CLASS 4 (MATHS)

CHAPTER 2-Long and Short

Question 1. How Far Apart are the Dots?

a) Guess the distance between any two dots. How many centimeters is it? Now measure it with the help of a scale. Did you guess right?

Solution: The guessed distances between two dots are: Between dots

A and B = 2.5 cm, A and C = 3 cm, A and D = 5.5 cm

A and E = 3.9 cm, A and F = 4.6 cm, A and G = 4.5 cm

A and H = 6 cm, B and C = 5.5 cm, B and D = 4.5 cm

B and E = 4.5 cm, B and F = 8.5 cm, B and G = 3.4 cm

Band H = 8 cm, C and D = 8 cm, C and E = 4 cm

C and F = 2.5 cm, C and G = 9 cm, C and H = 5 cm

D and E = 6.5 cm, D and F = 10 cm, D and G = 5cm

D and H = 6.4 cm, E and F = 4.5 cm, E and G = 4 cm

E and H = 4 cm, F and G = 8.5 cm, F and H = 4.5 cm

G and H = 8 cm,

On actual measurement, we find the distances between the do's as under:

Between dots

A and B = 3 cm, A and C = 3 cm, A and D = 4.4 cm

A and E = 3.5 cm, A and F = 4.6 cm, A and G = 6.3 cm

A and H = 6 cm, B and C = 5.8 cm, B and D = 4.8 cm

B and E = 5 cm, B and F = 7.2 cm, B and G = 3.2 cm

B and H = 7 cm, C and D = 6.8 cm, C and E = 5.2 cm

C and F = 2.5 cm, C and G = 7.7 cm, C and H = 5 cm

D and E = 6.8 cm, D and F = 8.5 cm, D and G = 4.2 cm

D and H = 8.8 cm, E and F = 4.8 cm, E and G = 4.5 cm

E and H = 2.6 cm, F and G = 8.5 cm, F and H = 3.5 cm

Qu 2. Jhumpa once read a list of the tallest people in the world. One of them was 272 cm tall.

That is just double of Jhumpa's height. How tall is jhumpa?

Solution: Jhumpa' s height= 272/2 = 136 cm

Qu3. How far is Rehana from Arundhati?

Solution: Rehana is 4 meter from Arundhati.

Qu4. How far ahead is Rehana from Konkana and Uma from the finishing line?
Solution: Rehana is 8 meter from Konkana and Uma.

Qu5. Have you heard about a 1500 m or 3000 m race? (you remember that 1000 m make

1 km and 500 m make half a km.)
So you can say:

a) In a 1500 m race people run _____km.

b) In a 3000 m race people run _____ km.
Solution:

a) One and a half km.

b) Three km.

Now remember these

10 dm = 1 cm

100 cm = 1 m

1000 m = 1 km

500 m = ½ km

Qu.6 Fill in the boxes with the correct answers.

2 m = …… cm 300 cm = ……m

5 m = …… cm	600 cm = ……m
7 m = ……cm	1000 cm = …… m
20 m = ……..cm	1200 cm = …….m
3 km = ……m	5000 m = ……..km
8 km = ……..m	9000 m = ……km

Qu. Have you heard about marathon races in which people have to run about 40 km?

People run marathons on roads because the track of a stadium is only 400 metres.

10 rounds of a stadium track = _____km

Solution: Length of the track of a stadium = 400 metres

So, 10 rounds of a stadium track = 400 ×10 metres

= 4000 metres

=4000/1000 = 4 km

Question. So, if you run a marathon on a stadium track, you will have to complete _____ Rounds!

Solution: 100 rounds.

Question. Change the following

a. 150 m into cm
b. 320 cm into m
c. 4500 m into km
d. 15 km into m

Question. Dhanu has the longest jump of 3 meters 40 cm. Gurjeet is second. His jump is 20 cm less than Dhanu's. Gopi comes third. His jump is only 5 cm less than Gurjeet's jump. How long are Gurjeet's and Gopi's jumps?

Solution: Gurjeet's long jump = Dhanu's long jump – 20 cm

= 3 m 40 cm - 20 cm

=3 m 20 cm

Gopi's long jump = Gurjeet's long jump – 5 cm

= 3 m 20 cm - 5 cm

= 3 m 15 cm

Question . How far can you throw a ball?

Solution: I can throw the ball to a distance 6 meter.

Question. Look for a big ball, like a football or volleyball. How far can you kick it?

Solution: I can kick a ball to a distance 12 meter.

Question. Here are the Indian Records and World Records for some sports.

Solution:

Sports	World record	Indian record
High jump (men)	Javier S. (2 m 45 cm)	Chandra Pal (2 m 17 cm)
Long jump (men)	Mike P. (8 m 95 cm)	Amrit Pal (8 m 8 cm)
High jump (women)	Stefka K.(2 m 9 cm	Bobby A. (1 m 91 cm)
Long jump (women)	Galina C. (7 m 52 cm)	Anju G. (6 m 83 cm)

Question. Find out form the table –

1. How many centimeters more should Chandra Pal jump to equal the Men's World Record for high jump?

Solution: High Jump (Men) World Record = 2 m 45 cm

High Jump (Men) Indian Record = 2 m 17 cm

Number of centimeters more required by Chandra Pal to equal

Men's World Record = 2 m 45 cm - 2 m 17 cm

= 28 cm.

Question. .How many centimeters higher should bobby? Jump to reach 2 meters?

Remember that 1 m = 100 cm Half meter =?

Solution: High jump Bobby's record= 1 m 90 cm

To reach 2 m….

2 m – 1 m 90 cm = m cm

2 00

1 90

Also,

half a meter= 100/2 = 50 cm

Question. .Galina's long jump is nearly

(a) 7 meters (b) 7 and a half meters (c) 8 meters

Solution. …….

Question. .Look at the Women's World Records. What is the difference between the longest jump and the highest jump?

Solution: The difference between the highest jump and the longest jump

= 7 m 52 cm

– 2 m 9 cm.

= 5 m 43 cm

Question .If Mike P. could jump ……..centimeters longer, his jump would be full 9 meters.

Solution: if mike jumps 5cm longer than his jump would be full 9 m.

Question. Whose high jump is very close to two and a half meters?

(a) Stefka K (b) Chandra Pal (c) Javier S. (d) Bobby A.

Solution: Chandra Pal.

Add the following lengths.

m	cm
25	60
+19	45

M	cm
71	20
+ 20	41