पुष्ना International School

Shree Swaminarayan Gurukul, Zundal

Class -IV

MATH-MAGIC

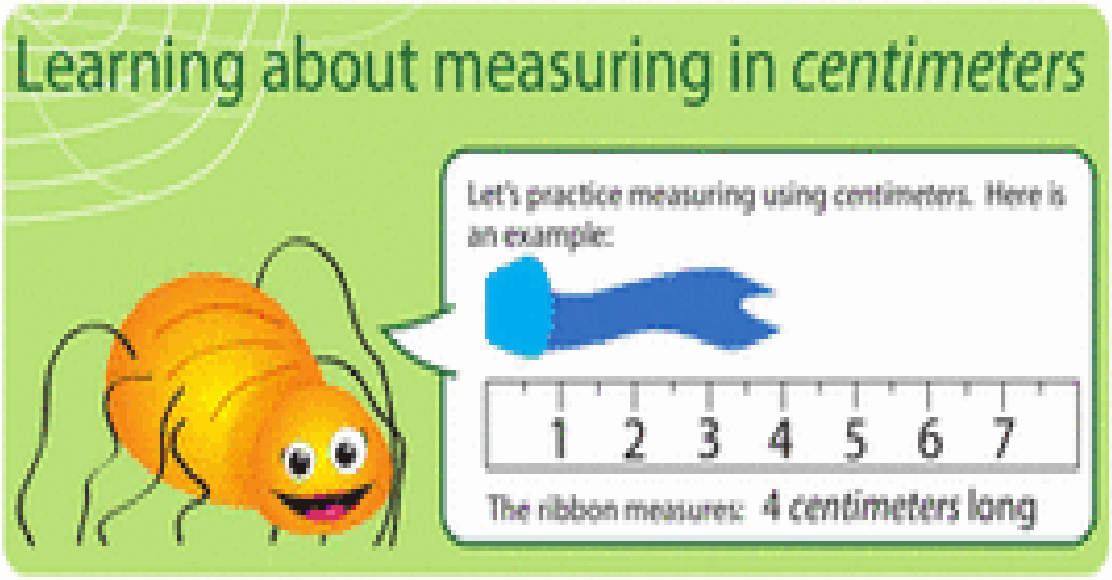
Year- 2020-21

CH-2

Long and Short

- ## Summary

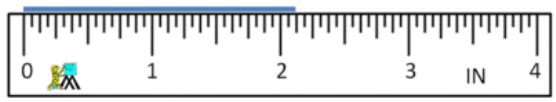
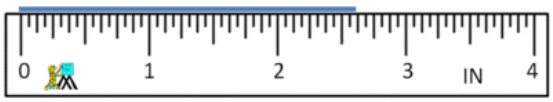
- **Measurement of length**
- **Draw the line segment of the following.**
- **Which is a better unit to measure these? (cm, m or km)**
- **Conversion of measures from higher to lower units**
- **Conversion of measures from lower to higher units**
- **Convert the following lengths into metres**
- **Convert the following lengths into metre and centimetre**
- **Addition and Subtraction**
- **Metric Measure of Length**
- **Complete the table and answer the questions below**
- **Read the following table and answer the following question**



- ## Measurement of length

Measurement of something from its one end to the other is called its length. The standard unit of length is meter. We use different units to measure different length. Millimetre, centimetre. Metre is used to measure average distance. Kilometre used to measure long distance.

100 centimetre = 1 metre
1000 metre = 1 kilometre

1) How long? _____ 	2) How long? _____ 

- **Draw the line segment of the following.**

1. 4 cm
   _____
2. 7 cm
   _____
3. 11 cm
   _____
4. 9.5 cm
   _____
5. 10 cm
   _____

- **Which is a better unit to measure these? (cm, m or km)**

1. Length of a pin_____
2. Height of a house_____
3. Distance the scooter travels_____
4. Length of a park _____
5. Length of a pen_____ _____

6. Height of your pet_____

7. Length of 500 rupees note_____

8. Distance from Bangalore to Rajasthan _____

9. Thickness of your lunch box _____

10. Height of Qutub Minar _____

- **Conversion of measures from higher to lower units**

We always multiply when we change higher unit to lower unit.

Example 1: Change 4km into meters

1km =1000m

Therefore, 4 x 1000m = 4000m

Example 2: Change 25m into centimetres

1m = 100cm

Therefore, 25 x 100cm = 2500cm

1. 4 km = 4 x 1000m = 4000m
2. 12 km = 12 x 1000m = _____
3. 3 km = 3 x 1000m = _____
4. 10 km = 10 x 1000m = _____
5. 12 m = 12 x 100 = _____
6. 3m = 3 x 100 = _____

- **Conversion of measures from lower to higher units**

We always divide when we change lower unit to higher unit.

Example 1: Change 6000m to kilometre

1000m = 1km

Therefore, 6000 ÷ 1000 = 6km

1. 2000m = 2000 ÷ 1000 = 2km
2. 4000m = 4000 ÷ 1000 = _____
3. 12000m = 12000 ÷ 1000 = _____
4. 6000m = 6000 ÷ 1000 = _____

- **Convert the following lengths into metres.**

Example: 9 km 236 m
= 9 x 1000 m + 236 m
= 9000 m + 236 m
= 9236 m

1. 7 km 205m
2. 12km 60m
3. 19km 215m
4. 16km 115m

- **Convert the following lengths into metre and centimetre.**

Example: 526cm = 500 + 20 + 6 cm
= 5 x 100 + 20 + 6 cm
= 5 m + 26 cm
= 5 m 26 cm

1. 327 cm
2. 951 cm
3. 702 cm
4. 864 cm

- **Addition and Subtraction**

Step1: Write the units on the top.

Step2: Write the numbers in proper place below the units. Write zero in empty place.

Example: Add 45km 34m and 34km 5m

	km	m
	45	034
+	34	005
	79	039

- **Add the following:**

a. 21km 1m + 31km 7m

b. 31km 605m + 12km 22m

- **Subtract the following:**
- Example: Subtract 15km 30m from 35km 45m

	km	m
	35	045
-	15	030
	20	015

a. 48km – 24km 200m

	km	m
	48	000
-	24	200

b. 85km 542m – 14km 34m

	km	m
	48	542
-	24	034

- **Metric Measure of Length**

1. Answer the following:

a. How many meters are there in 22km? _____

b. What is the standard unit of length? _____ c.

Which unit of length is 100 times greater than meter? _____

2. Word problem:

a. Arya travelled 5km 300m by car and 1km 100m by bike. What distance did he travel in all?

5 km 300 m by car

+ 1 km 100 m by bike

Ans:_____-

b. Gaurav is 92cm tall. His brother is 60cm taller than him. What is the height of his brother?

92 cm
- 60 cm

Ans:_____

- **Complete the table and answer the questions below**

sl.no	name of the plant	last months Height	this month height	cm-grown Total
1	TULSI	5cm	8cm	
2	MANGO	10cm	13cm	
3	BAMBOO	20cm	38cm	
4	ROSE	32cm	32cm	

a. The plant which has grown maximum is_____

b. The plant which has grown minimum is_____, _____

c. The plant which has not grown_____

d. The plant which has grown by 18cm is _____

e. This month _____ plant is taller than _____, _____

- **Read the following table and answer the following question**

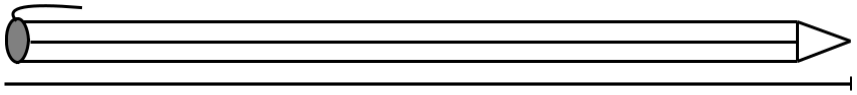
SL.NO	NAMES	DISTANCE OF SIXES BEATENIN A CRICKET MATCH
1	SACHIN	90m
2	YUVARAJ	101m 5cm
3	GAMBHIR	52m 25cm

a. What is the difference between the distance hit by Sachin and Yuvaraja?

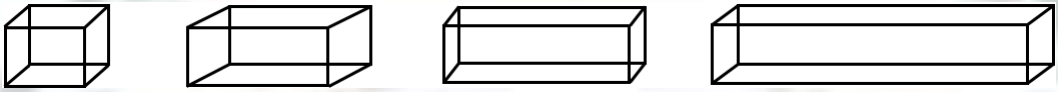
_____

EXERCISE CORNER

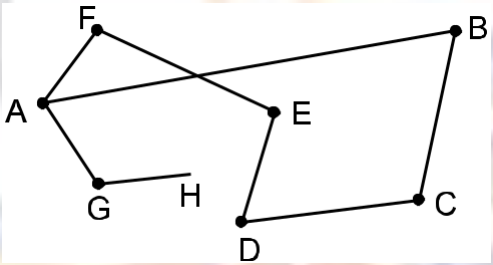
Q.1. Draw a pen 1 cm shorter than this pen.



Q.2. Circle the longest box.



ABCD Q.3. Measure the shortest distance between point A and B.

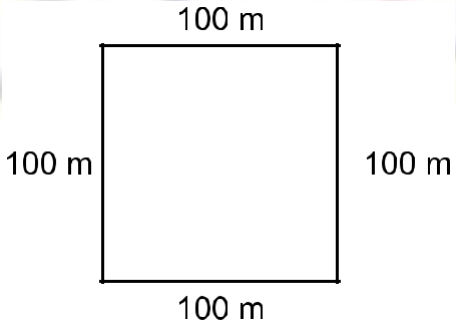


Q.4. Fil in the blanks

(a) 10 m = _____ cm

(b) 50 m = _____ cm

Q.5. Find the perimeter of the given figure.



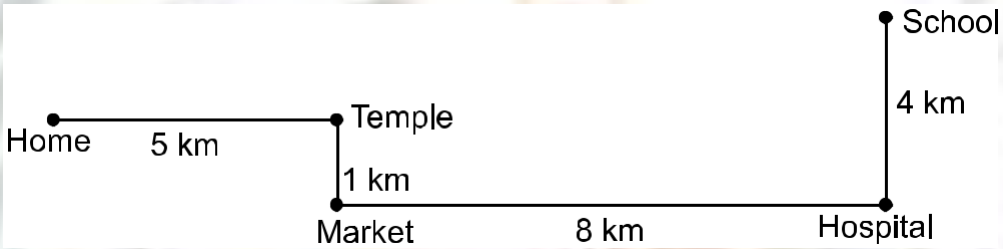
Q.6. Complete the table

metres	——	5	7	——
centimetres	100	——	——	800

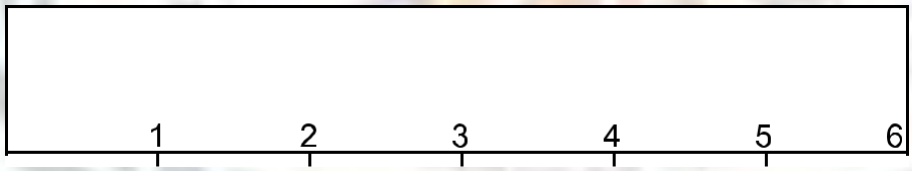
Q.7. Ram is 1 m 23 cm tall. Seeta is 12 cm shorter than Ram. What is their total height?

Q.8. A room has 6 m length and 4 m breadth. What is the perimeter of the room?

Q.9. Find the total distance covered by Mohan from home to school.



Q.10.



The line is about _____ centimetres long.

Q.11. Using a ruler, draw lines of following measurements

(a) 7.7 cm (b) 6.5 cm