

UNIVERSAL ACTIVE MATH

End Year Random Sample Assessment

CLASS 1 to 5

- This is not an evaluation of individual students.
- It is also not a comprehensive assessment.
- It is a diagnostic assessment of some basic concepts.
- This is for an assessment of what we have broadly achieved as a whole system.



How to conduct the assessment :

- o The assessment problems for class 1 to 5 are of three types- practical, mental math and written.
- o The assessment resource person team is three party- including teachers, officers and external resource persons.
- o There will be two to three members in each team.
- o Schools will be selected as per random sampling methods.
- o Within each class children will be selected as a random sample.
- o Each team visits one school per day. One member assesses 5 children each of class 1 and 2. The other member assesses 5 children each of class 3 and 4, and so on. To assess 5 children in all three ways takes approximately 1 hour and half.
- o Some materials like notes, coins, number bead line, shapes, etc. will be part of your assessment kit and will be prepared in advance.
- o Question cards for each class will be prepared as per the chart of 'Practical test : Prepare these cards'.
- o The practical test is administered to 5 children at a time sitting in a half circle. If the names of children are A, B, C, D, E, the question under A will be asked to child A and so on.
- o Each child is asked questions 1 to 8 (or as specified)
- o The mental math test is also given to all five children at a time.
Children of class 1 write the answers on the slate.
Children of class 2 to 4 write their answers in the printed paper sheet given to them. Class 5 does not have a separate test of mental math.
- o Thereafter give the children their printed written papers.
- o After the assessment, the papers are scrutinized and data obtained is collated.

Distribution of Marks

	Practical	Mental Math	Written	Total
Class 1	10	10	20	40
Class 2	7	18	20	45
Class 3	8	20	20	48
Class 4	9	21	20	50
Class 5	10	-	40	50

School : _____ NLF MRP / Teacher / Officer : _____

Class 1 : Practical : Class 1. Practical. Note the marks in this chart

Question	A	B	C	D	E	Note
1) Keep some cubes in front of each child. 'Count and say how many'.						
2) Give each child a single digit number. 'Count and give as many cubes'.						
3) Give a number card to each child. 'Count and give as many cubes'.						
4) Keep some rupees before each child. 'Say how many rupees'.						
5) Give two digit number cards. 'Read and say the number'.						
6) Teachers tells each child a two digit number. 'Show it on the ganitmala'.						
7) Teacher shows each child a number on the number line. The child should say the number.						
8) Teacher tells each child a two digit number. Say the next number.						
9) Do this with cubes or with rupees. Single digit addition; "Take so many rupees (or cubes)", "Take 3 more. How many in all?"						
10) Do this with cubes or with rupees. Single digit subtraction; "Take so many rupees (or cubes). Now remove 3 cubes and tell how many remain?"						

If the child answers correctly mark ✓ . If the child answers orrectly with a little help mark ✗ . If the child cannot answer, mark ✗

Class 1 . Practical Test. Make the following cards.

	A	B	C	D>	E
1. Give as many cubes.	5	6	9	8	7
2. Say the number. Give as many cubes.	9	8	7	0	6
3. Read the number. Give as many cubes.	6	7	0	9	8
4. Give children rupee notes	36	20	42	44	23
5. Children read the number and give as many rupees	35	25	50	28	41
6. Children hear the number and show it on the number line	35	25	40	28	41
7. Show the number on number line.	—	—	—	—	—
8. Count ahead from this number.	20	30	40	50	60
9. Do this with rupees or cubes.	5 + 3	6 + 2	7 + 1	5 + 2	6 + 3
10. Do this with rupees or cubes.	6 - 2	7 - 3	8 - 1	5 - 0	4 - 4

Class 1. Oral test.

1. 'Write the number.' Teacher says the following numbers : (each child should write all five numbers).
10, 25, 44, 39, 50
2. How many tens in 35? Repeat with other children for numbers 43, 29, 30, 44.
3. How many units in 35? Repeat with other children for numbers 43, 29, 44, 30.
4. Write the number made with 4 tens and 2 units.
5. Write the number made with 4 tens and 4 units.
6. Write the number made with 2 tens and 4 units.
7. Take two cubes in one hand. Take three cubes in the other. Show both to the child. Now put them together and close the fist and ask "how many ?"
Repeat for the other children. (Total should be less than or equal to 5)
8. Show me 4 fingers. Now use both hands and show me four fingers. Repeat with other children for numbers 2,3,4,5.
9. Take 5 units in one hand. Remove two in the other hand and show it to the child. Close the other fist and ask how many here ? repeat for other numbers 2,3,4,5 with the other children.
10. Clap 2 times. Repeat with 4, 3, 5, 3.

School : _____

NLF MRP / Teacher / Officer : _____

Class 1 : Oral. Note the marks in this chart

Question	A	B	C	D	E	Note
1 : Write how many numbers were correct						
2						
3						
4						
5						
6						
7						
8						
9						
10						

If the child answers correctly mark ✓ .

If the child answers correctly with a little help mark ✕ .

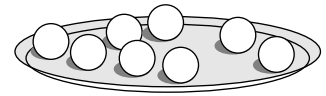
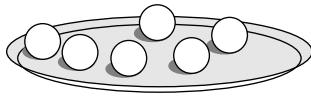
If the child cannot answer, mark ✕

Name _____

Class 1 : Written

Q.1 How many laddoos in the plate? (3)

>



Q.2 How many rupees does each have? (5)

Raja



1



1

1

Meena



1



1



Deepa



Who has the most money? _____

Who has the least money? _____

Q.3 Look at the numbers. Write the numbers which follow. (4)

61	62	63				
25	26	27				

Q 4 Write the previous number : (4)

	52	53		40	41
--	----	----	--	----	----

Q.5 Add the numbers : (2)

$$\boxed{3} + \boxed{4} = \boxed{}$$

$$\boxed{5} + \boxed{0} = \boxed{}$$

Q.6 Subtract the numbers : (2)

$$\boxed{8} - \boxed{2} = \boxed{}$$

$$\boxed{5} - \boxed{5} = \boxed{}$$

School _____ Name of Officer/Teacher/NLF member _____

Class 2. Practical Test. Note the marks in this chart

Question	A	B	C\$	D	E	Note
1. Give a number card to each child. 'Count and give as many cubes.'						
2. Give two digit number cards. 'Read and say the number.'						
3. Keep some rupees before each child (two digits). 'Say how many rupees.'						
4. Give two digit number cards. 'Read the card and give as many rupees.'						
5. Children show the above number on the ganit mala.						
6. Do this with rupees. Two digit addition; "Take so many rupees. Take 23 more. How many in all?"						
7. Do this with rupees. Two digit subtraction; "Take so many rupees. Now remove ... rupees and tell how many remain?"						

If the child answers correctly mark ✓. If the child answers correctly with a little help mark ✕. If the child cannot answer, mark X.

Class 2 . Practical - Make the following cards

	A	B	C	D	E
1. Read the number and give as many cubes.	9	8	7	0	6
2. Read the number .	43	37	52	39	50
3. Give children rupee notes. Children count and say the number.	9	55	62	70	53
4. Children read the number and give as many rupees	35	80	8	28	66
5. Children show the same number on the number line.	35	80	8	28	66
6. Do this with rupees or rods and cubes.	$45 + 23$	$5 + 3$	$32 + 13$	$34 + 20$	$9 + 0$
7. Do this with rupees or rods and cubes.	$40 - 20$	$45 - 12$	$8 - 1$	$5 - 0$	$32 - 10$

Class 2 : Mental Math

Teacher reads aloud the question. Children write answers in their answer sheet.

1. Write the number. Teacher says the following numbers :

9, 0, 30, 49, 55, 90

2. Write how many tens in 35? How many units?

3. Write the number made with 4 tens and 2 units?

4. Write the number made with 4 tens and zero units?

5. Write a number larger than 45.

6. Write the next number after 58.

7. What is 5 plus 5?

8. What remains if I remove 2 from 9?

9. What is 9 plus 3?

10. What is 20 plus 20?

11. What is 50 minus 20?

12. What is 4 minus 0?

Name : _____

Class 2 : Mental Math : Write the answers here.

1)

2) Tens Units

3)

4)

5)

6)

7)

8)

9)

10)

11)

12)

Name : _____

Class 2 : Written Test

Q. 1) How many rupees? Write the answer. (3)

Three 10 Rupee banknotes and four 1 Rupee coins are shown. A box is provided for the answer.

Five 10 Rupee banknotes and six 1 Rupee coins are shown. A box is provided for the answer.

Eight 10 Rupee banknotes are shown. A box is provided for the answer.

Q. 2) Look at the numbers and write the numbers which follow : (2)

Two rows of circles containing numbers. The first row has 61, 62, 63, and three empty circles. The second row has 85, 86, 87, and three empty circles.

Q. 3) Circle the smallest number : (1)

49, 23, 32

Q. 4) Circle the biggest number : (1)

33, 38, 32

Q. 5) See how many rupees each one has. Answer the questions : (3)
>



Radha
40 Rupees



Vicky
45 Rupees



Jaya
50 Rupees



Chanda
85 Rupees

Who has the most money? _____

Jaya has how many rupees more than Vicky?

Jaya has how many rupees more than Radha?

>

Q. 6) Add the numbers : (5)

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ + 28 \\ \hline \end{array}$$

Q. 7) Subtract the numbers : (5)

$$\begin{array}{r} 8 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ - 23 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ - 27 \\ \hline \end{array}$$

Name of Officer/ Teacher/ NLF MRP: _____

School ... _____

Class 3 - Practical Test - Note the marks in this chart :

Question	A	B	C	D>	E	Note
1. Keep some rupees before each child (two digits). 'Say how many rupees.'						
2. Child reads the number and makes it with currency.						
3. Read and say the number.						
4. Read and say the number.						
5. Child reads the number and makes it with currency						
6. 'Do the addition with currency. Take so many rupees. Take more. How many in all ?'						
7. Do the subtraction with currency. Take so many rupees. Now remove ... rupees and tell how many remain?"						
8. Do the multiplication with currency. Number is to be taken so many times.						

If the child answers correctly mark ✓. If the child answers correctly with a little help mark ✕. If the child cannot answer, mark X.

Class 3 : Practical Test : Make cards as follows :

	A	B	C	D	E
1. Give money in currency to the child.	53	30	46	43	60
2. Child reads the number on her card and makes it with currency.	63	68	72	86	91
3. Read and say the number.	76	98	43	72	67
4. Read and say the number.	419	694	399	235	864
5. Child reads the number and makes it with currency.	205	435	301	169	460
6. Do the addition with currency.	$35 + 18$	$32 + 40$	$56 + 14$	$63 + 17$	$48 + 15$
7. Do the subtraction with currency.	$68 - 29$	$70 - 45$	$65 - 29$	$63 - 41$	$69 - 18$
8. Do the multiplication with currency.	5×4	4×3	8×5	6×2	7×5

Class 3. Mental Math test

Ask the question. Children write the answer in the printed answer sheet.

1. Write the number :

60, 33, 49, 78

2. Write the number :

456, 508, 670, 888

3. What is 50 plus 50?

4. What is 40 minus 20?

5. What is 300 plus 200?

6. One child has 5 marbles. The other has 7.
How many marbles do both together have?

7. I bought Rs 42 worth of goods in a shop. I gave the shopkeeper a Rs 50 note. How much change did he return to me ?

8. I have 20 rupees. My friend has 25 rupees. How much more money does he have than me ?

9. A notebook costs Rs 10 each. What will 5 notebooks cost?

10. Mother bought one kilo sugar. Father bought half kilo sugar. How much sugar was bought for the house?

11. How much do we have to add to 84 to make up 100 ?

12. We distributed 20 chalks equally between 2 persons. How much did each get ?

13. What is this month ?

14. What is the month after this ?

Name : _____

Class 3 : Mental Math Test : Write the answers here.

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)

11)

12)

13) _____

14) _____

Name _____

Class 3 : Written Test

Q.1) Write the next two numbers which follow : (3)

57, 58, ,

109, 110, ,

597, 598, ,

Q.2) Add : (4)

$$\begin{array}{r} 23 \\ + 43 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ + 17 \\ \hline \end{array}$$

Q.3) Subtract : (4)

$$\begin{array}{r} 67 \\ - 27 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ - 34 \\ \hline \end{array}$$

Q.4) Multiply : (1)

$$8 \times 7$$

Q.5) Write the answer : (4)

$$5 + 0 =$$

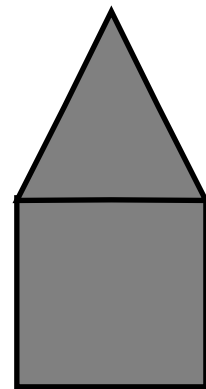
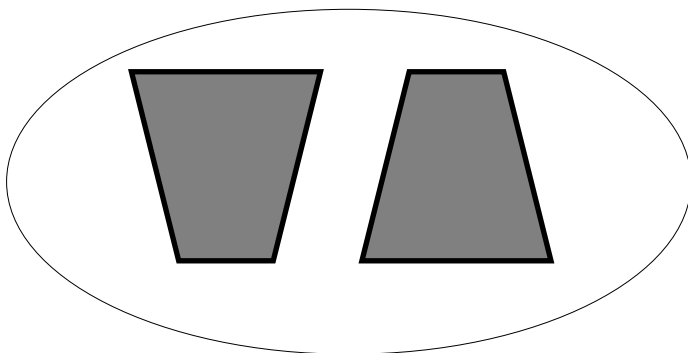
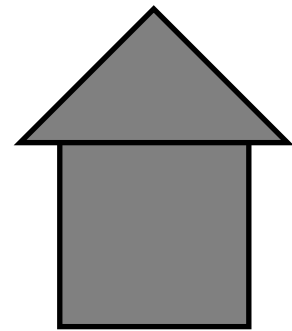
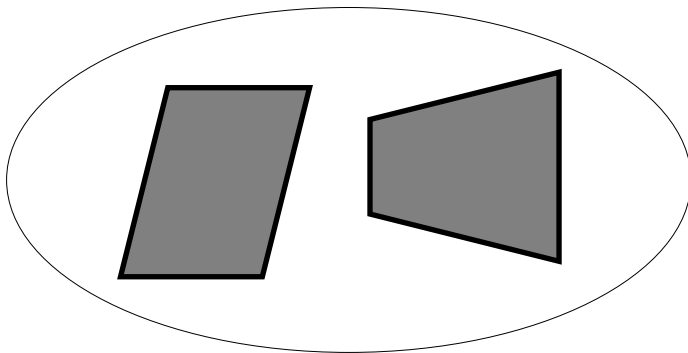
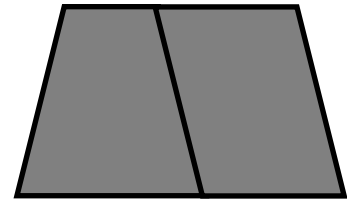
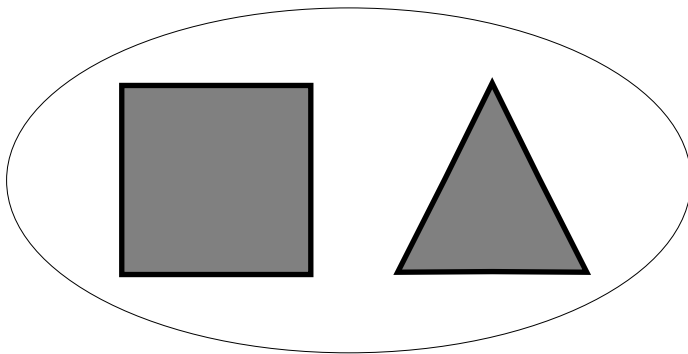
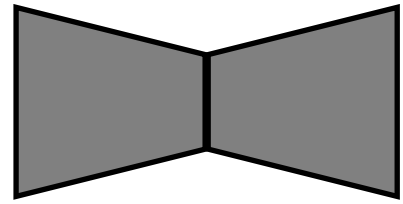
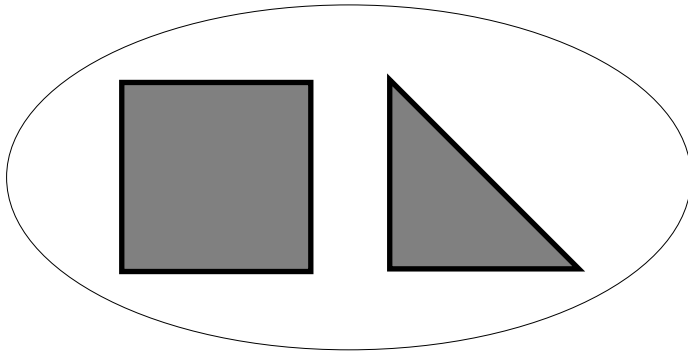
$$5 - 0 =$$

$$5 \times 0 =$$

$$5 \times 1 =$$

Q.6) On the left are two shapes. They have been joined on the right.
Match the pairs :

(4)



Name of Officer/ Teacher/ NLF MRP: _____

School ... _____

Class 4 - Practical Test - Note the marks in this chart :

Question	A	B	C	D	E	Note
1. Give each child a three digit amount of currency The child should say the number.						
2. Read the number on the card and give as much money.						
3. Read the number on the card.						
4. Read the number on the card.						
5. Read the number on the card and give as much money.						
6. Solve this problem using currency. If necessary, give instructions like ... “ Take this much money. Add this much. How much in all?”						
7. Solve this problem using currency. If necessary, give instructions like... “Take this much money. Give me this much. How much remains with you?”						
8. Do this problem with rods and cubes or currency. If necessary give instructions like “Take this number so many times “ .						
9. Do this problem with rods and cubes or currency. Give instructions like “Take this number, make so many equal parts. What is in each part “ .						

If the child answers correctly mark ✓. If the child answers correctly with a little help mark ✕. If the child cannot answer, mark X.

Class 4 : Practical Test : Make cards as follows :

	A	B	C	D	E
1. Give money in currency to the child.	853	203	546	405	632
2. Child reads the number and makes it with currency	560	345	870	243	604
3. Read and say the number.	4376	9134	1402	7205	4000
4. Read and say the number.	8067	9044	8006	9007	5020
5. Child reads the number and makes it with currency.	2134	4054	3201	6009	1060
6. Do the addition with currency.	135 + 203	339 + 215	321 + 193	435 + 285	344 + 156
7. Do the subtraction with currency.	500 - 125	400 - 235	600 - 265	400 - 175	500 - 345
8. Do the multiplication with currency.	24 x 4	24 x 3	18 x 5	16 x 5	23 x 4
9. Do the division with currency.	60 ÷ 5	70 ÷ 5	72 ÷ 4	52 ÷ 4	96 ÷ 6

Class 4 : Mental Math test.

Ask the questions one by one. Children write the answer in the printed answer sheet.

1. Write the number : 68 388 409 560
2. Write the number : 2654 5099 4080 3001
3. What is 50 plus 50?
4. What is 200 minus 50?
5. What is 3000 plus 2000?
6. There are 10 children . Each child has 5 chalks. How many chalks do they have in total?
7. There are 5 children in a group. There are 4 such groups . How many children in all ?
8. There are 100 children in each school. There are 4 schools. How many children in all ?
9. 20 children in a class are divided into two equal groups. How many in each group ?
10. I have 450 rupees. My friend has 500 rupees. How much more money does he have than me ?
11. A notebook costs Rs 10 each. How many notebooks can I purchase for Rs 100?
12. Divide 200 rupees equally among four persons. How much does each get ?
13. I have one and a half kilo sugar. I have to take 2 kilos of sugar to school. How much more sugar should I buy ?
14. There is one and a quarter litres of water inside a bottle of 2 litres .how much water is needed to fill the bottle ?
15. We divide a cord of one metre length into two equal pieces. What is the length of each piece ?

Name : _____

Class 4 : Mental Math Test : Write the answers here.

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)

11)

12)

13) _____

14) _____

15) _____

Name _____

Class 4 : Written Test

Q.1) Write the two numbers which follow : (2)

2997, 2998, ,

Q.2) Add : (2)

$$\begin{array}{r} 803 \\ + 497 \\ \hline \end{array}$$

Q.3) Subtract : (2)

$$\begin{array}{r} 200 \\ - 50 \\ \hline \end{array}$$

Q.4) Multiply : (2)

$$35 \cdot 14$$

Q.5) Divide : (2)

$$4 \overline{) 200}$$

Q.6) Write the answers :

(4)

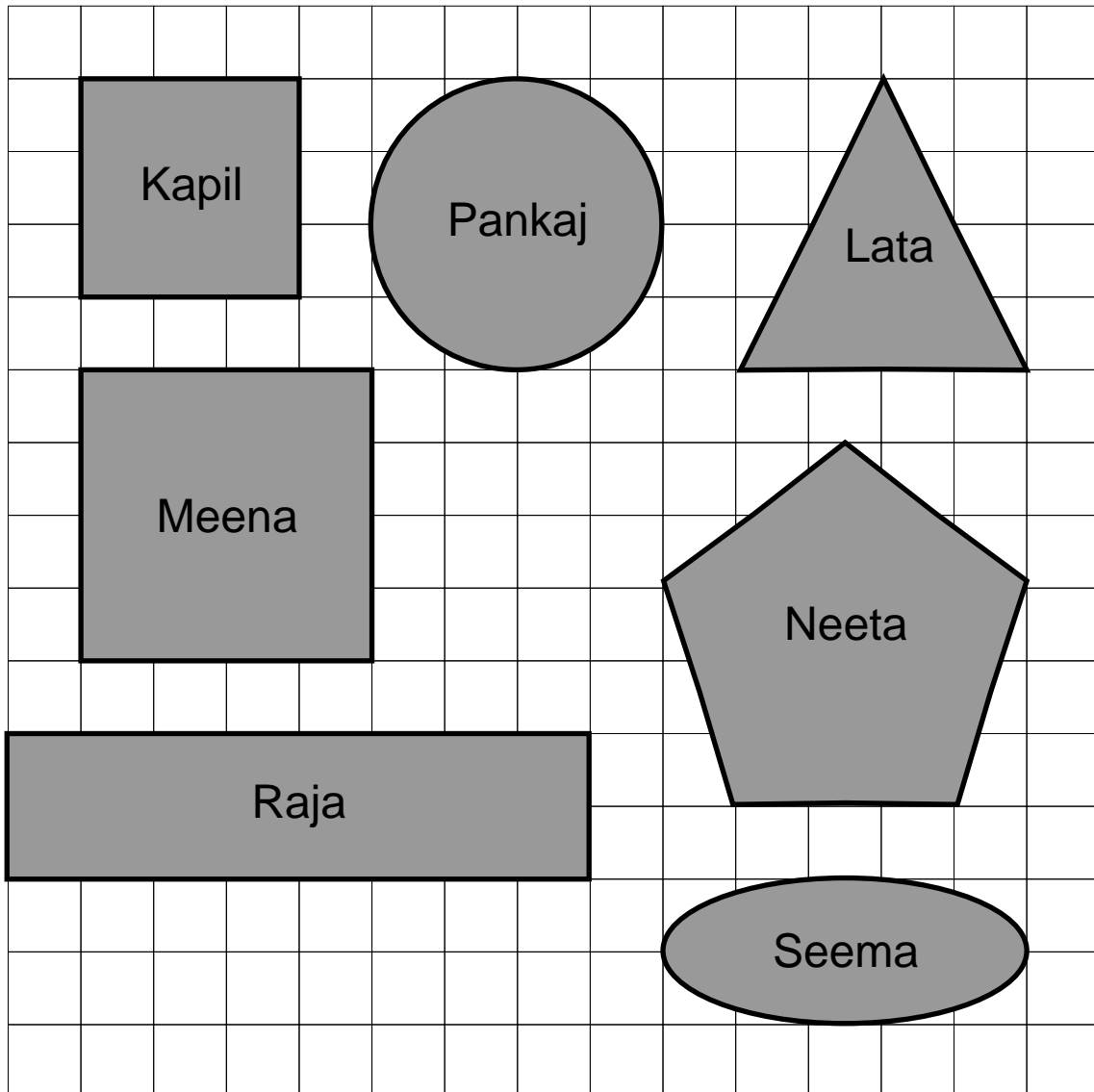
$$5 + 0 =$$

$$5 - 0 =$$

$$5 \times 0 =$$

$$5 \times 1 =$$

- Q.7) The children in the class made chapatis. Each child made a different shape. The name of the child is shown in each shape. Answer the questions : (6)



1. Whose chapati is bigger, Kapil's or Pankaj's? _____
2. How many square centimeters is Meena's chapati?
How many square centimeters is Raja's chapati?
What can you say about Raja's and Meena's chapati?

3. What is the shape of Lata's chapati? _____
4. How many corners does Neeta's chapati have?

School ... _____

Name of Officer/ Teacher/ NLF MRP: _____

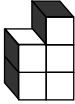
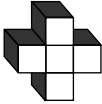
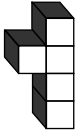
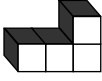
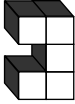





Class 5 - Practical Test - Note the marks in this chart :

	A	B	C	D	E	NOTE
1. Give each child a four digit amount of currency. The child should say the number.						
2. Read the number on the card.						
3. Make the number on the card using currency.						
4. Read the number on the card.						
5. Make a shape given on your card using blocks.						
6. Measure the length of your finger using a scale.						
7. Draw a line of given length.						
8. Read the time shown on the clock face.						
9. Find the value of given fraction piece from fraction kit.						
10. Write that fraction in numerator and denominator form.						

If the child answers correctly mark ✓. If the child answers correctly with a little help mark ✕. If the child cannot answer, mark X.

Class 5

Practical : Make cards as follows :

	A	B	C	D	E
1. Give money in currency to the child.	2005	1235	3120	3200	4000
2. Child reads the number on the card.	3235	4050	4005	3025	5555
3. Child makes the number on her card using currency.	3235	4050	4005	3025	5555
4. Read the number on the card.	10325	10040	13025	15432	10005
5. Make a shape given on your card using blocks.					
6. Measure the length of your finger using a scale.					
7. Draw a line of →	5 cm	6 cm	7 cm	4 cm	8 cm
8. Read the time shown on the clock face.	3 : 10	4 : 20	5 : 05	11 : 30	9 : 45
9. Find the value of given fraction piece from fraction kit. (Keep only those types of pieces in front of children)					
10. Write that fraction in numerator and denominator form.					

Name : _____

Class 5
Written Test

Q. 1) Write the numbers in sequence : (2)

338	339		
-----	-----	--	--

Q. 2) Write the numbers in sequence : (2)

7298	7299		
------	------	--	--

Q. 3) Add : (1)

$$\begin{array}{r} 3472 \\ + 1439 \\ \hline \end{array}$$

Q. 4) Subtract : (2)

$$\begin{array}{r} 630 \\ - 346 \\ \hline \end{array}$$

Q. 5) Multiply (2)

$$\begin{array}{r} 35 \\ \times 23 \\ \hline \end{array}$$

Q. 6) Multiply (2)

$$\begin{array}{r} 120 \\ \times 16 \\ \hline \end{array}$$

Q. 7) Divide

(2)

$$6 \overline{) 144}$$

Q. 8) Divide

(2)

$$25 \overline{) 1000}$$

Q. 9) Observe the pattern - Write the next number.

(2)

11, 22, 33,

101, 121, 141,

Q. 10) Solve :

(1)

$$3 \times 2 + 4$$

Q. 11) Solve

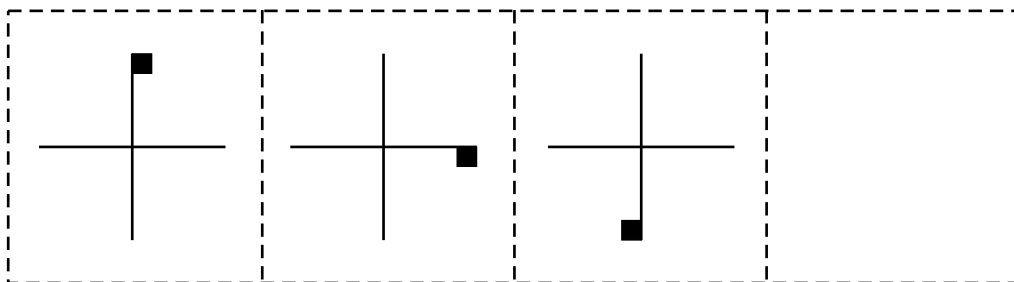
(1)

$$4 + 1 \times 3$$

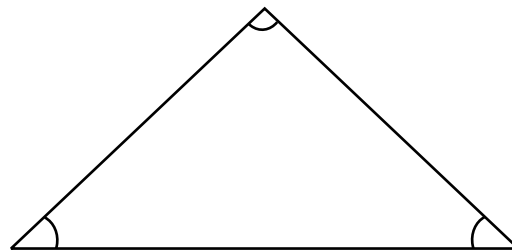
Q. 12. Write any two multiples of 6. (2)

Q. 13. Write any two factors of 8. (2)

Q. 14. What figure will come next ? (1)



Q. 15. Observe the figure. (1)

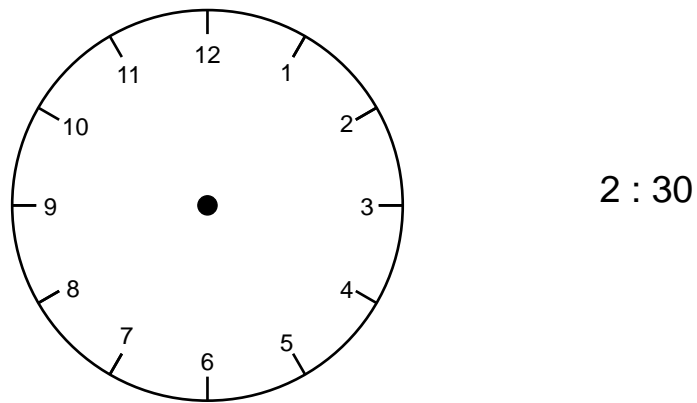


How many angles are there ?

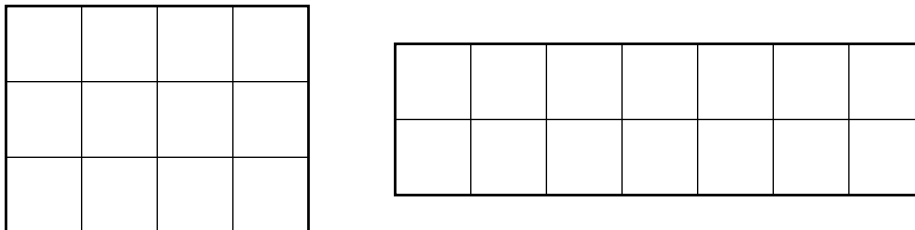
Q. 16. Draw a right angle. (1)

Q. 17. Draw an obtuse angle (angle that is greater than right angle.) (1)

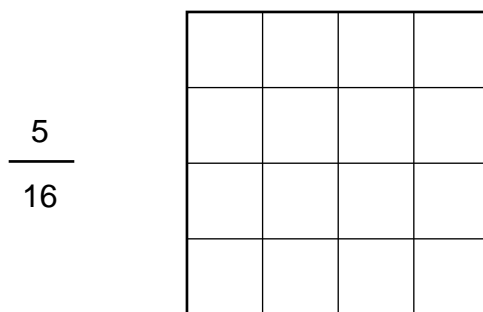
Q. 18. Show the given time by drawing hands. (1)



Q, 19. Which rectangle has more area ? Put a ✓ on that rectangle. (1)

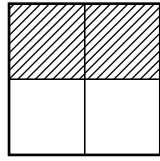


Q. 20. Colour the given fraction : (1)

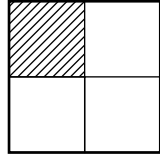


Q. 21. Match the coloured portion with fraction :

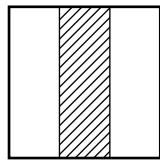
(2)



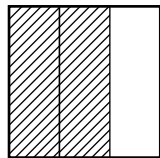
$$\frac{2}{3}$$



$$\frac{2}{4}$$

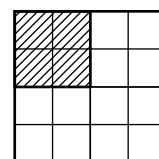
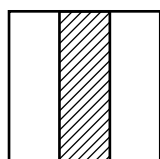
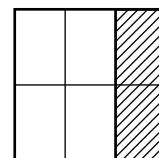
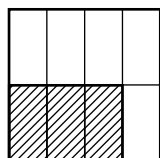
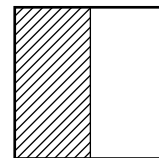
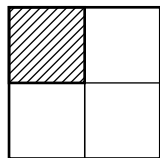
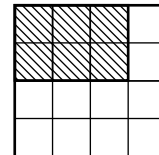
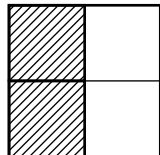


$$\frac{1}{4}$$

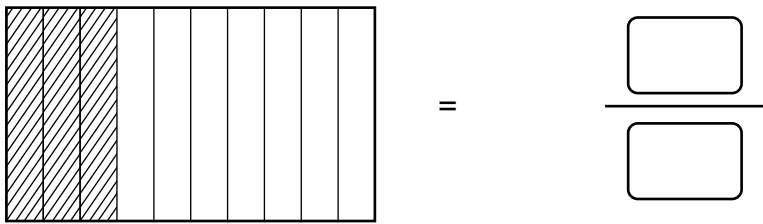


$$\frac{1}{3}$$

Q. 22. Match the pictures of equivalent fractions : (Fractions having same value) (2)



Q. 23. Write the coloured portion in the form of fraction. (1)



Q. 24. Write in decimal form : (1)

$$\frac{2}{10} = \boxed{}$$

Q. 25. Circle the largest number. (1)

0.3 0.03 0.33

Q. 26. The table gives heights of 6 children

Child	Height in cm
Mithun	130
Laxmi	150
Sajal	148
Chandan	133
Suman	145

a) Sajal's height is _____ cm. (1)

b) Who is the tallest ? _____ (1)

c) Whose height is 133 cm ? _____ (1)