Teachers' Handbook of Learning Outcomes





FORWARD

Samagra Shiksha, Education Department, UT Chandigarh has prepared Teachers' handbook based on leaning Outcomes at Elementary level in Hindi, English, Mathematics, EVS, Science & Social Science.

This Handbook will enable the teachers to ascertain learning skills more accurately in these subjects. While making the document it has been ensured that the learning need of the children with different learning level-pre Basic, Basic, Proficient & Advanced, are being catered & the academic progress of the students can be monitored by Faculty Incharges, Cluster Resource Coordinators & further by Head of the school.

The material in the document can be used as an assessment tool for Elementary classes & to keep a track of achievement of the learning level.

Teachers' handbook will not only help teachers to focus on teaching learning process but also facilitate State functionaries in their role towards ensuring quality education in schools

To make it user-friendly, simple language has been used as far as possible across the document. To help the teacher understand and achieve the learning outcomes as per the curricular expectations.

This document includes list of learning outcomes (with labeling) and progress sheet for monitoring/ tracking of the progress of the students.

Question prepared in this document are only suggestive for teachers. The teacher can modify these tools as per the need.

ABOUT THE DOCUMENT

This question bank might prove an effective tool in the hands of the educators & evaluators. It aims at assisting teachers to assess and improve the performance of the learners.

Some features of the documents are as follows:

- * Proper care has been taken to cover all the learning outcomes.
- * The questions have been framed focusing upon the learner's mathematical thinking, reasoning and hence ability to solve daily life problems.
- * The teacher can make relevant changes in question bank according to the needs of different levels of learners.
- * It provides enrichment material & remedial material for different level of learners.

RESOURCE GROUP

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Code	Learning Outcomes
3.1	• works with three digit numbers
	• reads and writes numbers up to 999 using place value
3.2	• compares numbers up to 999 for their value based on their place value
3.3	• solves simple daily life problems using addition of three digit numbers with
	and without regrouping, sums not exceeding 999
	 adds small amounts of money with or without regrouping
3.4	• solves simple daily life problems using subtraction of three digit numbers
	with and without regrouping, sums not exceeding 999
	 subtracts small amounts of money with or without regrouping
3.5	• tables up to 10
3.6	• constructs and uses the multiplication facts (tables) of 2, 3, 4, 5 and 10 in
	daily life situations
3.7	• explains the meaning of division facts by equal grouping/sharing and finds it
	by repeated subtraction. For example, 12÷3 can be explained as number of
	groups of 3 to make 12 and finds it as 4 by repeatedly subtracting 3 from 12
3.8	• analyses and applies an appropriate number operation in the situation/ context
3.9	acquires understanding about 2D shapes
	• identifies and makes 2D-shapes by paper folding, paper cutting on the dot
	grid, using straight lines etc.
	• describes 2D shapes by the number of sides, corners and diagonals.
	• For example, the shape of the book cover has 4 sides, 4 corners and two
	diagonals
	• fills a given region leaving no gaps using a tile of a given shape
3.10	• estimates and measures length and distance using standard units like
	centimetres or metres and identifies relationships
3.11	• weighs objects using standard units– grams and kilograms using simple
	balance
	• adds and subtracts measures involving grams & kilograms in life situations
3.12	• compares the capacity of different containers in terms of non standard units
3.13	• identifies a particular day and date on a calendar
3.14	• reads the time correctly to the hour using a clock/watch
3.15	• extends patterns in simple shapes and numbers
3.16	• records data using tally marks, represents pictorially and draws conclusions.

MATHS LEARNING OUTCOMES ACHIEVEMENT SHEET (CLASS 3)

School:-

Class:-

Class Teacher:-

Maths Learning		Basic Numeracy					Experimental Activities										
Outco	omes	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	3.10	3.11	3.12	3.13	3.14	3.15	3.16
S. No.	Students' Name	Counting upto 999	Comparison upto 999	Complex +	complex -	ables upto 10	imple x	iimple ÷	Nord Problems	2D Shapes Features	Measurement (standard)	Veight (standard)	Capacity (Non-standard)	Calendar reading	ime identification	asy Patterns	Data Interpretation(Rate chart, bill)
						•	•,	•,				-			•		
					<u> </u>	<u> </u>											

QUESTION BANK BASED ON LEARNING OUTCOMES MATHEMATICS CLASS 3

LEARNING OUTCOME 3.1 :

- Works with three digits numbers.
- Reads and writes numbers.

1. Write the following numbers in words:

- a. 109=_____
- b. 206=_____
- c. 776=_____

2. Complete the following pattern.

- a. 201, 301, 401, ____, 601, ____, 801, ____.
- b. 250, 300, ____, 400, 450, ____, 550, ____.

3. Write the number in the given table as shown in example:

a.	3 hundreds 4 tens 7 ones is	347
b.	2 hundreds 5 tens 9 ones is	•••••
c.	3 hundreds 6 tens 2 ones is	•••••
d.	9 hundreds 0 tens 5 ones is	•••••
e.	1 hundred 0 tens 0 ones is	••••••

4. Write in numerals.

a.	Three hundred seventy nine	=	•••••
b.	Five hundred	=	•••••
c.	Seven hundred one	=	•••••
d.	One hundred ninety nine	=	•••••

LEARNING OUTCOME 3.2 :

- Compares numbers upto 999 for their value based on their place value.
- **1.** Circle the smallest number.
 - a. 215, 913, 397, 937, 739 b. 789, 897, 987
- 2. Circle the greatest number.

a.	453,	786,	567
b.	564,	245,	759

3. Put appropriate sign('>', '<' or '=').

a.	349	••••	439
b.	123	•••••	321
c.	901	•••••	109
d.	743	••••	347

4. Represent 926 on abacus.



5. Re-arrange the digits to form the greatest and smallest numbers.

	Digits	Greatest Number	Smallest Number
a.	1,3,4		
		•••••	•••••
b.	5,0,1		
		••••	••••

LEARNING OUTCOME 3.3:

- Solves simple daily life problems using addition of three digit numbers with/without re-grouping, sums not exciding 999.
- Adds and Subtracts small amounts of money with or without regrouping.
- 1. Ravi has 428 marbles and Ram has 188 marbles. How many marbles do they have in all?
- 2. Solve:

<u>Rs.</u> Paise.	<u>Rs.</u> Paise.
40 30	17 80
+ 17 20	+ 18 20

3. Ajay has ₹ 116 and Sunny has ₹ 230. How much money do they have in all? Solution:-



4. Add the cards given in each box and write the answer in the given space.



5. Fill in the blanks:

a.	₹ 3 more than ₹ 55	=	
b.	₹ 9 less than ₹ 20	=	
c.	₹ 10 added to ₹ 47	=	

6. Solve:

Rs 30	Rs 100
Rs 40	Rs 200
<u>+ Rs 10</u>	<u>+ Rs 400</u>

-

LEARNING OUTCOME 3.4:

- Solves simple daily life problems using subtraction of three digit numbers with/without re-grouping, sums not exciding 999.
- Subtracts small amount of money with/ without regrouping.
 - 1. Subtract the following: b. **НТО** н т о 5 4 7 932 -324 -4 7 8
 - 2. Solve:

a.



3. Rajesh had Rs. 250. He purchased apples of Rs. 120. How much money he has now?

Rajesh had	=	₹	
He spent	=	₹	
He has now	=	₹	

4. Find the missing number:



LEARNING OUTCOME 3.5:

• Tables of 2,3,4,5 and 10.

1. Complete the following:

a.	7	Х	8	=	
b.	5	Х	8	=	
c.	7	х	0	=	
d.	9	х	4	=	
e.	6	х	7	=	
f.	9	х	1	=	

2. Complete the following patterns.

	7+7+7+7	=	4x7	=	28
a.	8+8+8	=	x8	=	24
b.	9+9+9+9+9	=	X	=	45
c.		=	4x3	=	

3. Complete the following patterns.

	6+6+6+6	=	4x6	=	24
a.		=	3x4	=	
b.		=	5x2	=	
c.		=	6x5	=	

LEARNING OUTCOME 3.6:

• Constructs and uses the multiplication facts in daily life.

1. Complete the following:

1 kg = 1000 gms $2 \text{ kg} = \underline{\qquad} \text{ gms}$

 $3 \text{ kg} = ___gms$

2. Find the number of beads in 15 such strings.



3. How many days are there in 3 weeks?

4. If 1 notebook costs ₹10, then find the cost of 4 such notebooks.

5. Do as directed and complete the table.

Weight	Double	Half
200 g	400 g	100 g
400 g		
6 kg		

LEARNING OUTCOME 3.7:

• Explains the meaning of division facts by equal grouping/ sharing and finds it by repeated subtraction.

1. Complete the following.

a.	10	÷	2	=	5
b.	8	÷	2	=	
c.	18	÷	6	=	
d.	16	÷	4	=	

2. Look at the following pictures carefully and write the division facts.



- **3.** There are 8 toffees and 4 children. Each child will get toffees.
- 4. Divide 9 oranges in the group of 3 oranges. How many groups can be formed?



5. Fill in the boxes with correct answer using multiplication facts and division facts. a.



b.



LEARNING OUTCOME 3.8:

- Analyses and applies an appropriate number operation in the situation/ context.
- 1. Do as per given examples using the following cards.

100) , [1	.0	
a.	126	=	
b.	114	=	
c.	500	=	
d.	24	=	
e.	203	=	

2. Use notes and coins to show the following amounts of money. For example:

Twenty Seven Rupees	=	20 5 1 1
a. Thirty five Rupees	=	
b. 120 rupees	=	
c. 52 rupees	=	
d. 70 rupees	=	
e. 18 rupees	=	
f. 120 rupees	=	

3. Fill in the blanks:



- a. There are _____ apples.
- b. They are in _____ groups.
- c. There are _____ apples in each group.
- 4. Divide 12 laddoos among 4 children equally.

LEARNING OUTCOME 3.9:

• Acquires understanding about 2-D shapes.

1. Draw the top view of the following things.

Table	Pencil	Pressure Cooker

 Look at the following pictures given below.
 Does the dotted line divide each picture into two similar halves? Tick the correct option in the box.



3. Complete the following figures which are half drawn.



4. Complete the following table.

Sr. No.	Name of Thing	No. of Corners	No.of Edges
a.	Ludo Die		
b.	Eraser		
с.	Circle		

5. Observe the following figures carefully and colour the figures having no corner or zero corner.



6. Draw the objects of given shapes in the boxes.

	· · · · · · · · · · · · · · · · · · ·
Cube	Cuboid
Sphere	Cylinder

Help Box:Cube:- ludo dice, sugar cubes etc.Cuboid:- Sharpener, eraser etc.			
	Cylinder:- Wire, sketch pen's cap, lipstick etc.		

:

7. Complete the following patterns.



8. Complete the following patterns.



9. Draw a figure having four corners and four edges.

10. Colour/ tick the figures made up of curves.



LEARNING OUTCOME 3.10:

• Estimates and measures the length and distance using standard units like centimetres or metres and identifies the relationships.

Complete the following tuble.		
a. Distance from Chandigarh to Delhi	350 km	Three hundred fifty kilometres
b. Distance from Ludhiana to Chandigarh	120 km	
c. Distance from Delhi to Amritsar	535 km	
d. Distance from Chandigarh to Shimla		Two hundred seventy kilometres

1. Complete the following table.

2. Add the followings:



3. Subtract the followings:



4. If the length of one pencil is 9 cm. What will be the length of 5 such pencils?

5. Complete the followings.

	a.	1 km	=	1000 m		
	b.	2 km	=	2000 m		
	c.	3 km	=	3000		
	d.	4 km	=	m		
	e.	5 km	=			
	f.	km	=	6000 <u>m</u>		
	g.		=	7000 m		
	6. Complete the followin			ings.		
6.	Comp	lete the follow	ings.			
6.	Comp a.	1 m	ings. =	100 cm		
6.	a. b.	lete the follow 1 m 2 m	= =	100 cm cm		
6.	Comp a. b. c.	lete the follow 1 m 2 m 3 m	= = =	100 cm cm cm		
6.	Comp a. b. c. d.	1 m 2 m 3 m 4 m	ings. = = = =	100 cm cm cm 400		
6.	Comp a. b. c. d. e.	1 m 2 m 3 m 4 m 5	ings. = = = = =	100 cm cm cm 400 500 <u>cm</u>		
6.	Comp a. b. c. d. e. f.	1 m 2 m 3 m 4 m 5	ings. = = = = =	100 cm cm cm 400 500 <u>cm</u> 600 cm		

7. How tall is each figure?



LEARNING OUTCOME 3.11:

• Weighs objects using standard units like grams and kilograms using simple balance.

1. Complete the followings.

a.	1 kg	=	1000 g
b.	2 kg	=	g
c.	3 kg	=	g
d.	4 kg	=	<u> </u>
e.	5	=	5000 g
f.	6	=	6000 <u>g</u>
g.	7 kg	=	

2. Encircle the heaviest weight. For example-

- a. 20g, 5kg, 250kg, 700g.
- b. 8kg, 175g, 90g, 276kg
- c. 920g, 475kg, 300g, 900kg
- d. 72kg, 420g, 500g
- e. 97kg, 98kg, 89kg, 72kg
- f. 100kg, 700g, 900g, 300g
- g. 404g, 978g, 789g, 578g

3. Match the followings:

- a. 4 kg of onions
- b. $\frac{1}{2}$ kg of tomatoes
- c. 5 kg of rice
- d. 3 kg of potatoes
- e. 1 kg of carrots

- i. 5000 g of rice
- ii. 1000 g of carrots
- iii. 500 g of tomatoes
- iv. 4000 g of onions
- v. 3000 g of potatoes

4. Do as directed and complete the table.

Weights	Double	Half
8000 g	16000 g	4000 g
1 kg		
6 kg		
2000 g		

5. Add the followings:

$\frac{kg}{340}$ $\frac{G}{500}$	<u>kg</u> <u>g</u> 930 200
+720 200	+ 240 180

6. Subtract the followings:

$\frac{\underline{kg}}{850} = \frac{\underline{G}}{730}$	<u>kg</u> 980 870
- 207 290	- 300 300

7. Tick the correct option.

a.	Half	kg =		g
----	------	------	--	---

- i. 1000 ii. 500 iii. 700 iv. 100
 - **b.** Double of 2 kg = _____ kg
- i. 2 ii. 9 iii. 8 iv. 4
 - c. Half of 8 kg = _____ kg
- i. 16 ii. 7 iii. 4 iv. 18

d. $6 \text{ kg} = ___ \text{kg}$

	i.	2+2	ii.	1+4	iii.	3+3	iv.	6+6
--	----	-----	-----	-----	------	-----	-----	-----

8. Tick the estimated weight of the following things:

- a. An elephant 5000 kg / 5000 gm
- b. A buffalo 300 kg / 300 gm
- c. A textbook 1.2 kg / 20 gm
- d. A laptop 2 kg / 2 gm

9. Solve the followings:

a.	900 g + 730 g	=	
b.	4 kg 300 g + 5 kg 200 g	=	
c.	750 g – 200 g	=	
10. Use ">	>", "<", or "=" for the follo	wings.	
a.	2 kg rice		1000 gm rice

b. 1 kg popcorn _____ 1 kg sugar

c. 7000 g potatoes _____ 9 kg potatoes

LEARNING OUTCOME 3.11:

- Adds and subtracts measures involving grams & Kilograms in life situations.
- 1. Sonu bought 5 kg of apples and 9 kg of oranges. What is the total weight of the fruits that Sonu bought?

2. Ramu bought 15 kg rice and Golu bought 7 kg potatoes. Who bought more amount and by how much?

3. A box contains 5 apples. How many apples will be there in 2 such boxes?

4. Solve the followings:

a.	2kg + 3kg + 4kg		=	kg
b.	9kg – 3kg		=	kg
c.	700g + 300g	=		kg
d.	1000g - 350g	=		g

300g + 200g	1 kg
3kg + 5kg	7kg +1kg
9kg	9000g
7000kg	7g
170g	2kg
2000g	2g + 2000g

5. Compare the following by using symbols ('<', '>' or '+').

LEARNING OUTCOME 3.12:

- Compare the capacity of different containers in terms of nonstandard units.
- 1. Circle the vessel which can hold more water.



2. Pot 'B' holds 14 glassfuls of water. Pot 'A' holds twice the water as pot 'B'. Answer the following questions.



- a. How many glasses of water are needed to fill pot 'A'?
- b. Which pot holds more water?
- c. How many glassfuls of water are needed to fill both the pots?

3. Match the right pair.



4. Compare the following using symbols ('>' or '<').

Capacity of a water bottle	Capacity of a water tank
Capacity of a glass	Capacity of a bucket
Capacity of 1 L water bottle	Capacity of 2 L water bottle
Capacity of a glass	Capacity of a jug

5. Observe the following pots carefully and draw these pots at the right place in the table.



Less than 1 litre	More than 1 litre

6. Arrange the following in ascending order/ increasing order.

Oil in a spoon, a mug full of water, a tank full of water, a bucket full of water

Ascending/ increasing order:-

LEARNING OUTCOME 3.13:

• Identifies a particular day and date on a calendar.

1. Answer the followings:

- a. If today is Thursday tomorrow will be _____.
- b. The day before Tuesday is _____.
- c. The number of days in a week is _____.
- d. The day between Saturday and Monday is _____.
- e. The day after Tuesday is _____.

2. Complete the following.

a.	One week	=	<u>7</u> Days
b.	Two weeks	=	<u>14</u> Days
c.	3 weeks	=	Days
d.	4 weeks	=	Days
e.	5 weeks	=	Days
f.	6 weeks	=	Days
g.	7 weeks	=	Days

3. Answer the followings:

- a. The Children's Day is celebrated on _____.
- b. Christmas is celebrated on _____.
- c. There are _____ days in July.
- d. How many months have 30 days? ______.
- e. ______ is the shortest month in a calendar.

4. Match the followings:

a. Children's Day
b. Christmas
c. Shortest Month
d. Days in a week
e. Days in a non-leap year
d. February

5. Circles the months having thirty days.

January	February	March	April
May	June	July	August
September	October	November	December

6. Tick the right option. a. How many months have 30 days? i. 3 ii. 2 iii. 4 iv. 1 b. How many days are there in a leap year? i. 7 ii. 14 iii. 300 iv. 366 c. How many months have 31 days? i. 7 ii. 4 iii. 2 iv. 1 d. _____ is the shortest month. i. February ii. January iii. April iv. December e. A year has _____ weeks. i. 5 ii. 7 iii. 52 iv. 15

7. Match clouds with umbrellas.



LEARNING OUTCOME 3.14:

• Reads the time correctly to the hour using a clock / watch.

1. Match the following:

- a. The short hand
- b. 1 hour after 3 o' clock
- c. 2 hours before 7 o' clock
- d. The long hand

i. 4 o' clock

ii. Minute hand

b.

- iii. Hour hand
- iv. 5 o' clock

2. Write the time shown by the clock.

a.





3. Tick the correct option for the time taken by different activities. a. Blinking your eyes. ·· . . ··· . . . · тт

i. Hours		ii. Seconds	iii. Minutes	iv. Days	
	b.	Switching on light.			
i.	Hours	ii. Seconds	iii. Minutes	iv. Days	
	с.	Brushing your teeth.			
i.	Hours	ii. Seconds	iii. Minutes	iv. Day	
	d.	Growing of a plant.			
i.	Hours	ii. Seconds	iii. Minutes	iv. Months	

a.	5 o' clock	$ \begin{array}{c} 11 \\ 11 \\ 10 \\ 2 \\ 9 \\ 8 \\ 7 \\ 6 \\ 5 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10$
b.	7 o' clock	$ \begin{array}{c} 11 \\ 12 \\ 10 \\ 2 \\ 9 \\ 8 \\ 7 \\ 6 \\ 5 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10$
с.	1 o' clock	11 ¹² 1 10 2 9 3 8 4 7 6 5
d.	3 o' clock	$ \begin{array}{c} 11121\\ 10 & 2\\ 9 & 3\\ 8 & 4\\ 7 & 6 & 5\\ 10 & 10 \end{array} $

4. Draw the hands on the clock for the following:

LEARNING OUTCOME 3.15:

- Extends patterns in simple shapes and numbers.
- 1. Given below are some patterns. Continue the patterns.



4.	Look a	at rules and continue these growing patterns.
	a.	2, 4, 8, 16, 32,,,,,,
	b.	1, 3, 7, 13,,,,,
	c.	51, 56, 61, 66,,,,,
	d.	12A, 13B, 14C,,,,,
	e.	7, 14, 21, 28, 35,,,,,,
	f.	11, 21, 31,,,,,,
	g.	40, 50, 60,,,,,
	h.	9, 14, 19,,,,,
_	C!	halann ann ann a dhanna. Firmean and dha null fan an dran dran dinna dha nadhann
5.	Given a.	AA, BB, AA,,,,,,
	b.	Breakfast, Lunch, Dinner, Breakfast,,,,,
		,
	c.	Sunrise, Sunset, Sunrise,,,,,,,
		·
	d.	Winter, Summer, Rainy, Winter,,,,
		,
	e.	Entering school, Attending class, Leaving to home, Entering school,
		,,,
	f.	Morning, Afternoon, Evening, Night, Morning,,,
		,,
	g.	

LEARNING OUTCOME 3.16:

- Records data using tally marks, represents pictorially, and draws conclusions.
- 1. Look at the pictures and fill the table.



Fruits' Name	Apples	Oranges	Mangoes
Number of			
fruits			

2. Look at the following table and draw the picture for the number of flowers shown in the table and colour.

Red	Blue	Yellow	Orange
5	2	4	1
	Red 5	RedBlue52	RedBlueYellow524



d. Name the item which costs $\gtrless 5$. _____.

LEARNING OUTCOME 3.16:s

• Makes Rate Charts and simple bills.

1. Complete the following:



2. Ramu has bought 1 pen, 2 bats & 3 books of the following costs.



3. Observe the following table and answer accordingly.



- c. Which item costs the least?
- 4. Raju had Rs. 700. He bought one bat of Rs. 380. How much money he has left with?

Raju had	=	₹	
He spent	=	₹	
Money he has now	=	₹	

5. Observe the following table and prepare a bill.



6. If one notebook costs Rs. 10. Then find the cost of 8 such notebooks.

7. Golu spent Rs. 60 on 12 pencils. Find the cost of 1 pencil.