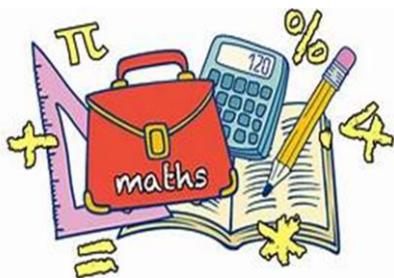


Teachers' Handbook of Learning Outcomes



CLASS-II

MATHEMATICS

FORWARD

Samagra Shiksha, Education Department, UT Chandigarh has prepared Teachers' handbook based on learning 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

- | | | |
|-------------------------|-------------|-----------------------------------|
| 1. Mr. Rakesh Sood | (Principal) | GMSSS Sector 28 D, Chandigarh |
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| 12. Ms. Neena Rana | (CRC) | |
| 13. Ms. Renu Singla | (CRC) | |

Code	Learning Outcomes
2.1	<ul style="list-style-type: none"> • works with two digit numbers • reads and writes numerals for numbers up to 99
2.2	<ul style="list-style-type: none"> • uses place value in writing and comparing two digit numbers. • forms the greatest and smallest two digit numbers (with and without repetition of given digits)
2.3	<ul style="list-style-type: none"> • solves simple daily life problems/ situations based on addition of two digit numbers
2.4	<ul style="list-style-type: none"> • solves daily life situations based on subtraction of two digit numbers
2.5	<ul style="list-style-type: none"> • represents an amount up to Rs. 100 using 3-4 notes and coins(of same/ different denominations of play money)
2.6	<ul style="list-style-type: none"> • describes basic 3D and 2D shapes with their observable characteristics • identifies basic 3D-shapes such as cuboid, cylinder, cone and sphere by their names
2.7	<ul style="list-style-type: none"> • estimates and measures length/distances and capacities of containers using uniform non-standard units like a rod/pencil, cup/ spoon/bucket etc.
2.8	<ul style="list-style-type: none"> • compares objects as heavier/lighter than using simple balance.
2.9	<ul style="list-style-type: none"> • distinguishes between straight and curved lines • draws/ represents straight lines in various orientations (vertical, horizontal, slant)
2.10	<ul style="list-style-type: none"> • draws inference based on the data collected such as the number of vehicles used in Samir's house is more than that in Angelina's. • sequences the events occurring according to their duration in terms of hours/days; for example, Does a child remain in school for a longer period than at home?
2.11	<ul style="list-style-type: none"> • identifies the days of the week
2.12	<ul style="list-style-type: none"> • identifies months of the year

QUESTION BANK BASED ON LEARNING OUTCOMES

MATHEMATICS

CLASS 2

LEARNING OUTCOME 2.1:

- **Works with two digit numbers.**
- **Reads and writes numerals up to 99.**

1. Count the dots and write the number.

••	••	••	••		
••	••	••	••	•	
••	••	••	••	••	=
••	••	••	••	••	<input type="text"/>
••	••	••	••		

2. Count and write the number

••	••	••		
••	••	••		
••	••			=
••	••			<input type="text"/>
••	••			

3. Write the number name for :

- a. 82 _____
b. 43 _____

4. Write the numeral for:

Sixty nine _____

5. Write the numeral for:

Eighty four _____

6. Write the numeral for:

Twenty five _____

7. What comes after :

43 _____

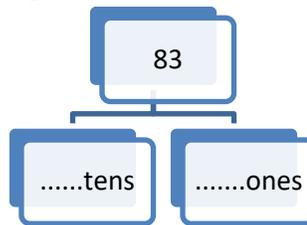
8. What comes before :

80 _____

LEARNING OUTCOME 2.2 :

- Uses place value in writing and comparing two digit numbers.
- Forms greatest and smallest two digit numbers.

1. Write 'Tens' and 'Ones' for the given number.



2. Write the number-

7 tens + 4 ones

=

3. Match the correct pairs:

8 tens
9 ones

76

3 tens
2 ones

89

7 tens
6 ones

32

4. Write 'tens' and 'ones' for:

76 _____

5. Circle the larger number.

28 or 47

6. Tick the greatest number.

35, 43, 34, 67, 19

7. Write the greatest 2-digit number using the digits 3 and 8.

8. Write the smallest 2-digit number using the digits 6 and 4.

LEARNING OUTCOME 2.3 :

- **Solve simple daily life problems/ situations based on addition of two digit numbers.**

1. **Sudha buys 18 marbles on Monday and 39 marbles on Tuesday. How many marbles does she have in all?**

2. **Ravi buys 32 bananas on Tuesday and 45 bananas on Wednesday. How many bananas did he buy in total ?**

3. **A gardener plants 56 saplings in Chandigarh and 37 saplings in Mohali. How many saplings did he plant in total ?**

4. **A pilot goes on 39 flights in January and 28 flights in February. How many flights did he fly in all ?**

5. **25 boys and 44 girls of a class went for a picnic. Find the total number of students who went for the picnic ?**

LEARNING OUTCOME 2.4 :

- **Solve simple daily life problems/ situations based on subtraction of two digit numbers.**

1. **Shiva brought 60 pens from the market and distributed 38 to his students in the class. How many pens are now left with him ?**

2. **Raghu's father gave him Rs. 80. He spends Rs. 43 and puts the remaining amount in his piggy bank. How much money did he put in piggy bank?**

3. **Malti bought eggs from a shop for Rs. 48. She gives a 100 rupee note to the shopkeeper. How much money will the shopkeeper return to Malti ?**

4. Out of a class of 68 students, 47 passed in a Maths test. How many students failed in the test ?

5. Shweta had a weight of 92kg in July 2018. She lost 13kg weight in August by joining a gym. What will be her weight after August 2018?

LEARNING OUTCOME 2.5 :

- **Represents the amount of Rs. 100 using 3-4 notes and coins**

1. How many notes of Rs. 10 will make Rs. 100 ?

2. How many coins of Rs. 5 will make Rs. 60 ?

3. If Daisy has 18 coins of Rs. 5 and 14 coins of Rs. 2, how much money does she have ?

4. Rajan has Rs. 30 in his pocket. How many coins of Rs. 2 should he borrow from his friend so that he has Rs. 50 with him ?

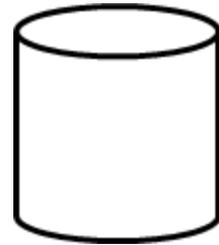
5. How many notes of each denomination will you use to represent Rs. 100.

Denomination		Number of Notes		Amount	
<table border="1"><tr><td>₹ 10</td></tr></table>	₹ 10	X	_____	=	_____
₹ 10					
<table border="1"><tr><td>₹ 20</td></tr></table>	₹ 20	X	_____	=	_____
₹ 20					
<table border="1"><tr><td>₹ 50</td></tr></table>	₹ 50	X	_____	=	_____
₹ 50					
		Total	=	<table border="1"><tr><td>₹ 100</td></tr></table>	₹ 100
₹ 100					

LEARNING OUTCOME 2.6:

- Describes basic 3-D and 2-D shapes with their observable characteristics.

1. Identify the given shape.



2. Identify the shape given on the right.



3. Which of these objects looks like a sphere?

i.



ii.



iii.



5. Which of these objects looks like a cone?

i.



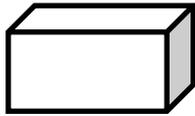
ii.



iii.



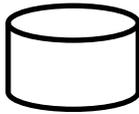
6. Match the figures with their names.



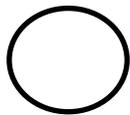
Sphere



Cylinder



Cone



Cuboid

LEARNING OUTCOME 2.7:

- **Estimates and measures length / distances and capacities of containers.**

1. Which glass will hold more milk?



A



B

2. Tick the smallest vessel.



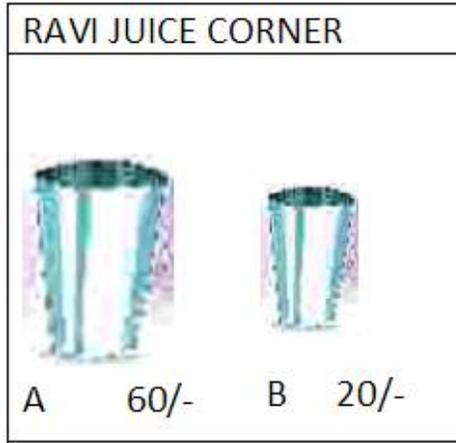
3. What is more in quantity?

A pinch of salt or A table spoon of sugar

4. Why does glass A of juice cost more?

Because it has more _____.

- a. Capacity
- b. Colours



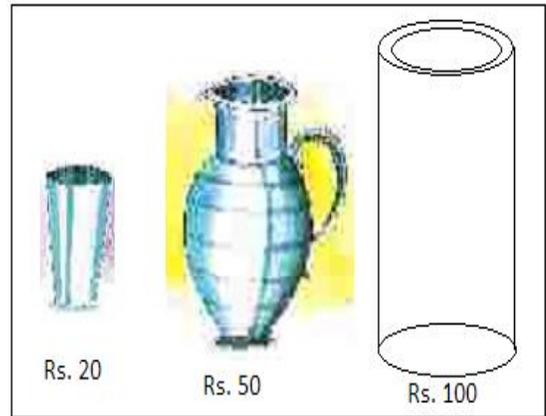
5. Complete:

One  = ₹ _____

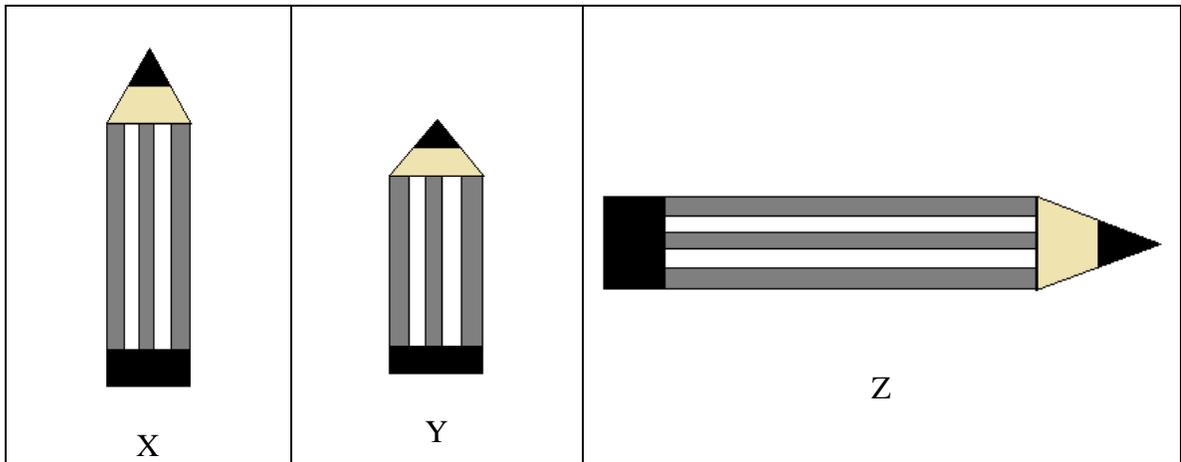
Two  = ₹ _____

 + = ₹ _____

One  = ₹ _____



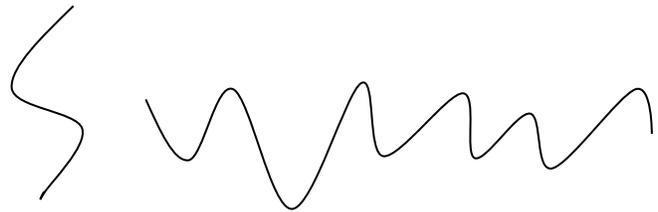
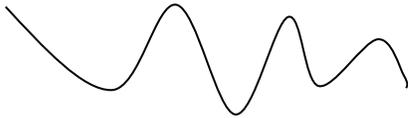
6. Which one is the longest? Tick it.



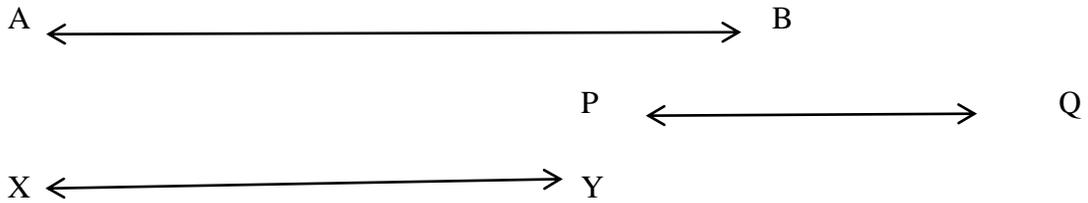
7. Tick the smallest.



8. Which thread is the longest?



9. Which cities are farthest from each other?



- i.) A and B
- ii.) P and Q
- iii.) X and Y

10. How much sugar do you add to one glass of milk?

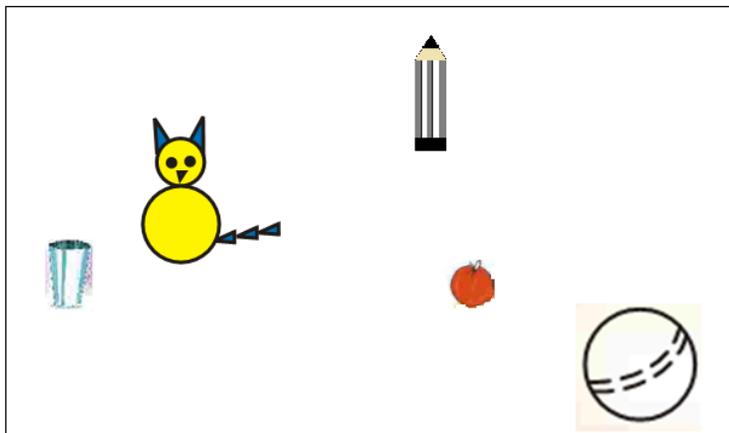
_____ Spoonful.

11. How much salt will your mother add to 1 kg Bhindi?

- a. Half tablespoon.
- b. Three tablespoons.
- c. Two tablespoons.

12. Which object is farthest from the cat?

- a. glass
- b. pencil
- c. apple
- d. ball



LEARNING OUTCOME 2.8:

- Compares objects as heavier/ lighter than using simple balance.

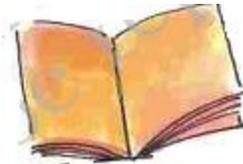
1. Tick the heavier object.



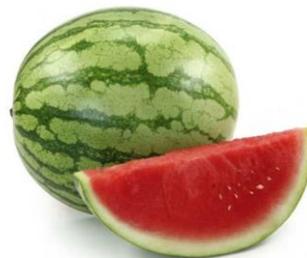
2. Tick the lighter object.



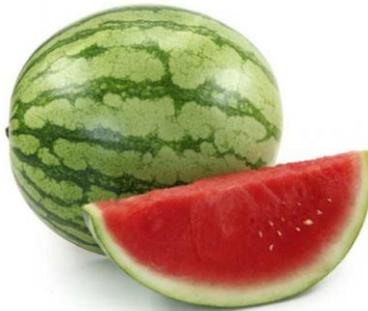
3. Which of these is heaviest?



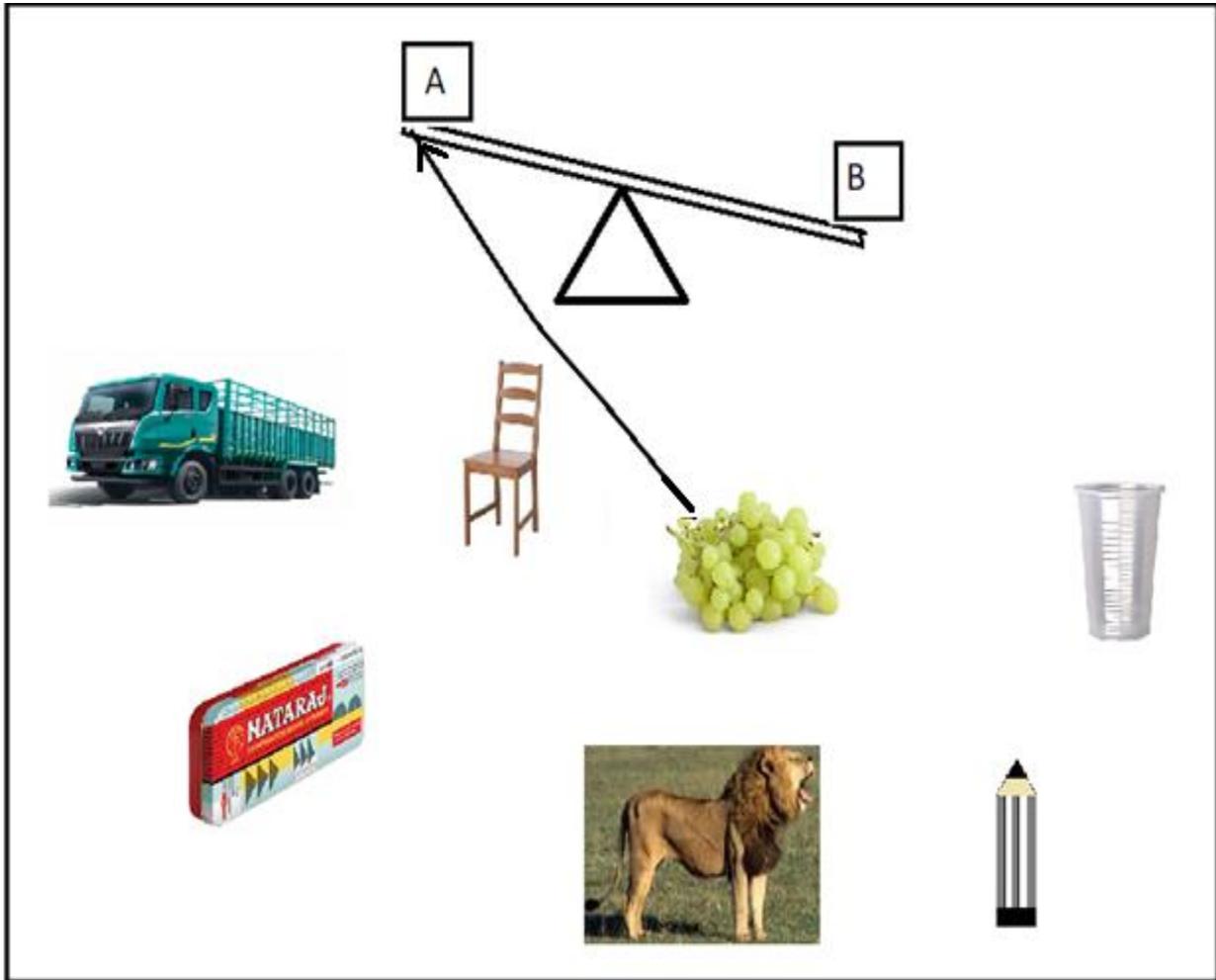
4. Tick the lightest picture.



5. Tick the objects that you can lift.



6. Draw lines to match the heavier objects to point B and light objects to point A. Compare them with 1 kg weight.



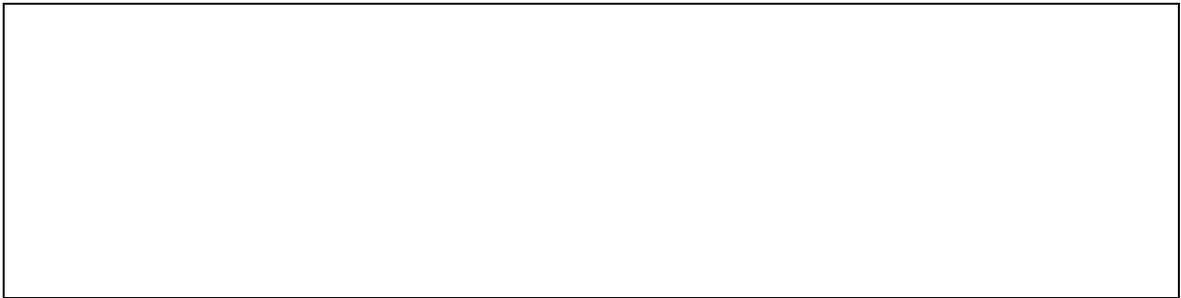
7. What is the weight of your bag to day? Can you guess?

_____ kg.

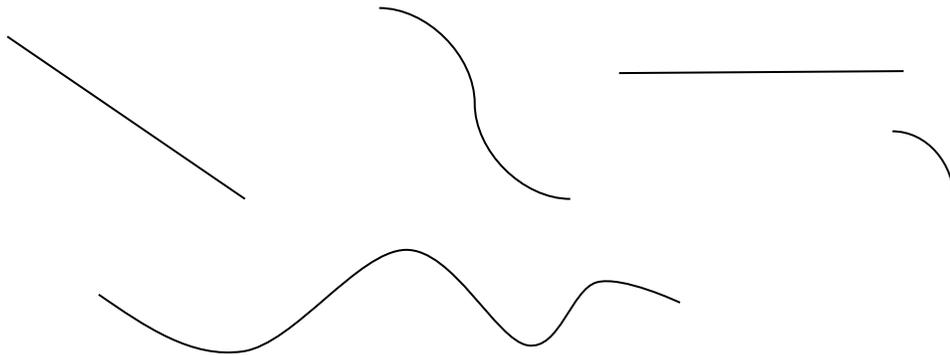
LEARNING OUTCOME 2.9:

- **Distinguish between straight and curved lines**
- **Draws/ represents straight lines in various orientations (vertical, horizontal, slant)**

1. Draw three straight lines in the box.



2. Tick the curved lines.



3. Draw a horizontal straight line.

4. Draw a vertical straight line.

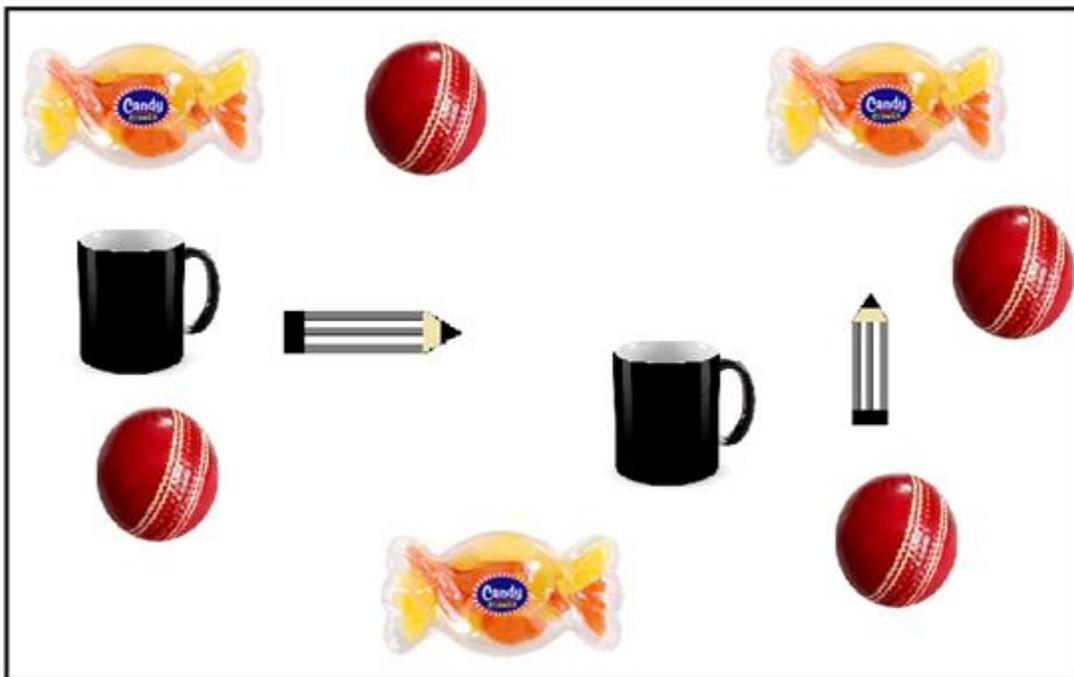
5. Draw two slanting lines.

LEARNING OUTCOME 2.10:

- Draws inferences based on the data collected such as number.
- Sequences the events occurring according to their duration....

Section A

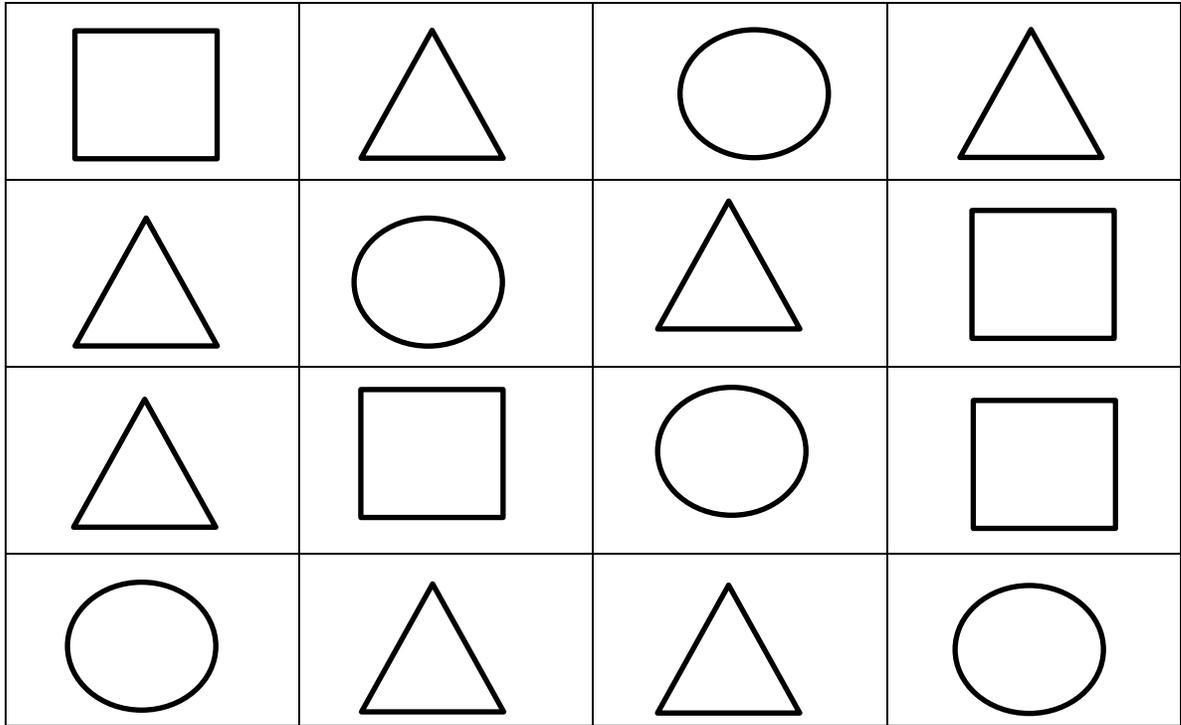
1. Look at the picture and Answer the questions.



- How many mugs are there?
_____.
- How many balls are there?
_____.
- How many candies are there?
_____.
- Which object is least in number?
_____.
- The number of mugs is equal to the number of _____.

Section B

2. Count and write:



- a. Number of squares = _____
- b. Number of triangles = _____
- c. Number of circles = _____
- d. The number of _____ is the least.
- e. The number of circles is more than the number of _____.
- f. The number of _____ is less than the number of triangles.

Section C

Choose the correct option:

3. **If you are having breakfast, what time of the day will be it be?**
 - a. Morning
 - b. Afternoon
 - c. Evening
 - d. Night

4. **At what time will you have lunch break in school?**
 - a. Between 11 am and 12 noon
 - b. Between 6 am and 7 am
 - c. Between 8 pm and 9 pm
 - d. Between 2pm and 3pm

5. **What activities will you take more time to do?**
 - a. Brushing your teeth
 - b. Sleeping
 - c. Playing football

6. **What activity will take the least time?**
 - a. Having lunch
 - b. Sharpening a pencil
 - c. Playing carom

7. **Shyam takes 10 minutes to reach school on his cycle, 30 minutes to learn his work, 15 minutes for lunch and 25 minutes for playing.**
 - a. **What activity does he complete in least time?**

 - b. **What activity takes maximum time?**

8. **With whom do you spend most part of the day?**
 - a. With parents/ family.
 - b. With classmates.
 - c. With teachers.

9.

<u>Name of students</u>	<u>Time taken to complete homework</u>
Raghav	2 hours
Pranshu	1 hour 30 minutes
Sapna	Half an hour
Ashmita	1 hour
Pankhuri	1 hour 30 minutes

a. Who takes maximum time to complete his / her homework?

_____.

b. Who spends least time to complete his / her homework?

_____.

c. Who takes more time than Pranshu?

_____.

d. Who takes less time than Ashmita?

_____.

e. Which two students take equal time to complete their homework?

_____.

10. Do you spend more time in studying or playing?

_____.

11. Where does your mother spend most of her time?

a. in front of tv

b. in the kitchen

c. in the park

LEARNING OUTCOME 2.11 & 2.12:

• **Identifies the days of the week and months of the year.**

1. Write your birth date.

Day / Month / Year
...../...../.....

2. If your birthday is on Monday this year, which day will come after 4 days?

_____.

3. Which day will come next to Thursday?

_____.

4. What day comes 2 days before Wednesday?

_____.

5. If Monday is the first day of the week; what will be the fourth day?

_____.

6. Which month of the year has least number of days?

_____.

7. How many days are there in the month of August?

_____.

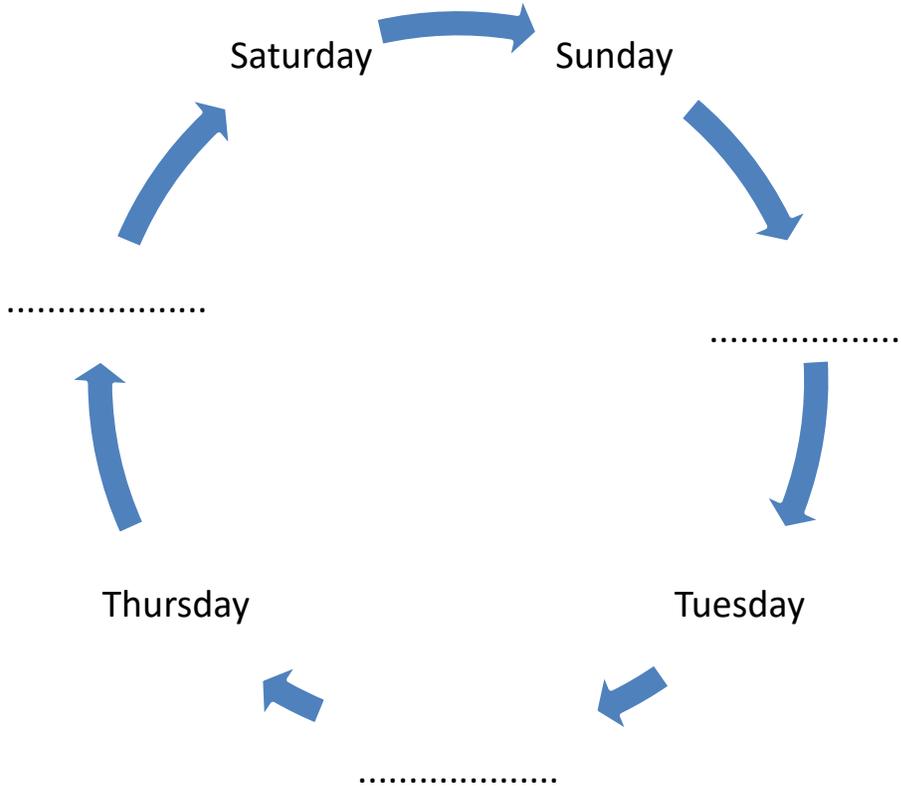
8. Which month comes next to October?

_____.

9. Which is the seventh month of the year?

_____.

10. Complete:



11. Write some festivals that you celebrate in these months:

- a. January -
- b. April -
- c. December -