

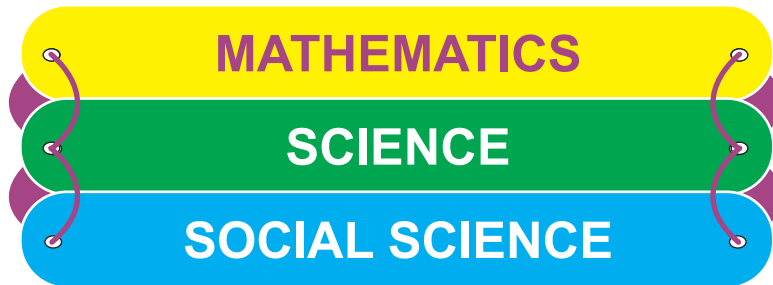


Government of Tamilnadu

STANDARD FOUR

TERM I

VOLUME 2



NOT FOR SALE

Untouchability is Inhuman and a Crime

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MATHEMATICS

IV STANDARD

Term I

MATHEMATICS



What these Icons stand for!



Practice



REVISION



Puzzle



PROJECT

Oral sums



Lab activity

SHAPES AND FIGURES

Observe the following pictures.



Identify and write the names of the pictures that have the following shapes.



Pentagon - Front view of the house.



Interesting facts

When people construct buildings, they use different shapes, because every shape has special characteristics that are best suited for a particular purpose.

A circle has curved line segment.
Other shapes like triangle, square, rectangle and pentagon have line segments.

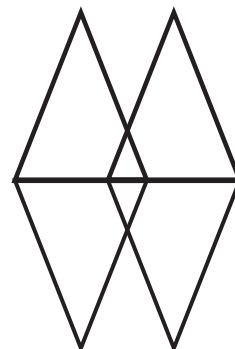
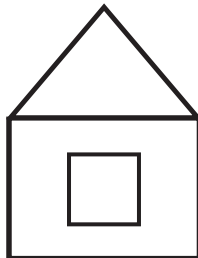
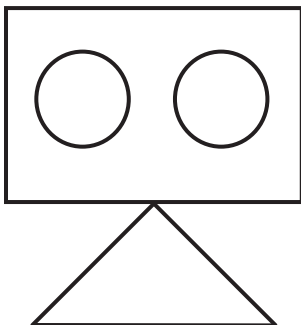
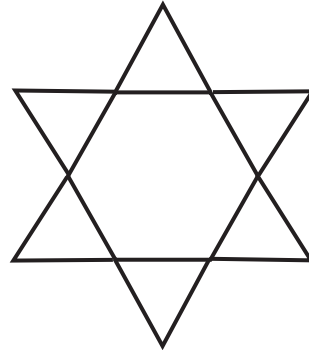
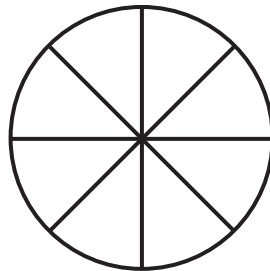
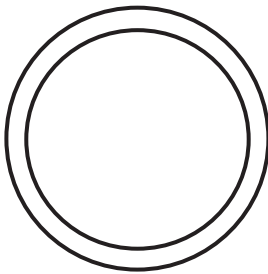


Line segment


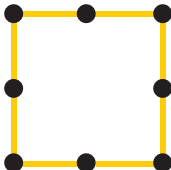
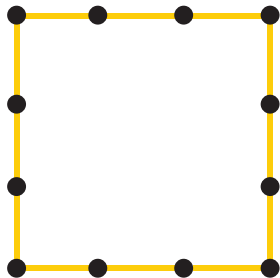

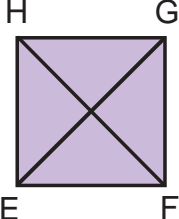
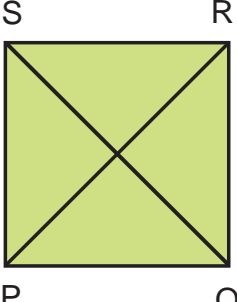


Curved line segment

Colour the shapes



Squares

Squares are formed using the matchsticks			
Squares are formed by the line segments	 figure (1)	 figure (2)	 figure (3)

In figure (1)

- ◆ A, B, C and D are **corners**.
- ◆ AB, BC, CD and DA are the **sides**.
- ◆ AC and BD are the **diagonals**.
- ◆ All sides are equal.

$$AB = BC = CD = DA$$

A square has four corners and four sides. All sides are equal.

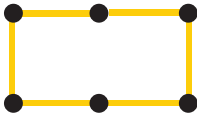
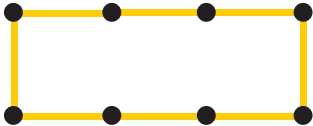
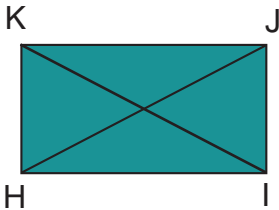
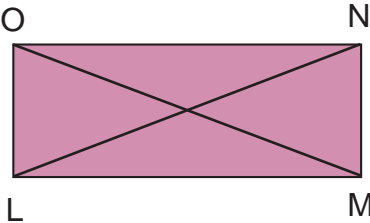


Practice

Name the corners, sides and diagonals for the **figure (2)** and **figure (3)**.



Rectangle

Rectangles are formed using the matchsticks		
Rectangles are formed by the line segments	 figure (1)	 figure (2)

In figure (1)

- ◆ H, I, J and K are **corners**.
- ◆ HI, IJ, JK and KH are the **sides**.
- ◆ HJ and IK are the **diagonals**.
- ◆ **Opposite sides are equal.**

$$HI = JK$$

$$IJ = KH$$

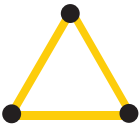
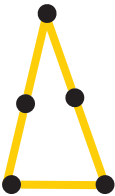
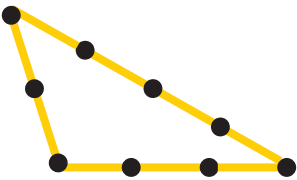
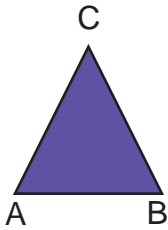
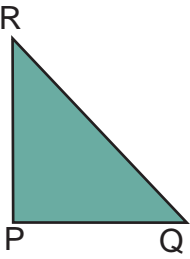
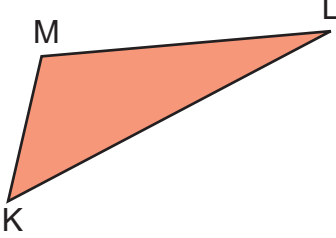
A rectangle has four corners and four sides.
Its opposite sides are equal.



Practice

Name the corners, sides and diagonals for the **figure (2)**.

Triangle

Triangles are formed using the matchsticks			
Triangles are formed by the line segments	 figure (1)	 figure (2)	 figure (3)

In figure (1)

◆ A, B and C are **corners**.

◆ AB, BC and CA are the **sides**.

A triangle has three corners and three sides.

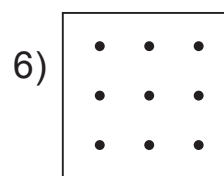
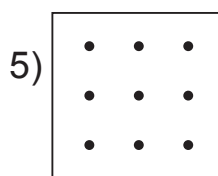
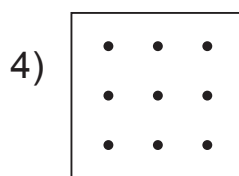
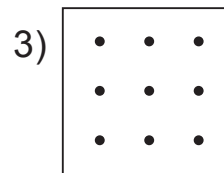
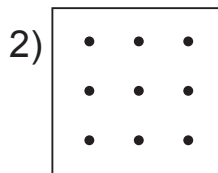
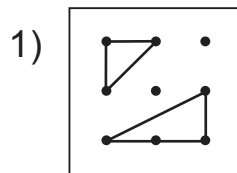


Practice

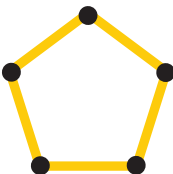
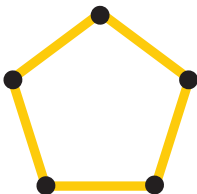
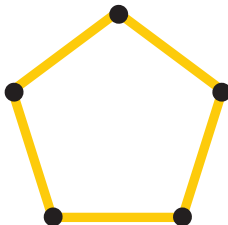
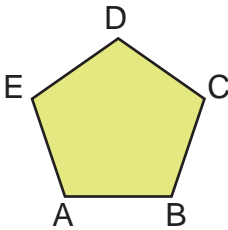
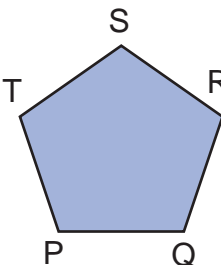
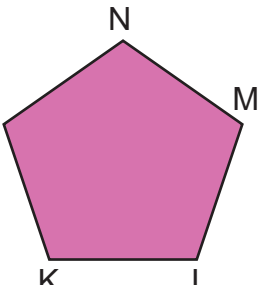
Name the corners and sides for the **figure (2)** and **figure (3)**

Lab activity

Use the following dots to draw different triangles, each triangle should be different from the others.



Pentagon

Pentagons are formed using the matchsticks			
Pentagons are formed by the line segments	 figure (1)	 figure (2)	 figure (3)

In figure (1)

▲ A, B, C, D and E are **corners**.

▲ AB, BC, CD, DE and EA are the **sides**.

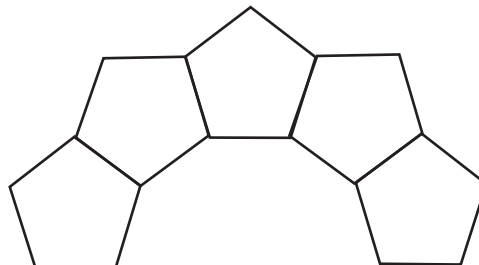
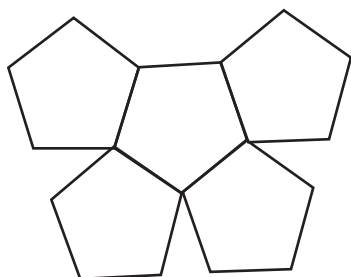
A pentagon has five corners and five sides.



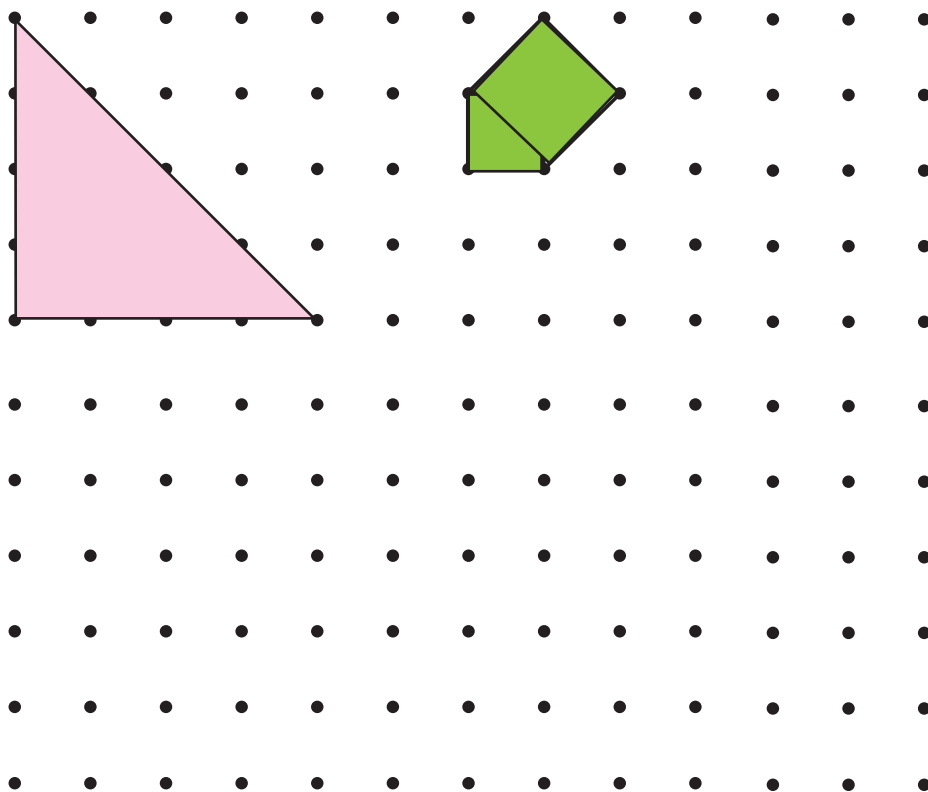
Practice

1) Name the corners and sides for the **figure (2)** and **figure (3)**.

2) Shade the pentagons by different colours.



3) Connect the dots to form shapes and colour them.



Drawing circle

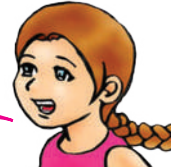
Draw a circle in each of the following boxes.

Use a coin	Use a bangle	Use a bottle cap

Freehand drawing of a circle



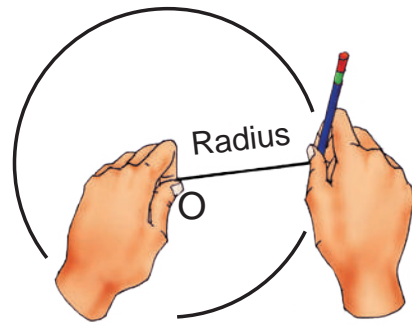
I am going to draw a circle by using a piece of string and pencil.



O.K, how will you do?

Very simple. Let me show, look here...

- Tie one end of the string with a pencil and another end with a pin.
- Press the pin in the paper and keep a finger on its top.
- Rotate the pencil till a circle is formed.



The touching point of the pin and the paper at 'O' is called the centre of the circle. The length of the string is the radius of the circle.



Practice

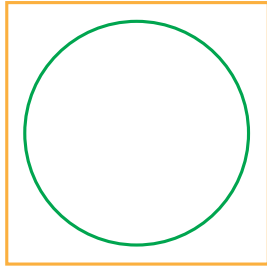
Using a string, without changing the centre, draw three circles with different lengths of string. You will get the diagram as given below.



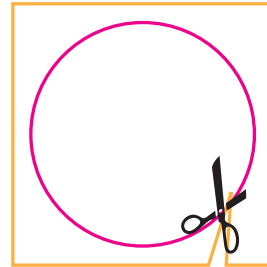
Lab activity

Finding centre and radius by paper folding.

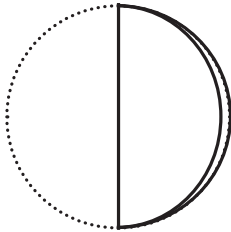
✧ Draw a circle in a paper.



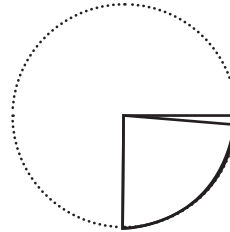
✧ Cut the circle.



✧ Fold the circle into half.

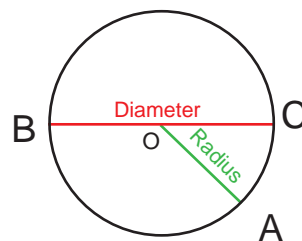
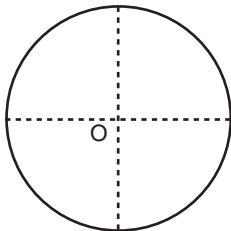


✧ Then fold it again like this.



✧ Now open the foldings.

The two creased lines cross each other.



Two creased lines meet at a point O , is the centre of the circle.

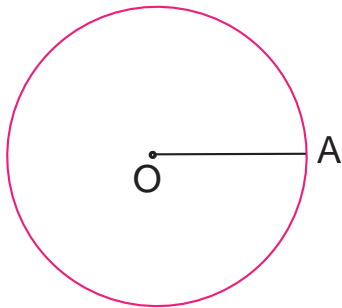
OA = Radius of the circle
 BC = Diameter of the circle

The line segment joining any two points on the boundary of the circle, which is passing through the centre of the circle is called diameter.

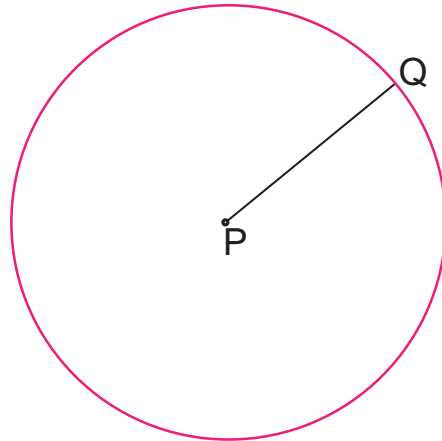


Practice

1) With the help of your ruler, measure the radius of the following circle.

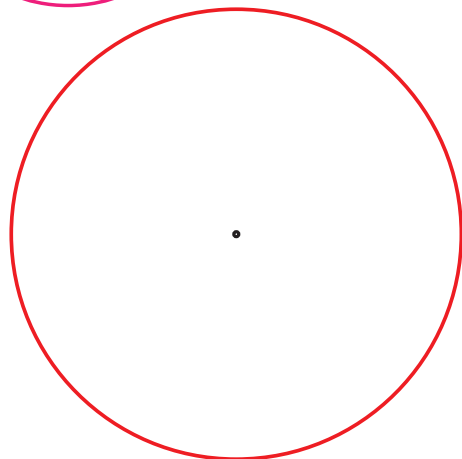
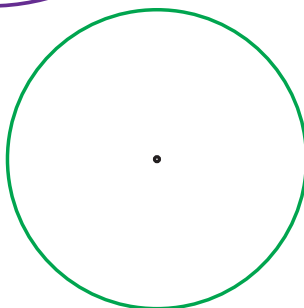
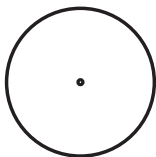
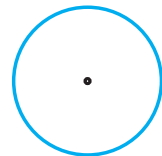
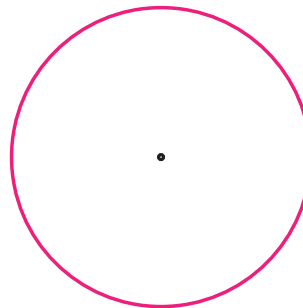
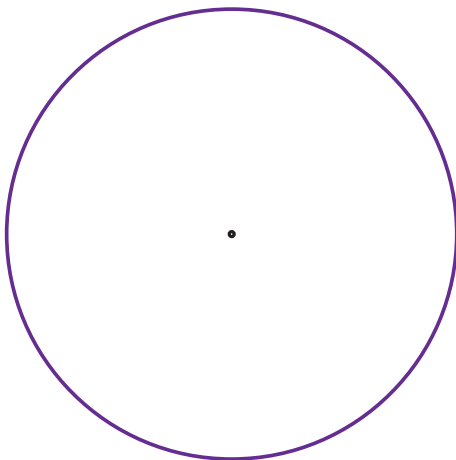


Radius = $OA = \underline{2\text{cm}}$

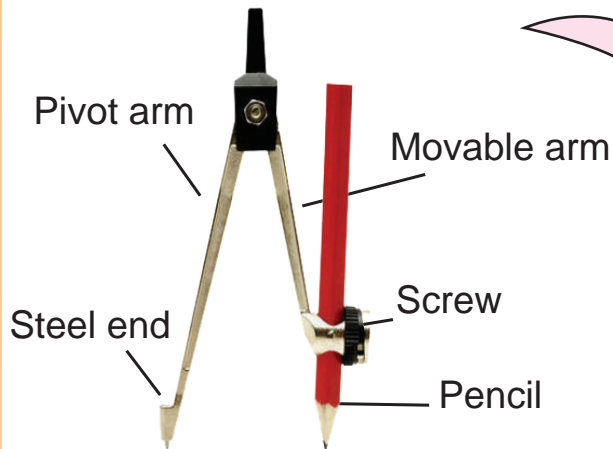


Radius = $PQ = \underline{\hspace{2cm}}$

2) Draw the radius for the following circles and measure them.



About compass

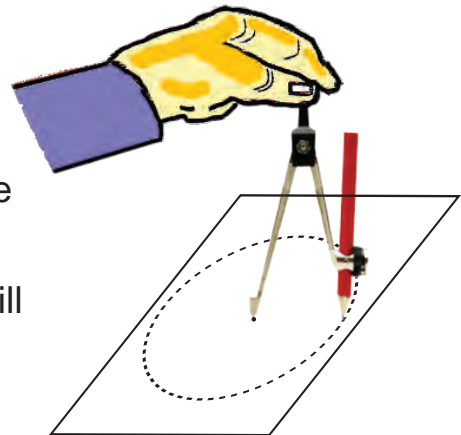


- ⦿ I am a compass.
- ⦿ I have two arms.
- ⦿ One arm has the steel end, called pivot arm.
- ⦿ Movable arm has a screw to fix a pencil.

Drawing a circle with a compass



- ★ Take a radius of 4cm using the ruler.
- ★ Fix the pivot point on the paper.
- ★ Rotate the pencil point till the circle is formed.



Practice

Draw circles using compass for the given radius.

1) 4 cm

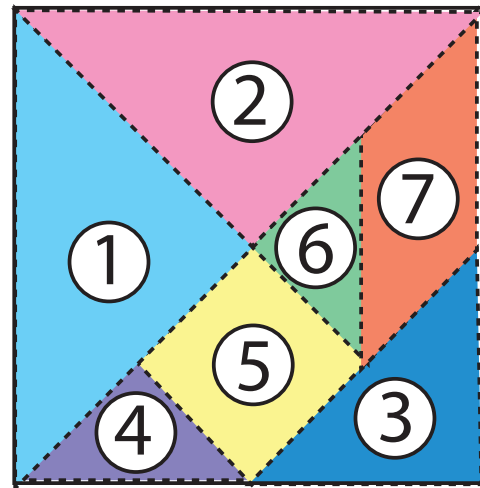
2) 5 cm

3) 3 cm

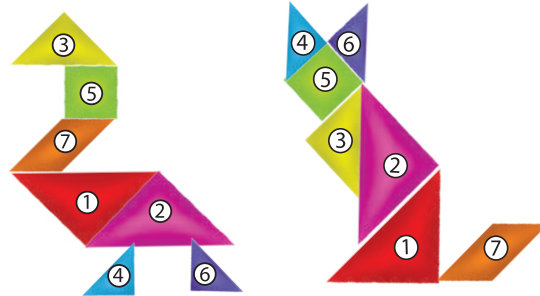
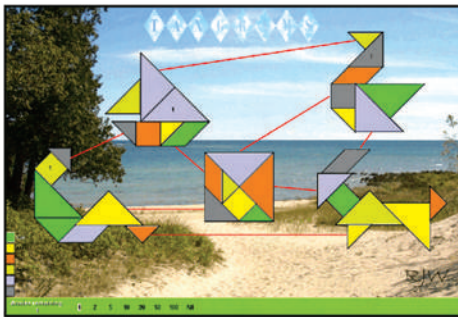
4) 6 cm

Geometric shapes with tangrams

Tangram is a thousand years old Chinese puzzle. It consists of seven geometrical pieces called tans, which are put together to form shapes. Using tans we can create different patterns, geometric designs, human beings, birds and animals.

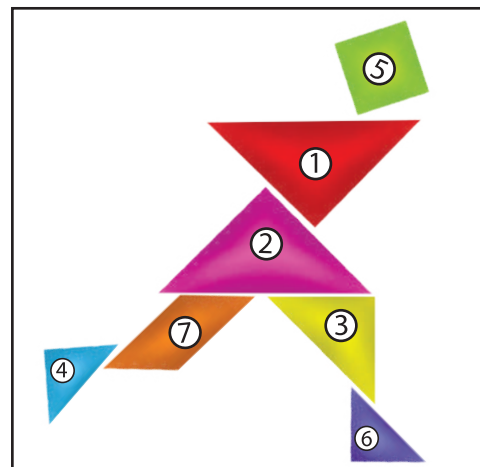


Different shapes using tangram



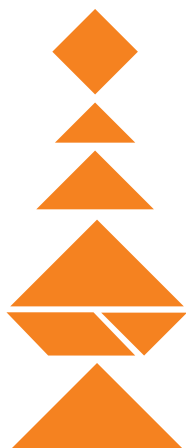
Practice

Tangram pieces are arranged into a picture of a man.

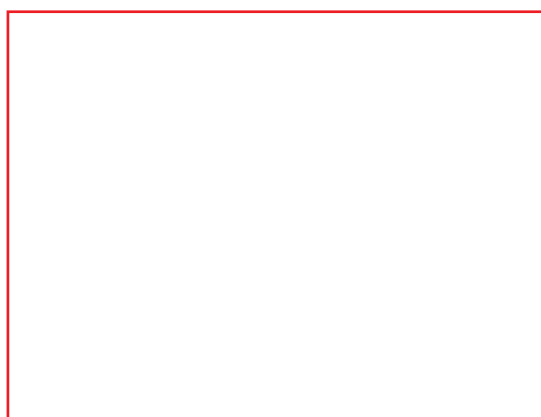


Arrange the tangram pieces

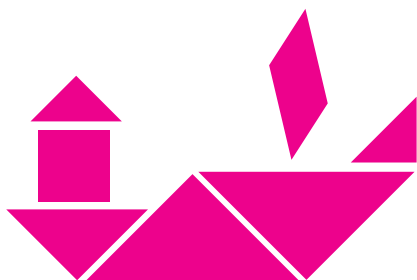
1)



2)



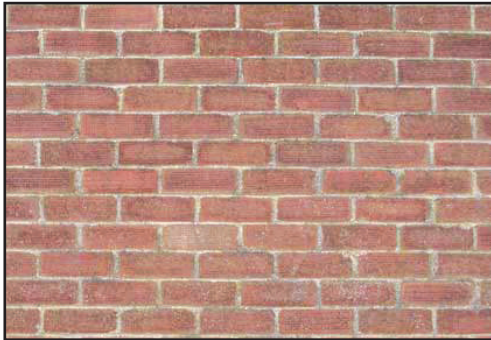
3)



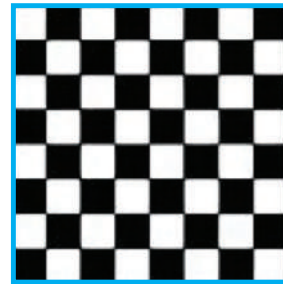
Tiling

Observe the following pictures.

Brick wall



Chess board



Beehive



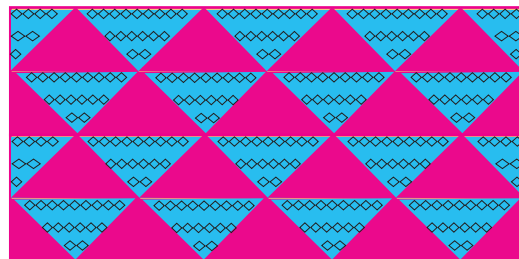
Floor tiles





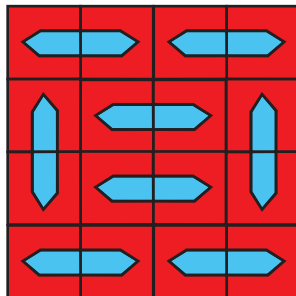
The above pictures are formed by arranging different tiles without gaps and over laps.

Tiling the space with one or two shapes

This space is filled by triangle shapes



This space is filled by two shapes  



Practice

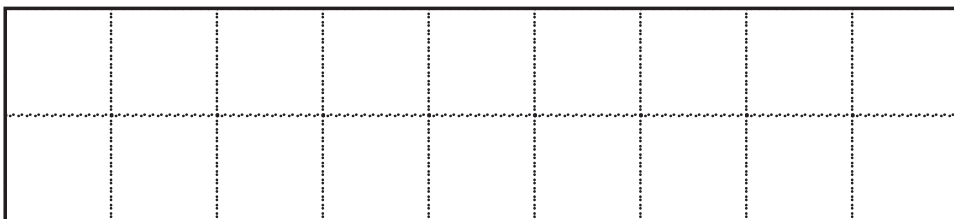
Select the two suitable shapes and tile the space given below.



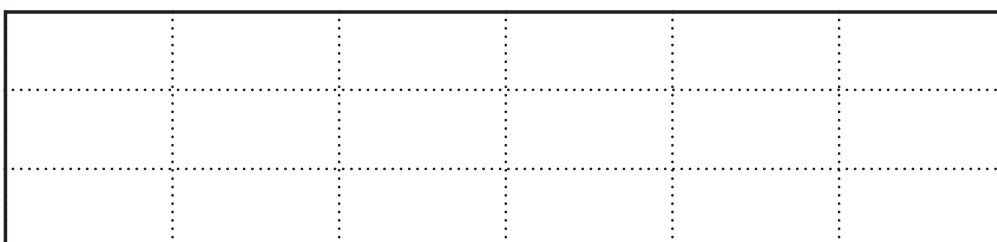
1)



2)



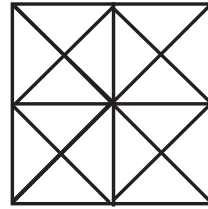
3)



REVISION

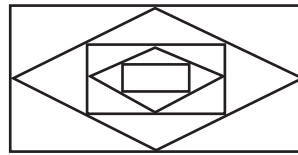


- 1) Count and write the number of squares and rectangles.



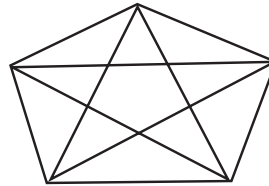
Number of squares _____ Number of rectangles _____

- 2) Count and write the number of rectangles and triangles.



Number of triangles _____ Number of rectangles _____

- 3) Count the number of triangles and pentagons.



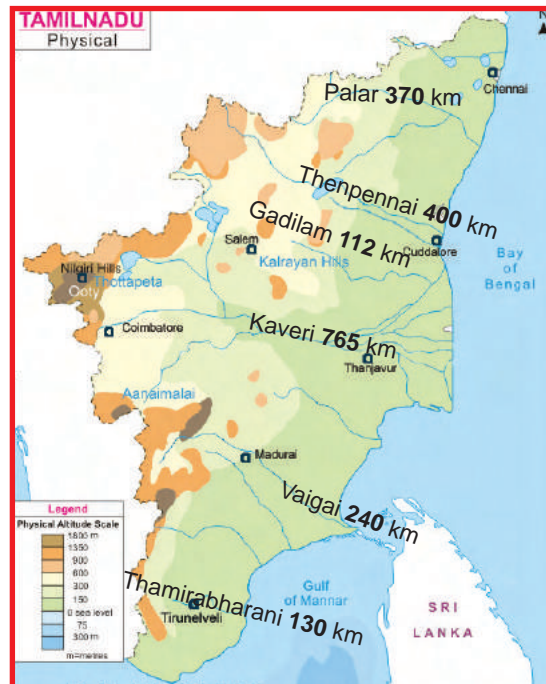
Number of triangles _____ Number of pentagons _____

- 4) A square and a rectangle have _____ sides and _____ corners.
 5) A _____ has 5 sides and 5 corners.
 6) _____ sides of a rectangle are equal.
 7) The line joining centre point and any point on the boundary of the circle is called _____.
 8) The line segment joining any two points on the boundary of the circle, which is passing through the centre of the circle is called _____.
 9) Create two shapes using tangrams.

Uma and Deepa are friends. One day Deepa visited Uma's house. Deepa noticed a Tamilnadu map hanging on the wall.

Deepa read the names of the rivers from the map, Uma read the length of the rivers. Deepa read "Thamirabharani".

Uma said, "130 km".

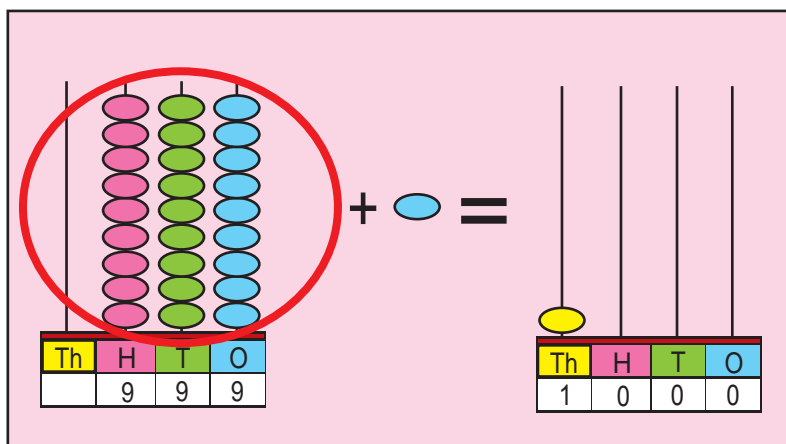


Fill up the following table.

Length of the rivers	Numerals	Number name	Expanded form
Thamirabharani 130 km.	130	One hundred and thirty	$100 + 30 + 0$
Vaigai 240 km.	240		
Kaveri 765 km.			
Gadilam 112 km.			
Thenpennai 400 km.			
Palar 370 km.			

Use abacus to express the numbers

Chitra and Jothi are sisters. They are playing with the beads in an abacus. Jothi asked Chitra to put the beads for the number 999. Chitra placed successfully.



Can you put one more bead? asked Chitra. Jothi observed the abacus from 'ones' place to 'thousands' place. She removed all the beads and placed one bead in the 'thousands' place because,

10 ones = 1 ten

10 tens = 1 hundred

10 hundreds = 1 thousand

$999 + 1 = 1000$. We read it as One thousand

Comparing the two numbers 999 and 1000

- ★ 999 has 3 digits, 1000 has 4 digits.
- ★ 1000 has 0 in ones, tens and hundreds places.
- ★ 999 has 9 in ones, tens and hundreds places.
- ★ The greatest 3 digit number is 999.
- ★ The smallest 4 digit number is 1000.

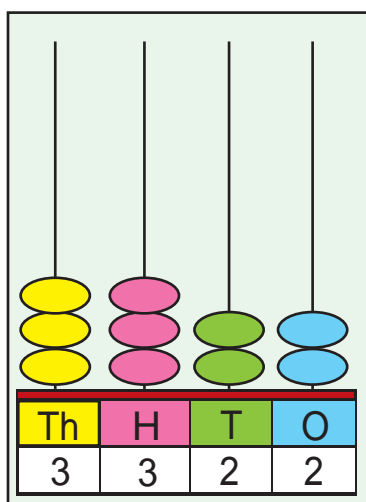


Practice

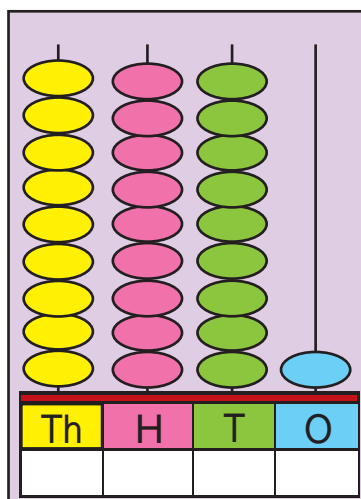
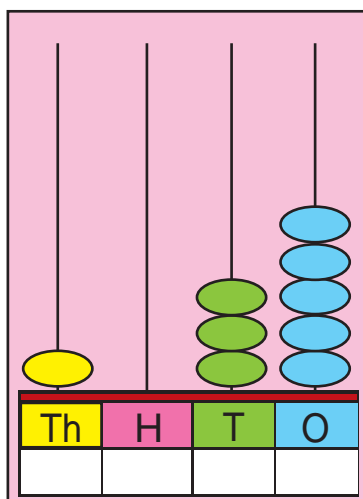
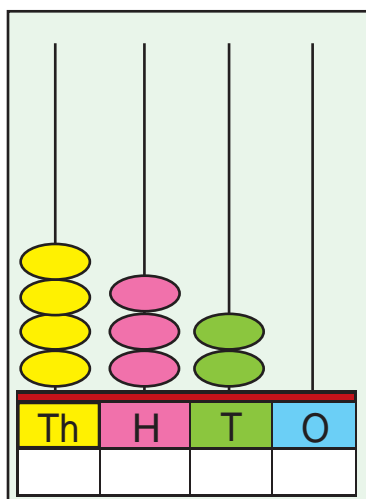
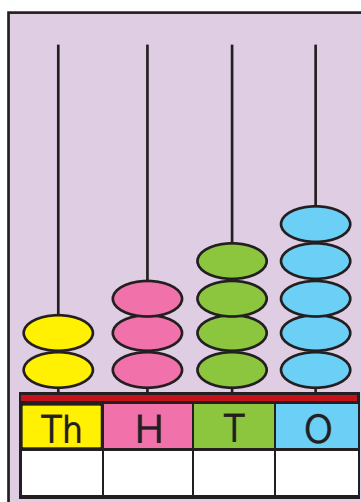
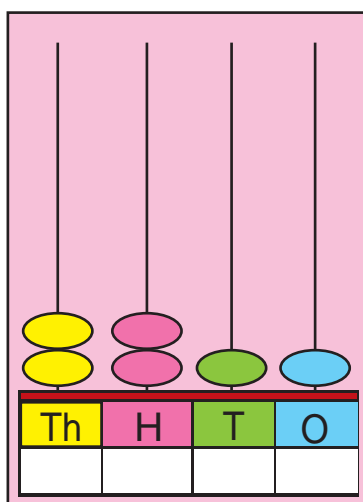
1) Fill up the boxes.

$9 + 1 = 10$	$10 + 1 = 11$	$10 - 1 = 9$
$99 + 1 = \square$	$100 + 1 = \square$	$100 - 1 = \square$
$999 + \square = 1000$	$1000 + \square = 1001$	$1000 - \square = 999$

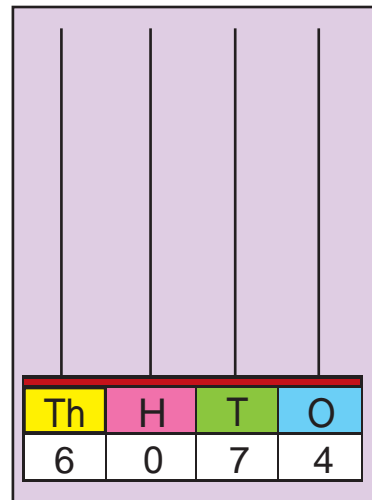
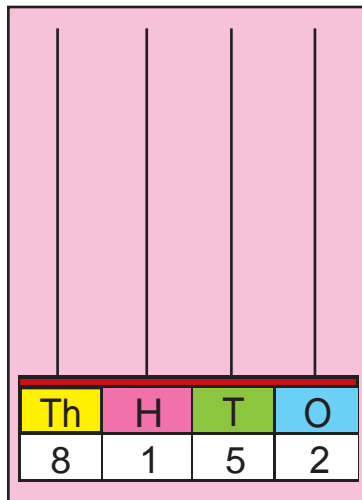
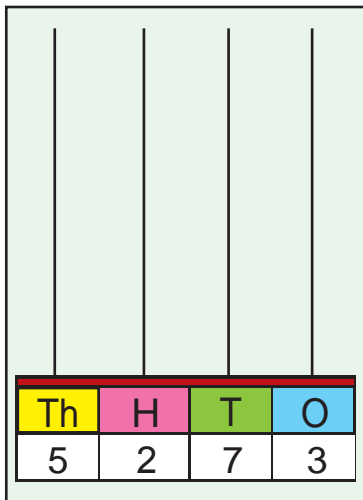
2) Write the numbers shown in the following abacus.



3322



3) Draw beads for the number shown in the following abacus.



4) Write the missing numbers.

1001	1002			1005				1009	
2005	2010				2030				2050
3010	3020					3070			
4020	4040						4160		4200
5050	5100							5450	
6100	6200							6900	
7200	7400						8600		9000
5000	5500					8000			
9990	9991				9995			9998	
1000	2000			5000					10000

The greatest four digit number is 9999



Read the following sentences.

- ❖ Thirukkural has 1330 Kurals.
- ❖ The depth of Indian ocean is 7258 metres.
- ❖ Commonwealth games were held in New Delhi in 2010.

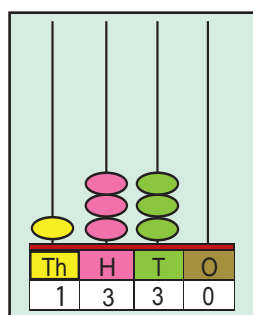
Shall we read the numbers ?

1330 - One thousand three hundred and thirty

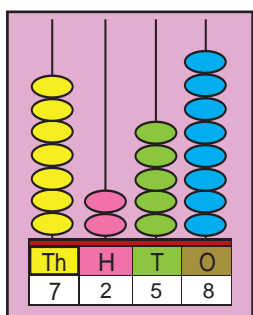
7258 - Seven thousand two hundred and fifty eight

2010 - Two thousand and ten

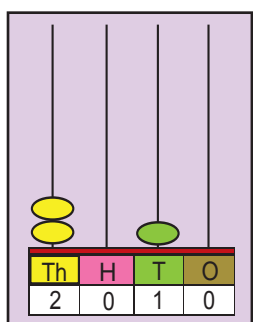
Place value



digit	place	place value
0	1	0 = 0 ones
3	10	30 = 3 tens
3	100	300 = 3 hundreds
1	1000	1000 = 1 thousand

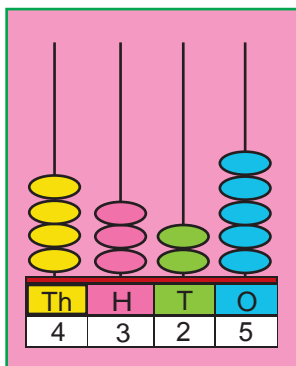


8	1	8 = 8 ones
5	10	50 = 5 tens
2	100	200 = 2 hundreds
7	1000	7000 = 7 thousands



0	1	0 = 0 ones
1	10	10 = 1 ten
0	100	0 = 0 hundreds
2	1000	2000 = 2 thousands

Expanded form



Number: 4325

Number name:

Four thousand three hundred and twenty five

Expanded form: $4325 = 4000 + 300 + 20 + 5$



Practice

1) Write the place value of the encircled digits.

8 3 4 5 - The place value of 8 is 8 thousands

2 7 5 1 - _____

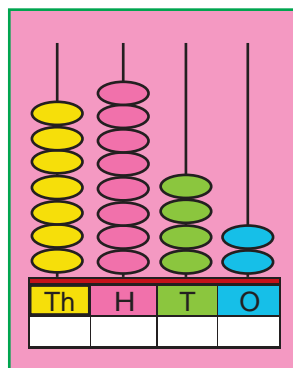
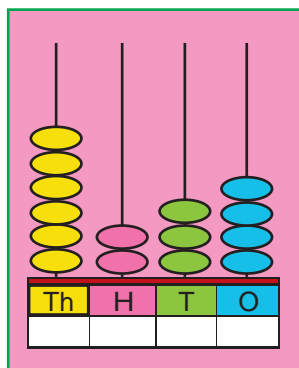
3 2 6 8 - _____

9 0 0 4 - _____

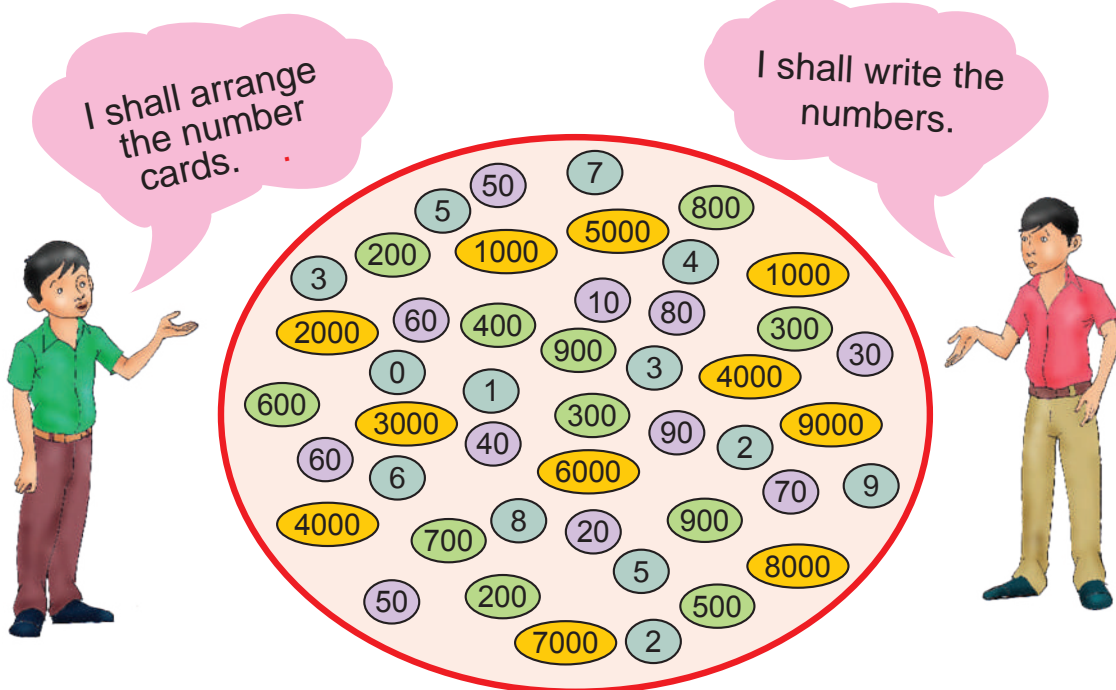
1 9 7 4 - _____

5 4 3 0 - _____

2) Write number, number name and expanded form for the beads in the abacus.



3) Form the numbers using number cards.



Balu arranges the number cards according to place value.

Velu writes the corresponding numbers.

Will you help them?

2000	+	200	+	30	+	5	=	2235
1000	+	300	+	10	+	8	=	
8000	+		+	60	+	6	=	8066
4000	+	400	+	40	+	4	=	
5000	+		+		+	3	=	5503

Balu writes the numbers.

Velu arranges the number cards.

9687	=	9000	+		+		+	7
6722	=		+	700	+	20	+	2
4359	=	4000	+		+	50	+	
3970	=		+	900	+	70	+	
8001	=		+		+		+	1

Formation of the greatest and the smallest number



In which order they should stand to form the greatest 4 digit number?

In 4, 6, 9, 2 the greatest digit is 9

In 4, 6, 2 the greatest digit is 6

In 4 and 2, 4 is greater than 2

In 4, 6, 9, 2 the smallest digit is 2

They stand from the greatest digit to smallest digit.



Now the number formed is 9642

This is the greatest 4 digit number, using the given digits.

In the same way in which order they should stand to form the smallest 4 digit number?

In 4, 6, 9, 2 the smallest digit is 2

In 4, 6, 9 the smallest digit is 4

In 6 and 9, 6 is smaller than 9

In 4, 6, 9, 2 the greatest digit is 9

They stand from the smallest digit to the greatest digit.



Now the number formed is 2469

This is the smallest 4 digit number formed from the given digits.

The greatest number is **9642**

The smallest number is **2469**



Practice

1) Form the greatest and the smallest 4 digit number.

Digits	Greatest Number	Smallest Number
0,4,2,8	8420	2048
3,7,4,9		
9,3,6,5		
5,0,1,7		

2) Pick out the smaller number, greater number and compare them using $>$ or $<$.

Numbers	Smaller Number	Greater Number	use $>$ or $<$
4910, 3618	3618	4910	$3618 < 4910$
2897, 5110			
2375, 5732			
8000, 6070			

Ascending order and Descending order

Look at the marks scored by four students in XII Standard Examination.

Velu	Jayashree	Anandan	Radhika
992	1187	1074	1126

Of these four marks, 992 is the lowest mark as 992 has 3 digits.

992 is the smallest of these numbers.

But the other three marks are 4 digit numbers.

First compare the digits in the 'thousands' place.

1187 1074 1126

All the three numbers have 1 in the 'thousands' place.

So, compare the digits in the 'hundreds' place.

1187 1074 1126

1187, 1126 has 1 in the 'hundreds' place.

1074 has 0 in the 'hundreds' place.

So 1074 is smaller than 1187 and 1126.

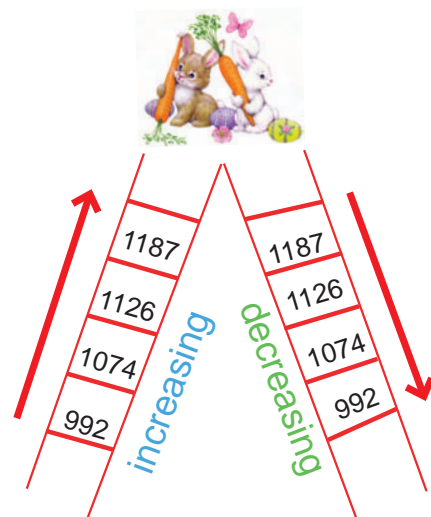
Now compare the digits in the 'tens' place.

1187 1126

1187 has 8 tens, 1126 has 2 tens.

So 1126 is smaller than 1187.

1187 is the greatest number.



Ascending order	992, 1074, 1126, 1187
Descending order	1187, 1126, 1074, 992

Arranging the numbers from the smallest to the greatest is called ascending order and from the greatest to the smallest is called descending order.



Practice

1) Arrange the measurement of the heights in ascending order and descending order.

Height in metres	Kalvarayan Hills	Nilgiri Peak	Aanai Malai Hills	Doddabetta Peak
	914	2474	2695	2637

Ascending order	
Descending order	

2) Arrange the numbers in ascending order and descending order.

- 1) 8000, 4105, 7400, 3050 2) 6345, 6789, 9876, 4567
 3) 4248, 1375, 5615, 1360 4) 1178, 1068, 1368, 1278
 5) 7800, 5300, 8800, 6400 6) 4999, 1809, 4959, 2829

Odd numbers and Even numbers



From the above coloured numbers write odd numbers and even numbers.

Odd numbers	_____, _____, _____, _____, _____, _____, _____, _____, _____, _____.
Even numbers	_____, _____, _____, _____, _____, _____, _____, _____, _____, _____.

The digits in the 'ones' place for **odd numbers** are 1, 3, 5, 7 and 9

The digits in the 'ones' place for **even numbers** are 0, 2, 4, 6 and 8

To identify whether the given number is odd or even,
it is enough to look at the digit in 'ones' place.



Practice

Identify the odd and even numbers. Fill them in flowers given below.

2765

4862

5047

4751

6404

3006

8354

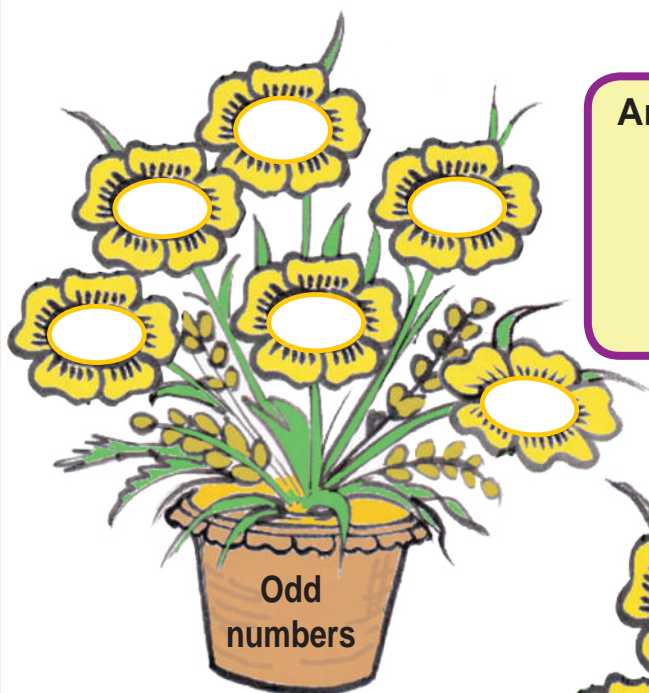
7298

9433

8450

1239

5237



Arrange the odd numbers in ascending order.

Arrange the even numbers in descending order.



PROJECT



Complete the table.

Family members	Name	Year of Birth
My name		
Father		
Mother		
Grandfather		
Grandmother		

Write the numbers from the above table and answer the following questions.

- ★ Write the number names.
- ★ Write in expanded form.
- ★ Write the place value of each digit in the numbers.
- ★ Arrange the numbers in ascending and descending order.



Puzzle

I am a 4 digit number.

My 'ones' place is 3.

Digit in 'tens' place is 2 more than in 'ones' place.

Digit in 'hundreds' place is 1 less than in 'tens' place.

Digit in 'thousands' place is 3 more than in 'hundreds' place.

I am



Estimation in numbers



Look at the apples,
without counting say approximately,
how many apples are there ?

Approximately 30 apples.

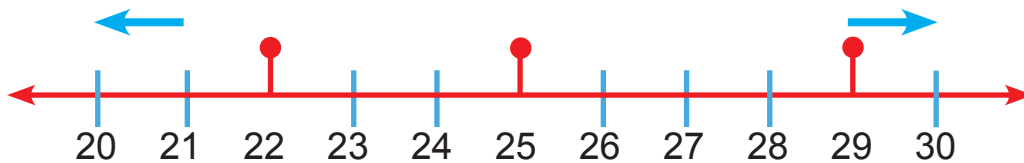


Your answer is close to actual number.
But actual number of apples kept in the
basket is 28.

What do you learn from the above conversation ?
We use estimation for counting in our daily life.

Estimation using number line

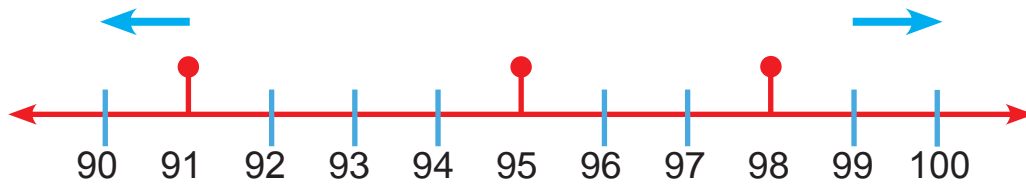
Estimation (round off) of numbers to the nearest 10



- ★ 22 is rounded off to 20 since it is close to 20
- ★ 29 is rounded off to 30 since it is close to 30
- ★ 25 is rounded off to 30 since it is half way between 20 and 30

We can estimate the number more easily by using number line.

Estimation (round off) of numbers from 91 to 99 to the nearest 10



- ★ 95 is rounded off to 100 since it is halfway between 90 and 100
- ★ 98 is rounded off to 100 since it is close to 100
- ★ 91 is rounded off to 90 since it is close to 90



Practice

Estimate to the nearest 10.

- | | | | |
|-------|--------|--------|--------|
| 1) 23 | 2) 46 | 3) 54 | 4) 65 |
| 5) 14 | 6) 35 | 7) 88 | 8) 91 |
| 9) 76 | 10) 99 | 11) 87 | 12) 94 |



While rounding off a number check its 'ones' place,
if it is 5 or more than 5, round off the number to the next nearest 10.
If it is less than 5, round off the number to the nearest 10.

REVISION



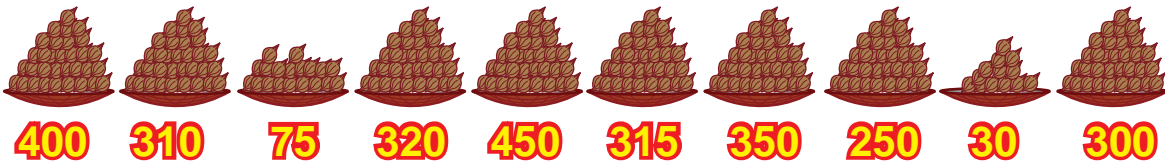
- 1) Write the missing numbers.
 - (i) 7430, 7440, _____, _____, _____, _____, _____, 7500.
 - (ii) 1300, 1400, _____, _____, _____, _____, _____, 2000.
- 2) Write the number names for the following numbers.
 - (i) 3906 _____
 - (ii) 10000 _____
- 3) Write the numerals for the following.
 - (i) Four thousand nine hundred and eighty two
 - (ii) Six thousand two hundred and five
- 4) Write the place value of the circled digits.
 - (i) 7 **4** 5 0 _____
 - (ii) 3 9 **8** 5 _____
- 5) Express the following in the expanded form.
 - (i) 3 4 6 0 _____
 - (ii) 9 0 1 7 _____
- 6) Write the short form of the following numbers.
 - (i) $5000 + 400 + 30 + 9 =$
 - (ii) $4000 + \quad 0 + \quad 0 + 4 =$
- 7) Write the ascending order and descending order.

8275	8555	8150	8325
------	------	------	------
- 8) Encircle the even numbers.

3645	9450	8564	3718	6071
------	------	------	------	------
- 9) Put '<' or '>'
 - (i) 4375 _____ 3747
 - (ii) 10000 _____ 9999
- 10) Round off the following numbers to the nearest tens.

(i) 75	(ii) 83	(iii) 94	(iv) 36
--------	---------	----------	---------

Addition



Four vendors went to a coconut grove to buy coconuts. Each one needed 700 coconuts. Help them to select the heaps.

First vendor	Second vendor	Third vendor	Fourth vendor
$\begin{array}{r} 350 \\ 320 \\ + 30 \\ \hline \end{array}$	$\begin{array}{r} 400 \\ + 300 \\ \hline \end{array}$		
700	700	700	700

Write the missing numbers in the magic squares for the given total.

Total 45

16	11	18
17	15	13
12	19	14

Total 210

80	30	
90	70	50
	110	60

Total 165

65	15	
75	55	35
	95	

Fill in the boxes.

$0 + 1 = 1$

$2 + 4 = 6$

$4 + 5 = 9 = 5 + \square$

$1 + 0 = \square$

$4 + 2 = \square$

$5 + 3 = 8 = \square + 5$

$2 + 0 = 2$

$0 + 0 = 0$

$2 + 6 = 8 = 6 + \square$

$0 + 2 = \square$

$0 + 3 = \square$

$7 + 2 = 9 = \square + 7$

The sum of any number and zero is the number itself.
The sum of two numbers does not change even if we change the order of the numbers.



Practice

1)

H	T	O
3	2	4
+	5	7

2)

H	T	O
6	0	0
+	2	3

3)

H	T	O
5	3	6
+	3	0

4)

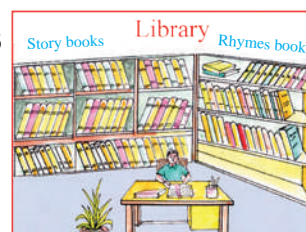
H	T	O
7	0	2
+	2	1

Addition without carrying

1) A library has 3242 story books and 435 rhymes books. Find the total number of books.

Solution:

To find the total number of books, we have to add the number of story books and rhymes books.



	Th	H	T	O	
Number of story books	3	2	4	2	= 3000 + 200 + 40 + 2
Number of rhymes books	+	4	3	5	= 400 + 30 + 5
Total number of books		3	6	7	7 = 3000 + 600 + 70 + 7

Total number of books in the library = **3677**

Another method:

Th	H	T	O
3	2	4	2
+	4	3	5
	3	6	7

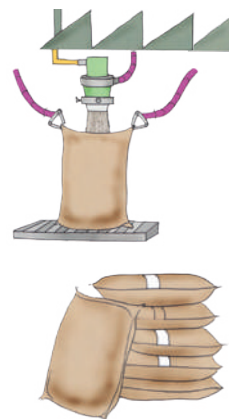
Steps

- * Add ones
- * Add tens
- * Add hundreds
- * Add thousands

- 2) A factory produced 1154 bags of fertilizer on the first day and 2832 bags on the second day. Find the total number of bags of fertilizer.

Solution:

$$\begin{array}{rcl} \text{Fertilizer produced on first day} & = & 1154 \\ \text{Fertilizer produced on second day} & = & + 2832 \\ \hline \text{Total number of bags of fertilizer} & = & 3986 \end{array}$$



3986 bags of fertilizer are produced.



Practice

1)

Th	H	T	O
2	4	6	3
+	4	2	3

2)

Th	H	T	O
2	2	0	4
+	3	4	8

3)

Th	H	T	O
4	5	0	2
+	5	3	0

4)

Th	H	T	O
8	4	1	0
+	1	0	6

5)

Th	H	T	O
2	0	0	0
+	4	0	0

6)

Th	H	T	O
5	1	2	1
+	2	3	7



- In a factory 3850 persons worked in the first shift and 3106 persons worked in the second shift. Find the total number of persons.

- 8) In a function 2274 people had breakfast and 3015 people had lunch. Find the total number of people in the function.

Recall and write

10 ones = 1 ten

70 ones = _____

25 ones = 2 tens 5 ones

43 ones = _____

10 tens = 1 hundred

50 tens = _____

36 tens = 3 hundreds 6 tens

29 tens = _____

10 hundreds = 1 thousand

40 hundreds = _____

78 hundreds = 7 thousands 8 hundreds

64 hundreds = _____

Addition with carrying

Balaji and Ramji bought two mobiles. The cost of mobiles are ₹ 2495 and ₹ 1628 respectively. Find the total cost of the mobiles.



Solution:

Cost of Balaji's mobile = ₹ 2495

Cost of Ramji's mobile = ₹ 1628

To find out the total cost, add the cost of the mobiles.

Th	H	T	O
		1	
2	4	9	5
+	1	6	2
			3

Step 1

Add the ones

5 ones + 2 ones = 7 ones

7 ones = 1 ten 7 ones

Write 7 under the ones place

Carry 1 to tens place

Th	H	T	O
		1	1
2	4	9	5
+	1	6	2
		2	3

Step 2

Add the tens

1 ten + 9 tens + 2 tens = 12 tens

12 tens = 1 hundred 2 tens

Write 2 under the tens place

Carry 1 to hundreds place

Th	H	T	O
	1	1	1
2	4	9	5
+	1	6	2
	1	2	3

Step 3

Add the hundreds

1 hundred + 4 hundreds + 6 hundreds = 11 hundreds

11 hundreds = 1 thousand 1 hundred

Write 1 under the hundreds place

Carry 1 to thousands place

Th	H	T	O
1	1	1	
2	4	9	5
+	1	6	2
4	1	2	3

Step 4

Add the thousands

1 thousand + 2 thousands + 1 thousand = 4 thousands

Write 4 under the thousands place

Total cost of 2 mobiles is ₹ 4123





Practice

1)

Th	H	T	O
4	3	2	7
+	2	8	6

2)

Th	H	T	O
2	7	4	5
+	5	4	6

3)

Th	H	T	O
3	5	4	6
+	4	6	8

4)

Th	H	T	O
5	3	6	9
+	3	2	4

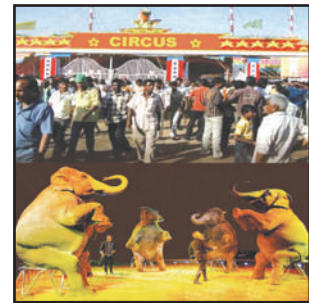
5)

Th	H	T	O
4	2	5	9
+	3	8	3

6)

Th	H	T	O
3	0	9	4
+	4	6	3

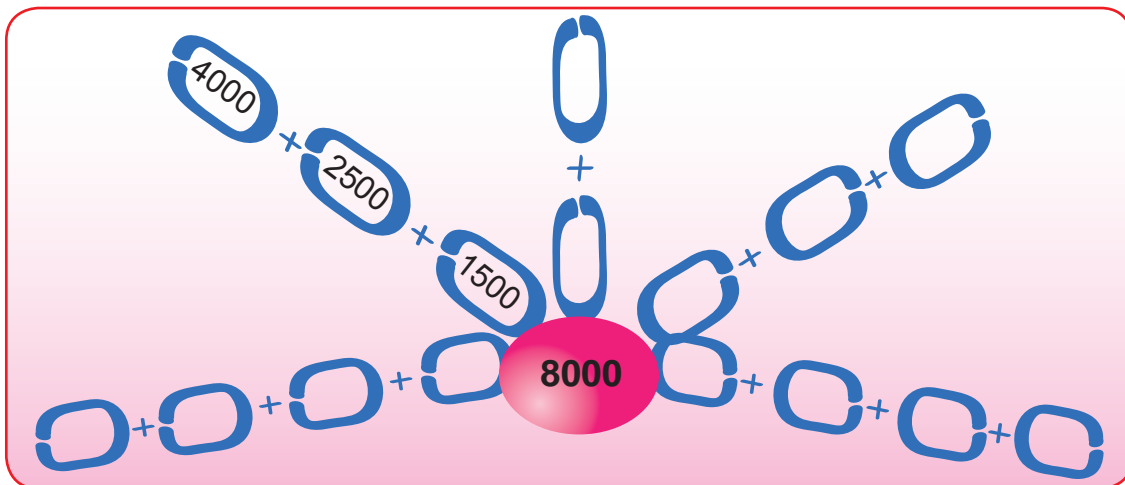
- 7) In a circus 2625 persons visited the noon show, and 3768 persons visited the night show. Find the total number of persons.



- 8) In a mango grove, 1243 malgova, 2132 sendura and 2644 neelam mangoes were plucked from mango trees. Find the total number of mangoes plucked.

Lab activity

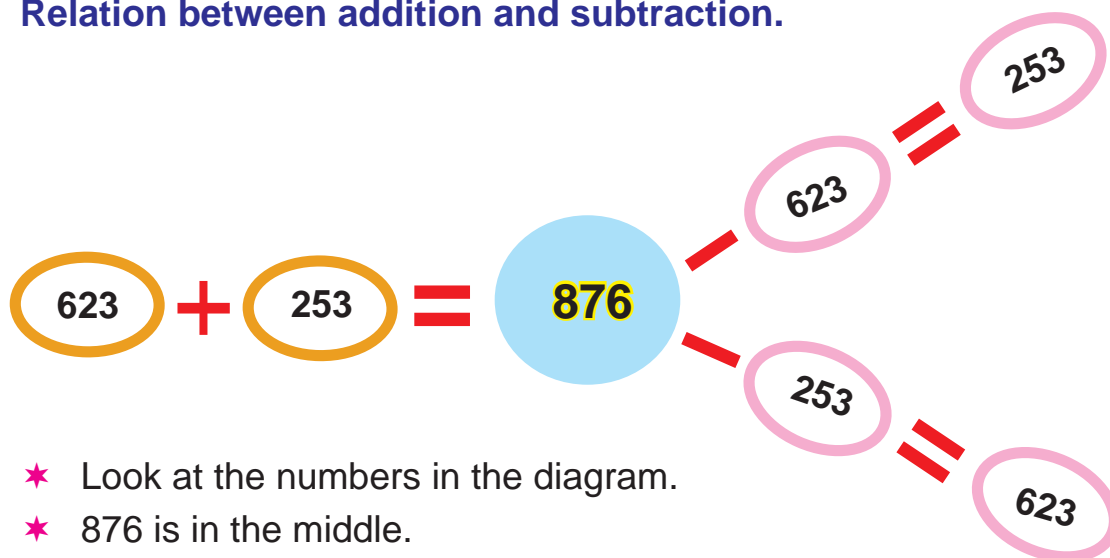
- 1) Fill up the addition chain



- 2) Take two sets of number cards from 0 to 9. Using the number cards form eight 4 digit numbers. Take two numbers at a time and add.

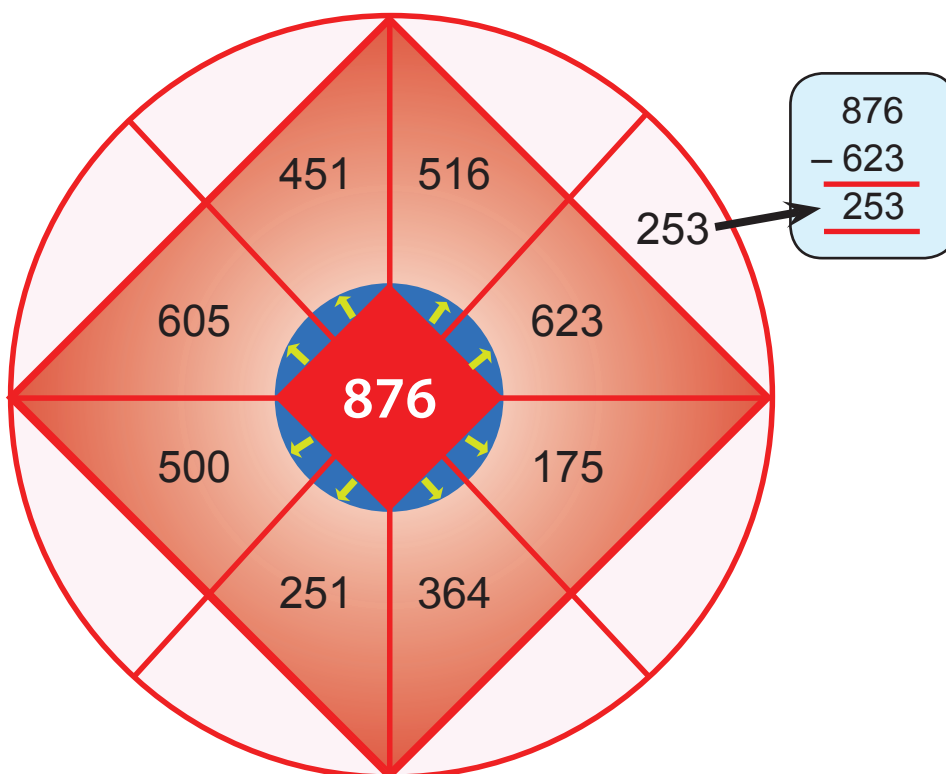
Subtraction

Relation between addition and subtraction.



- ★ Look at the numbers in the diagram.
- ★ 876 is in the middle.
- ★ 876 is written as the addition of two numbers.
- ★ Every addition has two subtractions.

Write the missing numbers by subtraction.



Subtraction without grouping

Bharath purchased an aircooler and a water heater for his house. The total cost is ₹ 8965. Find the cost of water heater, if the cost of the air cooler is ₹ 4650.



Solution:

Total cost of the air cooler and the water heater = ₹ 8965

Cost of the air cooler = ₹ 4650

The cost of water heater = ₹ 8965 – ₹ 4650

Th	H	T	O
8	9	6	5
– 4	6	5	0
			5

Step 1

Subtract the ones

5 ones – 0 ones = 5 ones

Write 5 in the ones place.

Th	H	T	O
8	9	6	5
– 4	6	5	0
		1	5

Step 2

Subtract the tens

6 tens – 5 tens = 1 ten.

Write 1 in the tens place.

Th	H	T	O
8	9	6	5
– 4	6	5	0
	3	1	5

Step 3

Subtract the hundreds

9 hundreds – 6 hundreds = 3 hundreds.

Write 3 in the hundreds place.

Th	H	T	O
8	9	6	5
– 4	6	5	0
4	3	1	5

Step 4

Subtract the thousands

8 thousands – 4 thousands = 4 thousands.

Write 4 in the thousands place.

The cost of water heater is ₹ **4315**.



Practice

1) 9865

– 2334

2) 7650

– 2310

3) 4030

– 2010

4) 8897

– 3405

5) 8743

– 1212

6) 7329

– 2018

7) 9000

– 7000

8) 5678

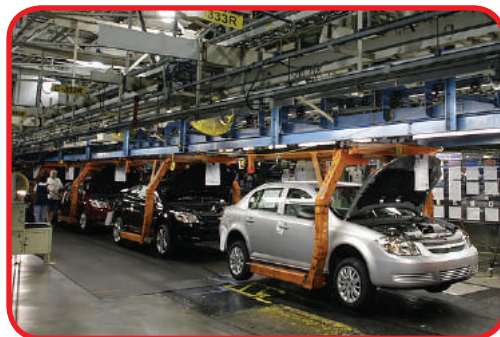
– 2400

- 9) Population of a village is 8625. Of them 4314 are working in fields. Find the remaining population.



- 10) Number of vehicles parked in a shed is 2448. If 1236 vehicles are taken out, calculate the vehicles left in the shed.

- 11) A car manufacturing company produced 2680 cars. 1570 cars are sold. How many cars are left in the company?



Subtraction with grouping

There were 8260 tea packets in a van.
Of these 6984 tea packets were sold out. Find the remaining tea packets.



Solution:

Tea packets in the van = 8260
Sold tea packets = 6984
Remaining tea packets = 8260 – 6984

Th	H	T	O
8	2	6	0
6	9	8	4
			6

Step 1
Subtract the ones
4 cannot be subtracted from 0
Take 1 ten from 6 tens, (we get 1 ten = 10 ones)
10 ones – 4 ones = 6 ones

Th	H	T	O
8	2	6	0
6	9	8	4
	7	6	

Step 2
Subtract the tens
8 cannot be subtracted from 5
Take 1 hundred from 2 hundreds,
(1 hundred = 10 tens) and adding with 5 tens
we get 15 tens – 8 tens = 7 tens

Th	H	T	O
8	2	6	0
6	9	8	4
	2	7	6

Step 3
Subtract the hundreds
9 cannot be subtracted from 1
Take 1 thousand from 8 thousands,
(1 thousand = 10 hundreds) adding with 1 hundred
we get 11 hundreds – 9 hundreds = 2 hundreds

Th	H	T	O
8	2	6	0
6	9	8	4
1	2	7	6

Step 4
Subtract the thousands
7 thousands – 6 thousands = 1 thousand

The remaining tea packets = 1276



Practice

1)

Th	H	T	O	
5	2	8	6	
-	3	4	5	2

2)

Th	H	T	O	
7	3	4	5	
-	2	6	5	2

3)

Th	H	T	O	
9	2	5	6	
-	4	6	7	8

4)

Th	H	T	O	
8	5	6	3	
-	3	7	6	8

5)

Th	H	T	O	
5	0	5	0	
-	2	2	4	0

6)

Th	H	T	O	
7	0	6	4	
-	3	4	3	7

7)

Th	H	T	O	
6	4	0	0	
-	2	1	2	0

8)

Th	H	T	O	
6	0	0	0	
-	2	1	5	0

H	K	W	D	R	O	R	A
2810	4795	1834	3850	4280	4693	4578	3627

Write the letters for the answers from 1 to 8
in the box and read.

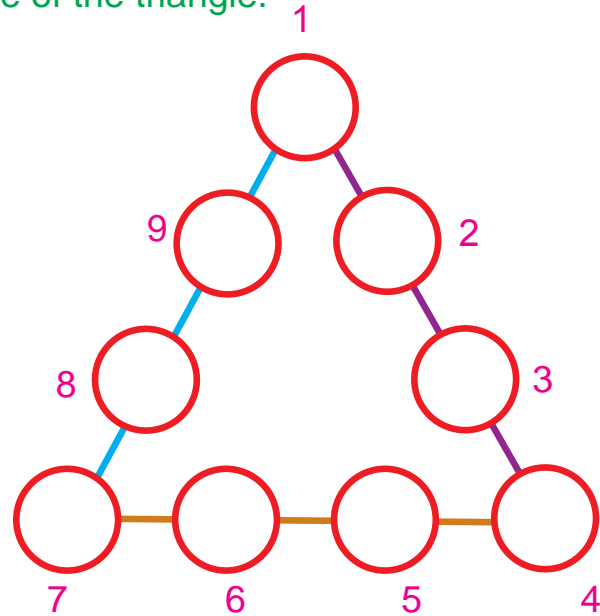
--	--	--	--	--	--	--	--

- 9) The sum of two numbers is 3527. If one number is 2685, find the other number.
- 10) 2456 passengers travelled in a train. Of them, 1387 passengers have reserved their tickets, how many passengers have not reserved?
- 11) A lungi merchant bought 6570 lungies. If he was left with 1898 lungies, then how many lungies were sold?
- 12) In a two wheeler shop 543 vehicles were there during the beginning of a month. Again 1475 vehicles arrived for the sale. If 1682 vehicles are sold, how many vehicles are left at the end of the month?

Oral sums

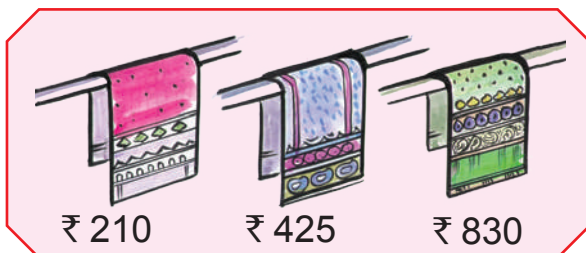


- Enter the result in the given circles.
- Add the numbers in each side of the triangle.
- What do you observe?



- 1) In a street there are 40 houses in the left side and 30 houses in the right side. What is the total number of houses?
- 2) In a bus 60 passengers are sitting and 30 passengers are standing. How many passengers are there in the bus?
- 3) In an aeroplane there are 200 passengers and 20 workers. How many are there in that aeroplane?
- 4) There are 1000 roses in a flower shop. 300 roses are used to make garlands. How many roses are left?
- 5) 30 laddus are issued from 100 laddus. How many laddus are remaining?
- 6) 20 boys and 30 girls are studying in a class. What is the total number of students?
- 7) A jack fruit has 160 pods in it and another jack fruit has 100 pods. What is the total number of pods?
- 8) 700 lemons were bought to prepare pickle. Out of these 200 were used. How many lemons were left?
- 9) In a shop there were 500 shirts. 250 shirts were sold. How many shirts were left.

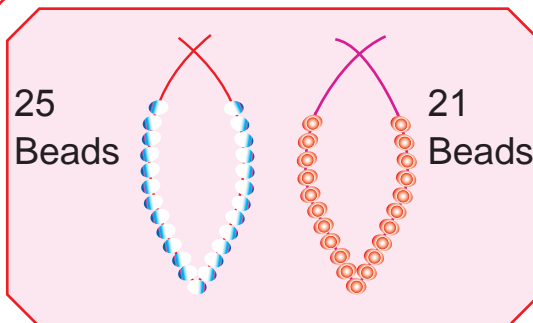
Observe the following pictures and frame the problems.



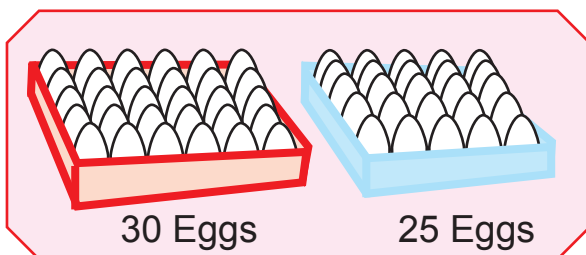
Problem

What is the total cost of 3 sarees?

Problem

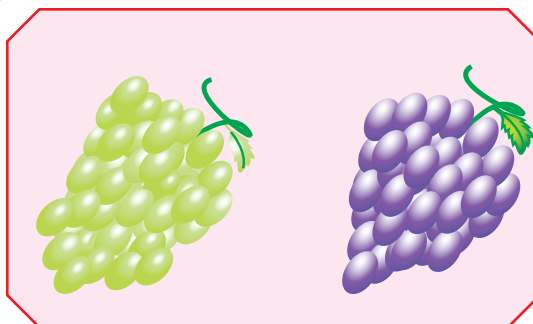


Problem

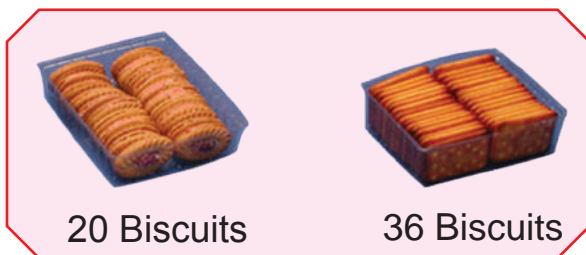


Problem

There are 70 green grapes and 60 black grapes. How many green grapes are more than black grapes?



Problem



Problem





Estimation in addition and subtraction

Estimation in addition



Balachandar has to travel 14 km by bus and 18 km by train to reach his office. Estimate the total distance he has to travel.



Mode of travel	Actual distance	Estimated distance
Bus	14 km	10 km
Train	18 km	20 km
Total distance	32 km	30 km

The difference between

actual distance and estimated distance = $32 \text{ km} - 30 \text{ km}$

Difference = **2 km**



Practice

A basket contains 83 kg of tamarind and another basket contains 46 kg of tamarind. Estimate the total weight of tamarind. Find the difference between actual weight and estimated weight.

Estimation in subtraction

A goldsmith had 88 g of gold coins. He used 63 g of gold coins to make different patterns of ornaments. Estimate the weight of gold coins left with him.



Coins	Actual weight	Estimated weight
Total	88 g	90 g
Used	63 g	60 g
Left	25 g	30 g

The difference between actual weight and estimated weight
 $= 30 \text{ g} - 25 \text{ g}$

Difference = 5 g



Practice

There were 76 kg of cakes in a bakery shop. In two days 43 kg were sold. Estimate the weight of the cakes left.



REVISION



Do the sums

$$\begin{array}{r} 1) \quad 3462 \\ + 2524 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 2835 \\ + 4124 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 3654 \\ + 4303 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 1347 \\ + 6532 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 2289 \\ + 7642 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 3009 \\ + 4006 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 2010 \\ + 5297 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 1800 \\ + 3589 \\ \hline \\ \hline \end{array}$$

9) A company produced 4152 dresses for boys and 2340 dresses for girls. Find the total number of dresses produced.

10) A factory manufactured 2436 mixies last week and 3527 mixies this week. How many mixies were manufactured altogether?

$$\begin{array}{r} 11) \quad 8000 \\ - 3000 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 12) \quad 5900 \\ - 4700 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 13) \quad 6058 \\ - 2035 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 14) \quad 7090 \\ - 5040 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 15) \quad 6437 \\ - 2329 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 16) \quad 8942 \\ - 3424 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 17) \quad 7826 \\ - 3918 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 18) \quad 6243 \\ - 2462 \\ \hline \\ \hline \end{array}$$

19) A farmer took 6475 bags of carrot to the market. He sold 5243 bags. How many bags of carrot are left?

20) In a school 2238 students went to various educational tours last year. If 1356 students went to some tours this year, how many more students went last year?

FANCY STORE



Friends are talking about the stationary items which they have bought.



What did you buy?

I bought hair pin and pencils.



I bought pencil eraser which is small in length.

I bought ribbon. It is longer in length.



Shall we measure and see...

Pencil, ribbon, cloth etc... are measured by length.

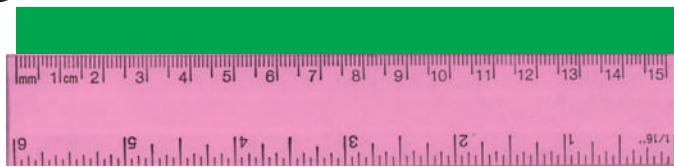
Measuring tools

Shall we measure with scale?



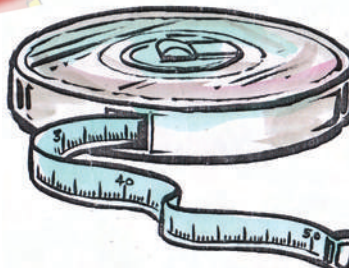
Pencil is 10 centimetre long.

Now can we measure ribbon by using tape?



Is there any other tools to measure?

The length of the ribbon is more than the length of the scale.



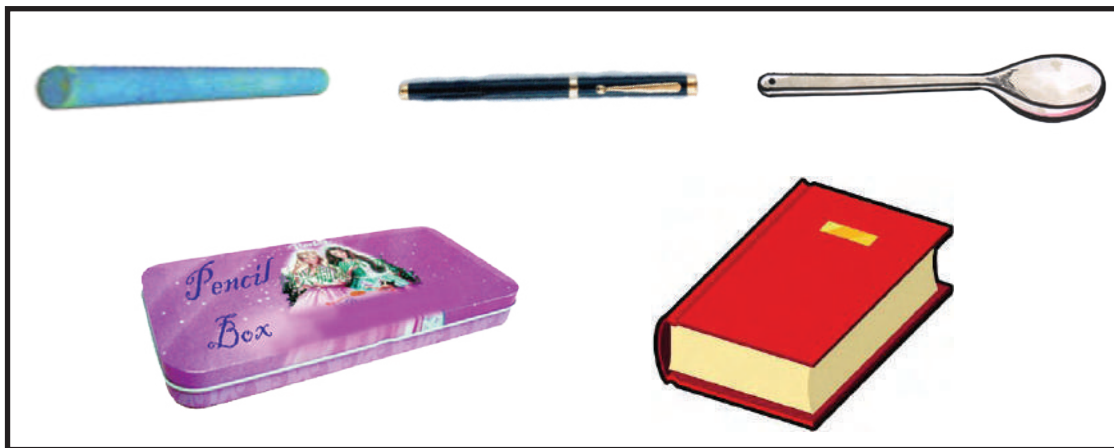
We can also use the tape to measure.

We measure the length of a playground with a measuring tape.

Length of smaller objects are measured in centimetre

Centimetre can be written as 'cm'.

Take the things given in pictures and write the approximate and actual length.



- 1) Length of a chalk =
- 2) Length of a pen =
- 3) Length of a spoon =
- 4) Length of a box =
- 5) Length of a book =

You are 100 cm tall

Relation between metre and centimetre

Archana is measuring her friend's height.

Height is measured in metre.

1 metre = 100 centimetre

Metre can be written as 'm'.



Yes, my height is 1 metre.

Conversion of metre into centimetre

Convert 3 m into cm.

$$1 \text{ m} = 100 \text{ cm}$$

$$3 \text{ m} = 3 \times 100 \text{ cm}$$

$$3 \text{ m} = 300 \text{ cm}$$

Convert 15 m into cm.

$$1 \text{ m} = 100 \text{ cm}$$

$$15 \text{ m} = 15 \times 100 \text{ cm}$$

$$15 \text{ m} = 1500 \text{ cm}$$

Convert 6m 20cm into cm

$$1 \text{ m} = 100 \text{ cm}$$

step 1

$$6 \text{ m} = 6 \times 100 \text{ cm}$$

$$6 \text{ m} = 600 \text{ cm}$$

step 2

$$600 \text{ cm}$$

$$+ 20 \text{ cm}$$

$$\hline 620 \text{ cm}$$

$$6\text{m } 20\text{cm} = 620 \text{ cm}$$

To change m into cm, multiply by 100



Practice

1) $2 \text{ m} = \underline{200} \text{ cm}$

5) $3\text{m } 40\text{cm} = \underline{340} \text{ cm}$

2) $5 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

6) $7\text{m } 10\text{cm} = \underline{\hspace{2cm}} \text{ cm}$

3) $25 \text{ m} = \underline{2500} \text{ cm}$

7) $8\text{m } 7\text{cm} = \underline{807} \text{ cm}$

4) $48 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

8) $6\text{m } 5\text{cm} = \underline{\hspace{2cm}} \text{ cm}$

Conversion of centimetre into metre

Convert 500 cm into m

$$100\text{cm} = 1\text{m}$$

$$500 \div 100 = 5$$

$$500\text{cm} = 5\text{m}$$

Convert 725 cm into m

$$100\text{cm} = 1\text{m}$$

$$725\text{cm} = 700 \text{ cm} + 25 \text{ cm} = 7 \text{ m} + 25 \text{ cm}$$

$$725\text{cm} = 7\text{m } 25\text{cm}$$

To change cm into m, divide by 100





Practice

1) 200 cm = 2 m

2) 500 cm = m

3) 5700 cm = m

4) 4800 cm = m

5) 485 cm = 4 m 85 cm

6) 775 cm = m cm

7) 970 cm = m cm

8) 706 cm = 7 m 6 cm

Addition

12m 75cm + 58m 56cm

m	cm
12	75
+	58 56
<hr/>	
71	31
<hr/>	

Step 1

Add cm

75
+ 56
<hr/>
131cm = 1m 31cm
<hr/>

Step 2

Add m

1
12
+ 58
<hr/>
71 m
<hr/>

12m 75cm + 58m 56cm = **71m 31cm**



Practice

Addition

m	cm
92	19
+	83 42
<hr/>	
<hr/>	

m	cm
22	65
+	97 48
<hr/>	
<hr/>	

m	cm
25	60
+	56 35
<hr/>	
<hr/>	

m	cm
43	08
+	27 64
<hr/>	
<hr/>	

Life related problems

Reena bought 15m 85cm of red ribbon and 28m 50cm of green ribbon to decorate the hall. What is the total length of the ribbon.

	m	cm
Length of the red ribbon	=	15 85
Length of the green ribbon	=	+ 28 50
Total length of the ribbon	=	<u>44 35</u>



Total length of the ribbon is 44m 35cm



Practice

Ashok sold 20m 95cm of cloth to one customer and 11m 35cm to another customer. Find the total length of the cloth.

Subtraction without conversion

$$95\text{m } 27\text{cm} - 46\text{m } 18\text{cm}$$

	m	cm
	95	27
-	46	18
	<u>49</u>	<u>09</u>

$$95\text{m } 27\text{cm} - 46\text{m } 18\text{cm} = 49\text{m } 9\text{cm}$$

Step 1

subtract cm

27
- 18
<u>9 cm</u>

Step 2

subtract m

95
- 46
<u>49 m</u>



Practice

m	cm
94	84
-	44 12
	<u> </u>

m	cm
85	44
-	68 29
	<u> </u>

m	cm
95	75
-	57 36
	<u> </u>

m	cm
32	28
-	12 09
	<u> </u>

Subtraction with conversion

$$84\text{m } 85\text{cm} - 68\text{m } 96\text{cm}$$

96 cm cannot be subtracted from 85 cm. So take 1 m from 84 m.

	m	cm
	84	85
-	68	96
<hr/>		
	15	89
<hr/>		

Step 1

subtract cm

85	185
- 96	- 96
<hr/>	<hr/>
	89
<hr/>	<hr/>

Step 2

subtract m

83
- 68
<hr/>
15
<hr/>

$$84\text{m } 85\text{cm} - 68\text{m } 96\text{cm} = 15\text{m } 89\text{cm}$$



Practice

Subtraction

	m	cm
	93	29
-	32	65
<hr/>		
<hr/>		

	m	cm
	85	21
-	47	75
<hr/>		
<hr/>		

	m	cm
	98	46
-	78	89
<hr/>		
<hr/>		

	m	cm
	56	18
-	28	37
<hr/>		
<hr/>		

Life related problems

Dinesh bought 80m 50cm of wire to fence his garden. He used only 65m 75cm of wire. Find the remaining length of the wire.

		m	cm
Total length of the wire	=	80	50
Length of the wire used	=	- 65	75
	=	<hr/>	<hr/>
		14	75
		<hr/>	<hr/>

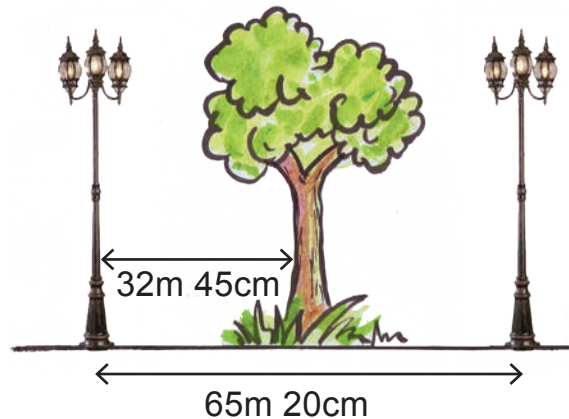


Remaining length of the wire is 14m 75cm



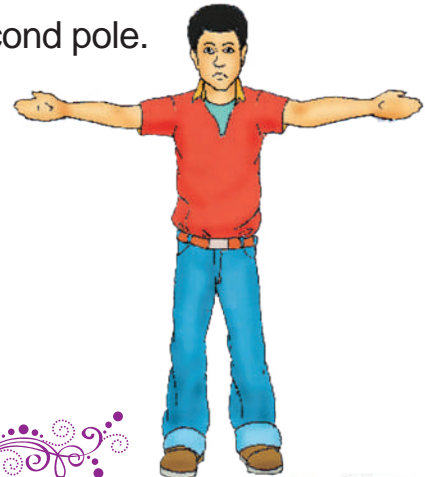
Practice

- 1) Kannan sold 48m 87cm of curtain cloth from the roll of 95m 75cm. How much is left over?



- 2) Distance between two poles is 65m 20cm. In between the poles there is a tree which is 32m 45cm away from the first pole. Find the distance between the tree and the second pole.

One metre is about the distance from one hand to other when your arms are stretched out



PROJECT

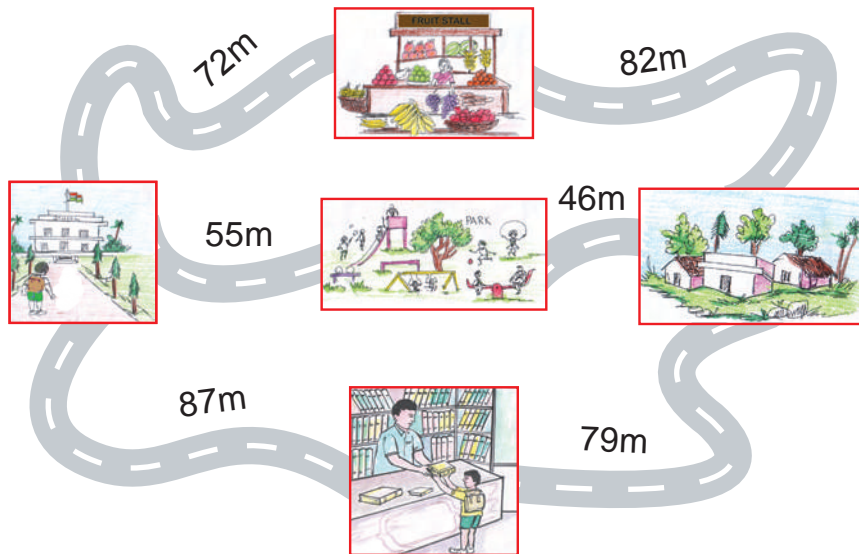
Estimate the following distances.

- 1) Distance between your classroom and the next classroom.
- 2) Distance between your classroom and playground.
- 3) Distance between the two poles in a kho - kho ground.
- 4) Distance between two neighbouring trees in your school.



Lab activity

Look at the route map. The various distance are marked in the figure.



Vijay goes to school by walk. While going to school he buys notebooks from the bookstall.

- 1) Distance between Vijay's house and the bookstall is _____
- 2) From the bookstall he goes to the school. Distance between the bookstall and the school is _____
- 3) Total distance covered by him from his house to school is _____
- 4) After school he goes to the fruit stall and buys fruits, then he goes to his house. Distance covered from school to house is _____
- 5) After reaching home he goes to the park and comes back home. Total distance covered by him is _____
- 6) In case if he comes directly from school to his house through park, then the distance is _____

REVISION



Fill in the blanks

- 1) 1300 cm = _____ m
- 2) 5800 cm = _____ m
- 3) 563 cm = _____ m _____ cm
- 4) 1865 cm = _____ m _____ cm
- 5) 809 cm = _____ m _____ cm
- 6) 7m 25cm = _____ cm
- 7) 4m 60cm = _____ cm
- 8) 8m 15cm = _____ cm

Do the sums

1)

m	cm
80	20
+	35 65
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

2)

m	cm
77	77
+	38 60
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

3)

m	cm
85	85
+	76 42
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

4)

m	cm
62	80
-	35 65
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

5)

m	cm
97	07
-	38 52
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

6)

m	cm
35	55
-	22 68
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

- 7) Ravi purchased 1m 35cm shirt bit for him and 1m 65cm shirt bit for his brother. Find the total length of the shirt bits.
- 8) An electrician had 63m 39cm of wire. He used 36m 48cm. How much length of wire was left with him?

WEIGHING OBJECTS

More weight

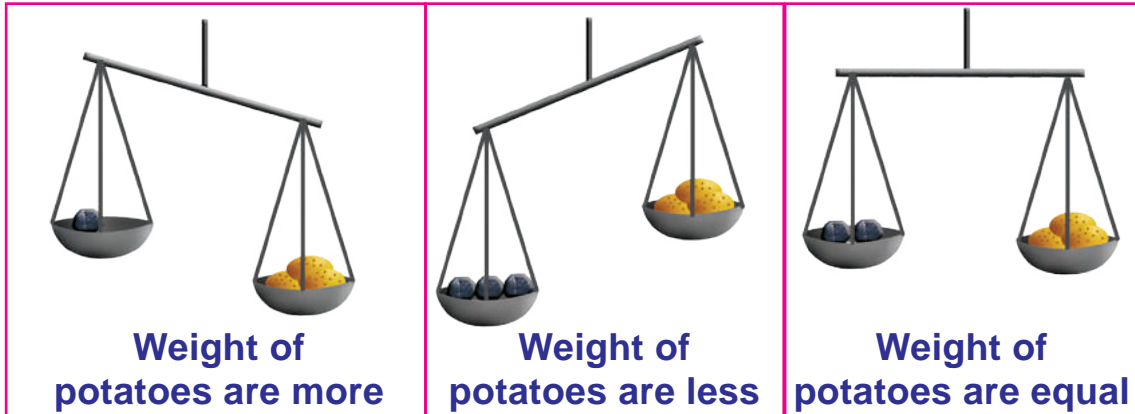


Iron ball

Less weight



Basket ball








Kilogram can be written as 'kg'

Weighing stones and weight of objects in kilogram






Various weighing machines

	<p>Weight of tomatoes = <u>2</u> kg</p>
	<p>Weight of grapes = ____ kg</p>
	<p>My weight = ____ kg</p>
	<p>Weight of sugar = ____ kg</p>
	<p>Weight of firewood = ____ kg</p>

Collect the pictures of different types of weighing machines and use it to prepare an album.




Addition in kilogram

Raghu	Kumar	Anandhan	Weight of
			$ \begin{array}{rcl} \text{Raghu} & = & 32 \text{ kg} \\ \text{Kumar} & = & 30 \text{ kg} \\ \text{Anandhan} & = & + 31 \text{ kg} \\ \hline & & 93 \text{ kg} \end{array} $
32 kg	30 kg	31 kg	
Total weight of them is 93 kg			






Practice

1) Find the total weight of vegetables

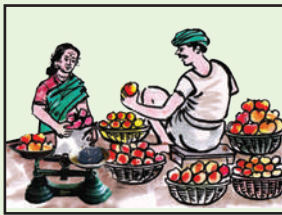
			Weight of
			tomatoes = 15 kg
			potatoes = 10 kg
			onions = + 7 kg
15 kg	10 kg	7 kg	
Total weight of vegetables			= _____

2) Find the total weight of cereals.

Wheat	Green gram	Black gram	Weight of
			wheat = 10 kg
			green gram = 75 kg
			black gram = + 63 kg
10 kg	75kg	63kg	
Total weight			= _____

3) Weight of rice 68 kg, sugar 55 kg and ragi 48 kg.
Find the total weight.

Subtraction in kilogram



Weight of mangoes in the shop = 25 kg

Weight of mangoes sold = - 17 kg

8 kg

Remaining weight of mangoes in the shop = 8 kg

Initial weight of Ice bar is 28 kg. After 15 minutes weight of Ice bar is 16 kg.



28 kg

- 16 kg

12 kg

Weight of melted Ice = 12 kg



Practice

1) Weight of

Laddu = 28 kg

Sold = -16 kg



2) Weight of

Halwa = 43 kg

Sold = - 18 kg

Remaining laddu = ____ kg

Remaining halwa = ____ kg

3) Weight of

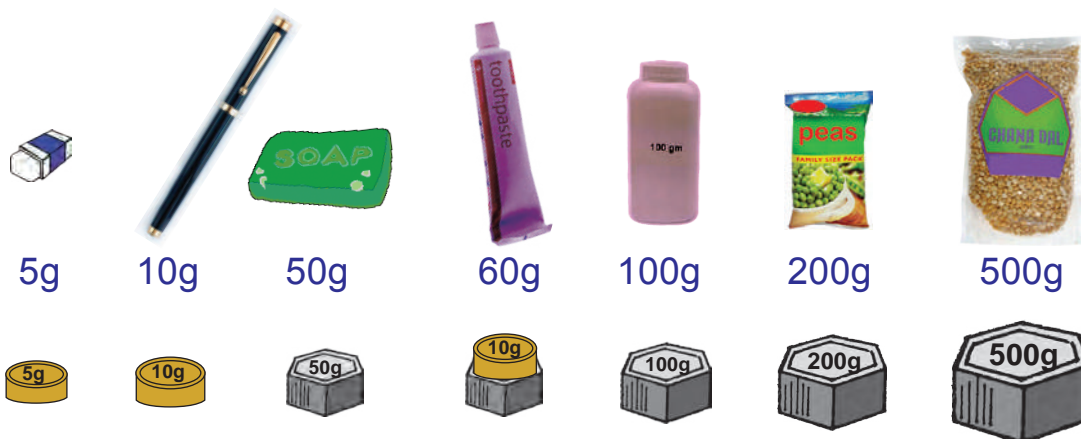
Clay = 25 kg

Horses = -19 kg



Weight of unused clay = ____ kg

Weighing stones and weight of objects in gram



Tea powder, coffee powder, gold, pepper, etc., are measured by grams

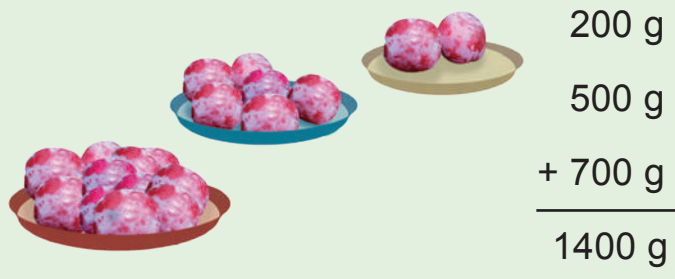
gram can be written as 'g'

1 Kilogram = 1000 gram

$$\begin{aligned}
 & 500\text{g} + 500\text{g} = 1000\text{g} \\
 & 200\text{g} + 200\text{g} + 200\text{g} + 200\text{g} + 200\text{g} = 1000\text{g} \\
 & 100\text{g} + 100\text{g} + 100\text{g} + 100\text{g} + 100\text{g} + 100\text{g} + 100\text{g} + 100\text{g} + 100\text{g} + 100\text{g} = 1000\text{g}
 \end{aligned}$$

Addition in gram

Let us find the total weight of the plums




$$\begin{aligned}
 1 \text{ kg} &= 1000\text{g} \\
 1400 \text{ g} &= 1000 \text{ g} + 400 \text{ g} \\
 &= 1 \text{ kg} + 400 \text{ g} \\
 &= 1 \text{ kg } 400 \text{ g}
 \end{aligned}$$

Total weight of plums = 1kg 400g



Practice

1) Find the total weight of grapes.



150 g

350 g

+ 850 g

Total weight of grapes = _____ g

2) 250 g
345 g
+ 657 g

3) 247 g
199 g
+ 238 g

4) 645 g
561 g
+ 359 g

5) 894 g
467 g
+ 500 g

Subtraction in gram

Let us calculate weight of mango.



Weight of
yellow bag = 1650 g

red bag = - 1350 g

300 g

Weight of mango is 300 g



Practice

1) 756 g
- 435 g

2) 539 g
- 49 g

3) 465 g
- 309 g

4) 647 g
- 35 g

Addition in kilogram and gram

Find the total weight of the following things.

Things	Weight	
	kg	g
Television	20	500
Chair	5	350
Bicycle	30	100
Total	55	950

Steps

- Add the grams
- Add the kilograms

Total weight of things = **55 kg 950 g**



Practice

1) Find the total weight of papayas.



1kg 255g



2kg 350g



3kg 300g

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 1 \quad 255 \\
 2 \quad 350 \\
 + 3 \quad 300 \\
 \hline
 \end{array}$$

Total weight of papaya is _____ kg _____ g

2) Find the total weight of vegetables



17kg 250g



13kg 500g



25kg 105g

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 17 \quad 250 \\
 13 \quad 500 \\
 + 25 \quad 105 \\
 \hline
 \end{array}$$

Total weight of vegetables is _____ kg _____ g

3)

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 77 \quad 355 \\
 89 \quad 090 \\
 + 35 \quad 155 \\
 \hline
 \hline
 \end{array}$$

4)

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 44 \quad 363 \\
 13 \quad 147 \\
 + 15 \quad 289 \\
 \hline
 \hline
 \end{array}$$

5)

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 88 \quad 154 \\
 16 \quad 246 \\
 + 26 \quad 343 \\
 \hline
 \hline
 \end{array}$$

Subtraction in kilogram and gram

Let us find the weight of honey



5kg 950g



4kg 895g

	kg	g
Weight of bee hive	=	5 950
Weight of honey	= -	4 895
Weight of honey wax	=	<u>1 055</u>

Weight of honey wax is **1kg 55g**



Practice

1)



13kg 750g



11kg 255g

	kg	g
Weight of purple paint	=	13 750
paint used	= -	<u>11 255</u>
		<u> </u>

Remaining paint is _____ kg _____ g

2) Find the difference between the weight of oranges and jack fruit.



45kg 258g



18kg 163g

	kg	g
Weight of oranges	=	45 258
jack fruit	= -	<u>18 163</u>
		<u> </u>

Difference in weight = _____ kg _____ g

3)

	kg	g
	25	456
-	14	369
	<u> </u>	<u> </u>
	<u> </u>	<u> </u>

4)

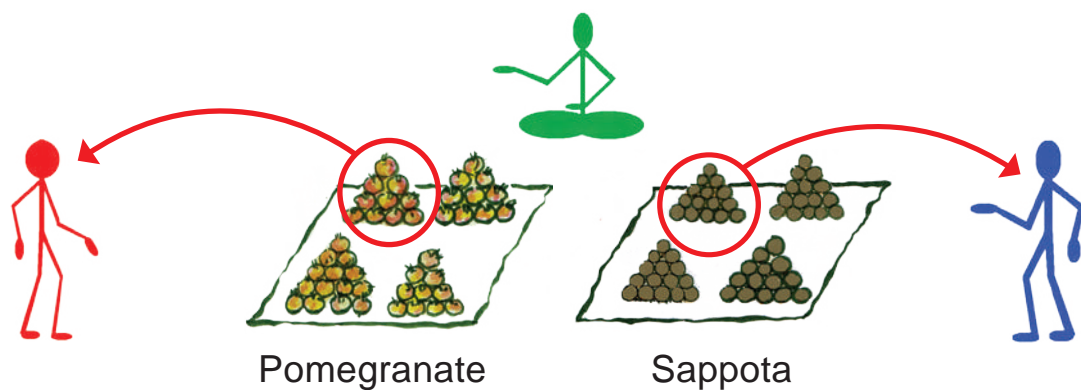
	kg	g
	37	576
-	25	455
	<u> </u>	<u> </u>
	<u> </u>	<u> </u>

5)

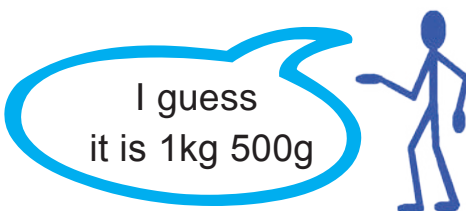
	kg	g
	54	342
-	37	523
	<u> </u>	<u> </u>
	<u> </u>	<u> </u>

Guessing weight

Shall we check our guessing, by weighing !

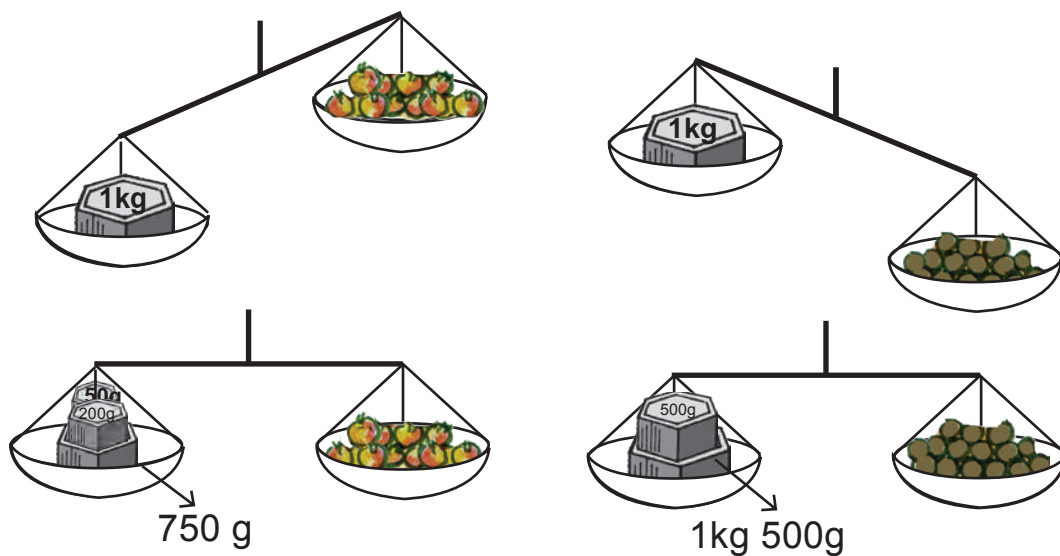


I guess
it is 1kg



I guess
it is 1kg 500g

Both are verifying their guessing.



My guessing is close
to the correct weight.

My guessing is correct.





Estimate the weight of objects.



Your Book
Pencil Eraser
Bucket
Crayon
School Bag

____ g
____ g
____ g
____ g
____ g



Practice

In a grocery shop the following items are purchased.

Name of the customer	Red chilli		Coriander		Turmeric		Cumin		Pepper	
	kg	g	kg	g	kg	g	kg	g	kg	g
Meena	2	175	4	150	300		150		125	
Radha		150	1	125	150		50		50	
Kumaresan	2	000	3	200	200		250		300	

Find the quantity of groceries bought by each customer.



Lab activity

Guess and verify the weights.

S. No.	Vegetables	Guessing weight	Correct weight
1.			
2.			
3.			
4.			
5.			

REVISION



Fill in the blanks.

- 1) $8500\text{g} = \underline{\hspace{1cm}} \text{ kg} + \underline{\hspace{1cm}} \text{ g}$
- 2) $7250\text{g} = \underline{\hspace{1cm}} \text{ kg} + \underline{\hspace{1cm}} \text{ g}$
- 3) $6\text{kg } 550\text{g} = \underline{\hspace{1cm}} \text{ kg} + \underline{\hspace{1cm}} \text{ g}$
- 4) $13\text{kg } 650\text{g} = \underline{\hspace{1cm}} \text{ kg} + \underline{\hspace{1cm}} \text{ g}$

Do the sums.

1)

kg	g
10	080
+ 20	355
<hr/>	
<hr/>	

2)

kg	g
29	054
+ 31	453
<hr/>	
<hr/>	

3)

kg	g
31	423
47	315
+ 54	154
<hr/>	
<hr/>	

4)

kg	g
75	859
- 39	676
<hr/>	
<hr/>	

5)

kg	g
91	759
- 77	597
<hr/>	
<hr/>	

6)

kg	g
82	235
- 17	198
<hr/>	
<hr/>	

- 7) One package of sweet is $5\text{kg } 600\text{g}$ and another package of sweet is $2\text{kg } 350\text{g}$. Find the total weight.
- 8) The quantity of red chillies in two baskets are $25\text{kg } 550\text{g}$ and $10\text{kg } 350\text{g}$ respectively. Find the total weight of red chillies.
- 9) First bag contains $52\text{kg } 600\text{g}$ of wheat and second bag contains $35\text{kg } 250\text{g}$ of wheat. How much more weight of wheat contains in the first bag than second bag?
- 10) A sandalwood weighs $18\text{kg } 250\text{g}$. A part of it weighing $12\text{kg } 100\text{g}$ is cut off from it. What is the weight of the remaining piece?

'I can, I did'

Student's Activity Record

Subject:

Sl. No	Date	Lesson No.	Topic of the Lesson	Activities	Remarks