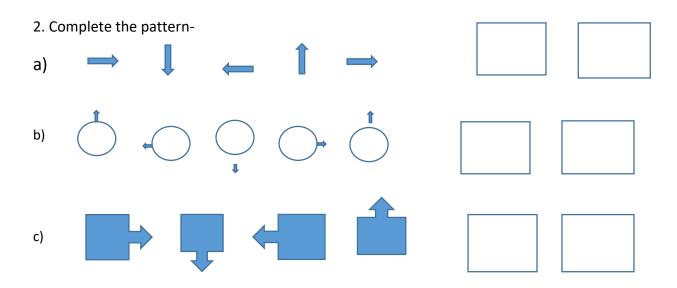
RULE---The numbers on each row and column add up to 36.

	10	
		8
	14	

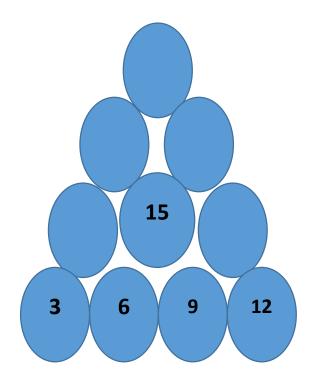
2. Remove six match sticks to make the word 'TEN'



1. If RAM is written as SBN, in a certain code language then SHYAM will be written as



3. Add 2 numbers below to get the numbers in the box above them.

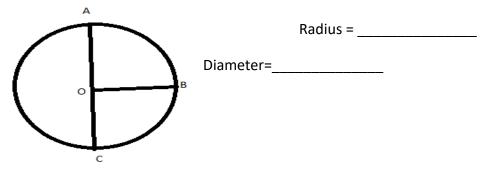


TEST YOURSELF

1. Colour the part/s of shape as required-



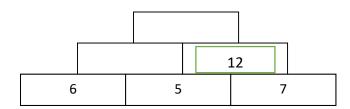
2. Fill in the blanks -



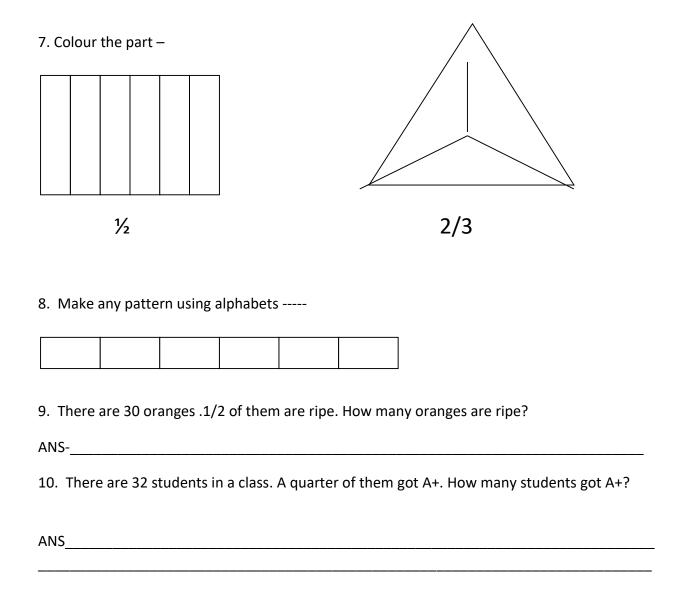
3. Take these patterns forward-

10AB	20CD	30EF	

4. Make the number pattern-



- 5. Draws a circle of radius 3 cm.
- 6. Make a design using compass.



Subject-Mathematics	Level A2	Class IV	Lesson-12 (How heavy? How light)
			Worksheet-11

Skill/ Competency /	Target learning outcomes	Suggested strategies
Concept		
 Knowledge Conversion Understanding Problem solving activity 	 Converts different units of weight Estimates heavy and light objects Solves problems related to weight 	 Group activity Individual task Games Demonstration method

SAMPLE ACTIVITY 1.

> TLO: Estimates heavy and light objects

Measure your own height and weight and find out actual ratio between height and weight.

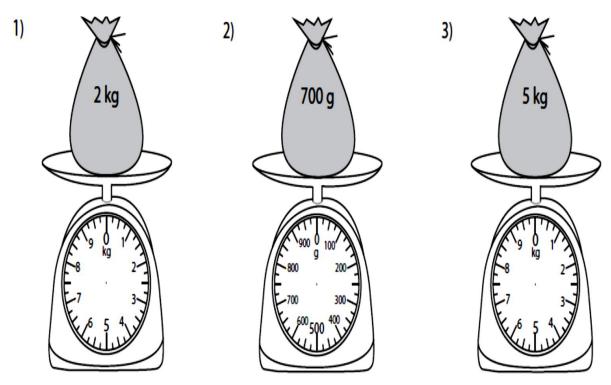
Height (cm)	Underweight (kg)	Normal Weight (kg)	Overweight (kg)	Obese (kg)	Extremely Obese (kg)
150	41 or less	42 - 56	57 – 67	68 – 90	91 or more
153	43 or less	44 - 58	59 – 70	71 - 93	94 or more
156	45 or less	46 - 61	62 - 73	74 – 97	98 or more
159	47 or less	48 - 63	64 – 76	77 – 101	102 of more
162	49 or less	50 – 65	66 – 79	80 - 105	106 or more
165	50 or less	51 – 68	69 – 81	82 – 109	110 or more
168	52 or less	53 – 70	71 – 84	85 – 113	114 or more
171	54 or less	55 – 73	74 – 87	88 - 117	118 or more

What is your actual weight?

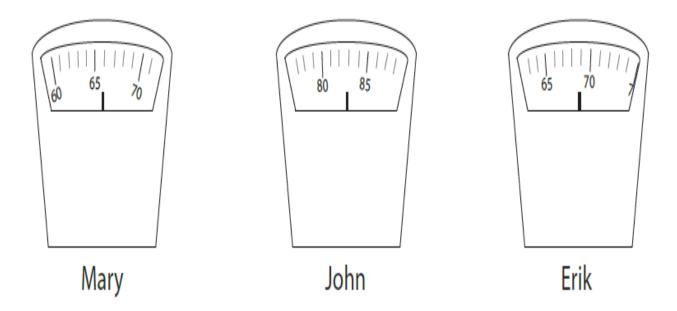
What should be your weight according to the table given above?

What is the difference between your ideal weight and your actual weight?

1. Draw pointer on each scale to show the weight



2. Read the following weighing scales and fill in the blanks



- a) The weight of Mary is kg less than Erik
- b) Is the heaviest student.
- c) The total weight of Mary, John and Erik iskg
- 3. Encircle any three objects in the grid which we weigh in gm -

L	E	М	0	N	Υ	U	1	0	Р
Α	S	D	F	G	Н	J	K	L	L
E	Z	Х	С	V	В	N	М	L	K
R	0	В	0	0	K	R	Т	Υ	U
Α	0	А	S	D	E	R	Т	Υ	U
S	0	С	Н	I	Р	S	В	N	М
E	С	Υ	U	1	0	Р	Υ	Т	R
R	U	F	G	G	Н	J	G	Н	V
В	Р	М	G	Н	S	Р	0	0	N
Т	Υ	U	I	0	K	L	U	I	I

4. Standard unit of weight is



b. 5 Kg= g



d. 2356 g= Kg g

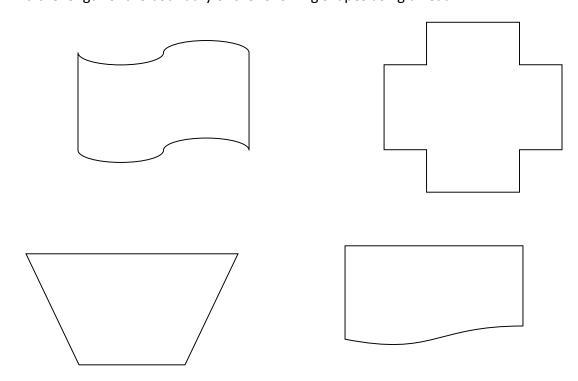
Subject-Mathematics	Level A2	Class IV	Lesson-13(Field and Fences)
			Worksheet-12

Skill/competency/concept	Target learning outcomes	Suggested Strategies	
 Knowledge Understanding Computation Problem solving 	 Calculates the total length of the boundary of regular and irregular shapes. Knows the concept of perimeter Finds the number of squares inside a regular shape. Solves day to day life problems related to area and perimeter 	 ➢ Group activity ➢ Individual task ➢ Games ➢ Demonstration method 	

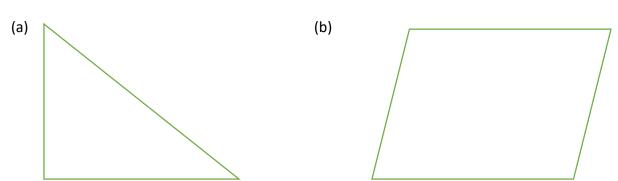
Sample Activity: 1

<u>TLO:</u> Calculates the total length of the boundary.

1. Find the length of the boundary of the following shapes using thread.



- 1. Find the perimeter of triangle whose sides are given below.
- (a) 14cm, 12cm, 9cm _____
- (b) 240m, 150m,150m
- 2. Find the perimeter of square whose sides are given below.
- (a) 7cm _____
- 3. Find the perimeter with the help of scale.



- 4. The perimeter of a square is 200cm. Find the length of its side.
- 5. Each side of a triangle is 8 cm and side of a square is 7 cm. Which one has more perimeter?

Subject-Mathematics	Level A2	Class IV	Lesson-14(Smart Chart)
			Worksheet-13

Skill/competency/concept	Target learning outcomes	Suggested Strategies
 Knowledge Understanding Computation Application 	 Draws conclusions and inferences from the data Solves simple problems using chart/data 	 Group activity Individual task Survey Demonstration method

Sample Activity 1:

TLO: Draws conclusions and inferences from the data

Make a list of students whose favourite sweet is kaju katali, laddoo , Rasgulla , rasmalai. Every student has to select any one sweet.

Name of sweets	No of students/Tally mark
kaju katali	
Laddoo	
Rasgulla	
Rasmalai	

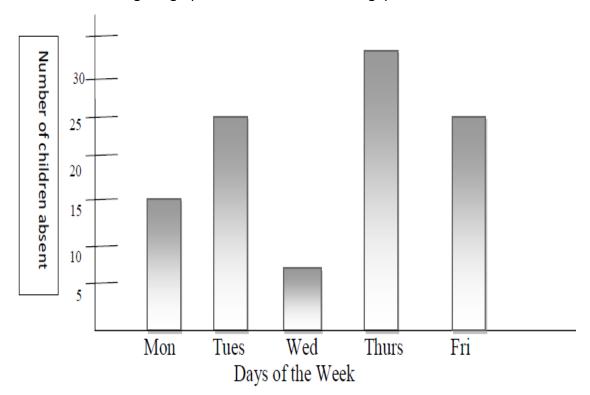
Answer the question given below on the basis of above observation.

- a) Which sweet is most favourite among students?
- b) Which sweet is liked by least number of students?

c) How many students like laddoo?

Learning Assessment

1. Observe the following bar graph and answer the following questions



a) How many children were absent on Tuesday?

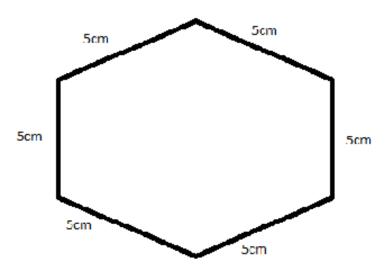
b) How many more children were absent on Thursday than on Monday?

c) On which day least number of children was absent?

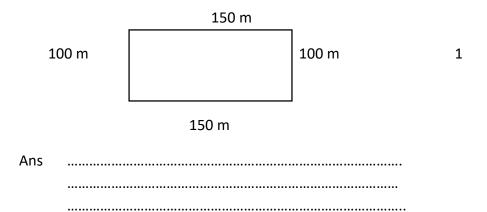
d) On which day the number of children absent was exactly the half of that on Thursday?

Test yourself

- 1. Name two things that we usually buy in kilogram?
 - (a) (b).....
- 2. Find the boundary of the field



3. Chandan wants to fence his field with the wire. What is the total length of the wire required for fencing the field ?



- 4. Sunil's weight is 78 kg and Deepak's is only 56kg . What is the difference between their weight?
- 5. A Football fields is $105m\ 40\ cm$ long and $65m\ wide$. How long is the boundary of the field?

Ans

5. Guess and write the weight of each things be bought in gm or kg .

Items	Weight	Kg/g
Turmeric	500	
Rice	10	
Salt	500	
Sugar	2	