NCERT Solutions for Class 4 Maths Chapter 2: Chapter 2 of Class 4 Maths in the NCERT textbook, titled "Long and Short," introduces students to the concept of measurement. The chapter helps students understand the difference between long and short objects through practical examples like comparing the lengths of pencils, ribbons, and roads.

It emphasizes the use of standard units of measurement such as centimeters and meters while also exploring non-standard units like hand spans and footsteps. NCERT Solutions for Class 4 Maths Chapter 2 includes various activities and exercises to help students grasp the idea of estimating, comparing, and measuring lengths in their daily lives.

NCERT Solutions for Class 4 Maths Chapter 2 Overview

Chapter 2 of the NCERT Class 4 Maths textbook, titled "Long and Short," is designed to introduce students to the fundamental concepts of measurement, particularly focusing on length. This chapter helps students differentiate between long and short objects and understand the importance of using appropriate units for measuring length.
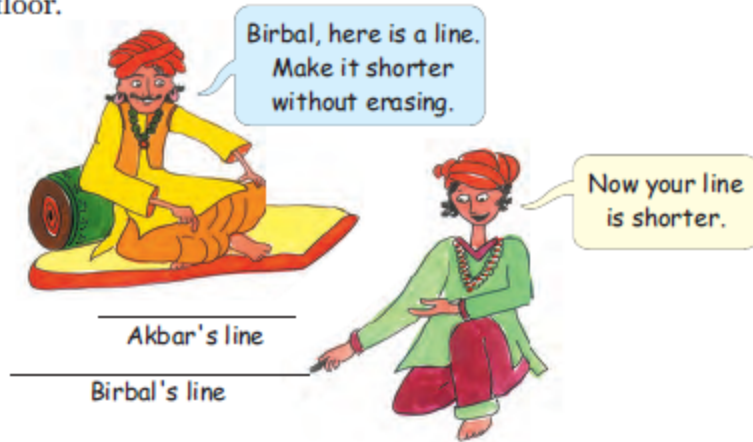
NCERT Solutions for Class 4 Maths Chapter 2 begins with simple activities where students compare the lengths of everyday objects, such as pencils, ribbons, and sticks, by visual inspection and estimation. It gradually progresses to the use of non-standard units like hand spans, cubits, and footsteps to measure different objects, helping students understand the concept of estimation and approximation.

NCERT Solutions for Class 4 Maths Chapter 2 Long and Short

Here we have provided NCERT Solutions for Class 4 Maths Chapter 2 Long and Short -

The Shorter Line

Akbar was a famous king. He had a smart minister called Birbal. Once Akbar gave him a difficult question. He drew a line on the floor.

Birbal, here is a line. Make it shorter without erasing.

Now your line is shorter.

Akbar's line

Birbal's line

Question: 1

Look at the picture and explain how Birbal made Akbar's line shorter.

Answer:

Compared to Akbar's line, Birbal's drawing was longer.

Question: 2

Make her right arm 1 cm longer than the left arm.

Answer:

Question: 3

Draw a cup 1 cm shorter than this cup.

Answer: The cup drawn is 1 cm shorter than the given cup

Question: 4

Draw a broom half as long as this broom.

Answer: Below is a drawing of a broom that is half as big as the one in the figure.

Question: 5

Draw another hair of double the length.

Answer:

Double-length hair is drawn underneath

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How Tall Have You Grown?

Question: 6

Do you remember if you measured your height in Class 3?

Answer: Yes, I measured my height in Class 3

Question: 7

Do you think you have grown taller?

Answer: Yes, I have grown taller

Question: 8

How much?

Answer: About 5 cm

Question: 9

Have your friends also grown taller?

Answer: Yes, most of them have grown taller

Question: 10

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? _____ cm.

Answer: Height of the tallest person = 272 cm

Which is double of Jhumpa's height

So,

272 ÷ 2 = 136 cm

Hence, Jhumpa's height is 136 cm

Question: 11

Could that person pass through the door of your classroom without bending?

Answer:

The person cannot pass through the classroom door without bending because it is 230 cm high.

Question: 12

Will his head touch the roof of your house if he stands straight?

Answer:

Yes, considering that my classroom is 310 cm tall.

The Long and Short of Your Family!

Question: 13

Who is the tallest in your family?

Answer: My grandfather is tallest in the family.

Question: 14

Who is the shortest in your family?

Answer:

My younger sister.

Question: 15

What is the difference between their heights?

Answer:

The difference between their heights is 55 cm.

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Race

Question: 16

(a) How far is Rehana from Arundhati?

Answer:

Rehana is three meters away from Arundhati.

(b) How far ahead is Rehana from Konkana and Uma?

Answer:

Rehana is 6 metres ahead from Konkana and Uma

(c) How far are Konkana and Uma from the finishing line?

Answer:

Uma and Konkana are 15 meters away from the finish line.

Question: 17

Have you heard about a 1500 m or 3000 m race? (You remember that 1000 metres make 1 kilometre and 500 metres make half a kilometre.)

(a) In a 1500 metres race people run _____ km

Answer: In a 1500 metres race people run one and half km

(b) In a 3000 metres race people run _____ km

Answer: In a 3000 metres race people run 3 km

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Question: 18

Have you heard about marathon races in which people have to run about 40 kilometres? People run marathons on roads because the track of a stadium is only 400 metres.

(a) 10 rounds of a stadium track = _____ km

Answer: 10 rounds of a stadium track = 400 metres × 10

= 4000 metres

= 400 ÷ 1000

= 4 km

So, 10 rounds of a stadium track = 4 km

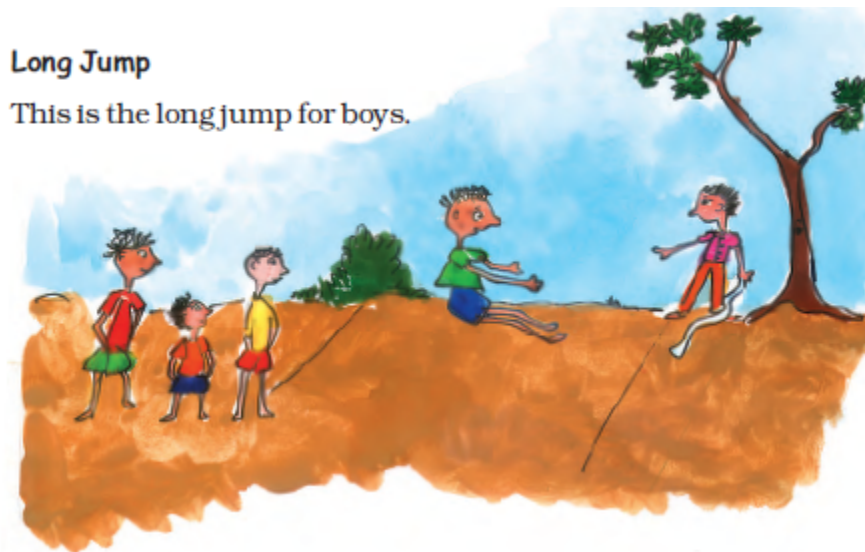**(b) So, if you run a marathon on a stadium track, you will have to complete rounds!**

Answer: The number of rounds to be completed

= (40 × 100) ÷ 100

= 4000 ÷ 100

= 10

Hence, you have to complete 10 rounds on a stadium track

Long Jump

This is the long jump for boys.

Question: 19

Dhanu has the longest jump of 3 metres 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?

Answer: Gurjeet's jumps = Dhanu's jump – 20 cm

= 3 metres 40 cm – 20 cm

= 3 metres 20 cm

Therefore, Gurjeet's jump is 3 metres 20 cm

Gopi's jump = Gurjeet's jumps – 5 cm

= 3 metres 20 cm – 5 cm

= 3 metres 15 cm

Therefore, Gopi's jump is 3 metres 15 cm

Here are the Indian Records and World Records for some jumps.

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

Question: 20

Find out from the table

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

Answer: We know that,

1 m = 100 cm

Given

Men's world record for high jump = 2 m 45 cm

= 2 × 100 + 45 cm

= 200 cm + 45 cm

= 245 cm

High jump record of Chandra Pal = 2 m 17 cm

= 2 × 100 + 17 cm

= 200 cm + 17 cm

= 217 cm

Now, subtract 217 from 245, we get

245 – 217 = 28 cm

Hence, to equal the men's world record for high jump, Chandra Pal needs to jump 28 cm more.

2. How many centimetres higher should Bobby A jump to reach 2 metres?

Remember that 1 m = 100 cm

Half metre =?

Answer: Bobby A, high jump record = 1 m 91 cm

= 1 × 100 + 91 cm

= 191 cm

Required centimetres to reach is 2m

So,

= 2 × 100

= 200 cm

Thus,

200 – 191 = 9 cm

Therefore, Bobby A should jump 9 cm higher to reach 2 metres

3. Galina's long jump is nearly

(a) 7 metres

(b) 7 and a half metres

(c) 8 metres

Answer: Galina's long jump record is 7 m 52 cm

Hence, it is nearly 7 and half metres,

Therefore option (b) is correct

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

Answer: Women's World record for high jump = 2 m 9 cm

Women's World record for long jump = 7 m 52 cm

So, difference between them is

= 7 m 52 cm – 2 m 9 cm

= 5 m 43 cm

5. If Mike P, could jump _____ centimetres longer, his jump would be full 9 metres.

Answer: Mike P long jump record = 8 m 95 cm

To reach 9 metres = 9 m – 8 m 95 cm

= 5 cm

Therefore, if Mike P jump 5 cm longer, his jump would be full 9 metres

6. Whose high jump is very close to two and half metres?

(a) Stefka K.

(b) Chandra Pal
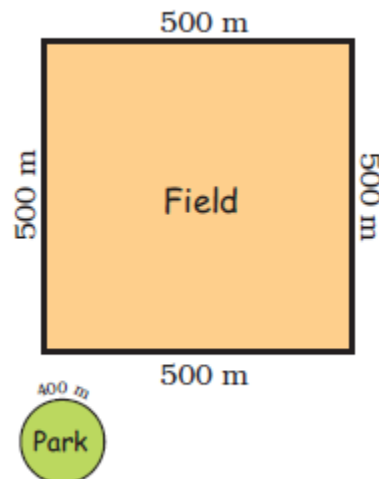
(c) Javier S.

(d) Bobby A.

Answer: Javier S high jump is 2 m 45 cm. So, his jump is very close to two and half metres.

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Running Exercise

The doctor has told Devi Prasad to run 2 km every day to stay fit. He took one round of this field. How far did he run?

The field was very far from his home. So he chose a park nearby. The boundary of the park was about 400 metres long.

Question: 21

* How many rounds of the park must Devi Prasad run to complete 2 km?

Answer: We know that,

1 km = 1000 m

So,

2 km = 2000 m

Hence, to complete 2000 m, Devi Prasad must complete

= 2000 m ÷ 400 m

= 5 rounds

Therefore, Devi Prasad has to complete 5 rounds of the park

* One day the weather was very good and a cool breeze was blowing. He felt so good that he kept jogging till he got tired after 8 rounds. That day he ran _____ km and _____ metres!

Answer: Distance covered to complete one round of the park = 400 m

So, distance covered by Devi Prasad to complete 8 rounds of the park = 400 m × 8

= 3200 m

We know,

1000 m = 1 km

Therefore, 3200 m = 3000 m + 200 m

3000 m = 3000 ÷ 1000

= 3 km 200 m

Hence, Devi Prasad ran 3 km 200 m to complete 8 rounds of the park

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From Kozhikode to Thalassery

Subodh is going to Kozhikode which is 24 kilometres (km) away. Manjani is going to Thalassery which is 46 km away in the opposite direction.

Question: 22

How far is Kozhikode from Thalassery? _____

Answer: Kozhikode distance from Thalassery

= Kozhikode distance + Thalassery distance

= 24 km + 46 km

= 70 km

How Far is Your Home from School?

Momun comes to school from very far. He first walks about 400 metres to the pond. With slippers in his hands, he then walks 150 metres through the pond. Next he runs across the 350 metres wide green field. Then he carefully crosses the 40 metres wide road to reach his school.

Question: 23

***How much does Momun walk every day to reach school?** _____

Answer: Total distance of school from Momun home = 400 m + 150 m + 350 m + 40 m

= 940 m

Therefore, Momun has to walk 940 m every day to reach school

* Is it more than 1 km? _____

Answer: Since, 940 m is less than 1000 m

Therefore, it is not more than 1 km

Question: 24

Find out how far your friends live from school and fill the table. Write in metres or kilometres.

Friend's name	Distance of home from school

Answer: Following is the list of distance of school from their home

Friends Name	Distance of home from school
Sohail	500 m
Amit	2 km 100 m
Alok	1 km 400 m
Sanjeev	1 km 100 m
Rohit	5 km 400 m
Rahul	2 km 400 m

* Who among you lives nearest to the school?

Answer: A person who lives nearest to the school is Sohail

* Who lives farthest from the school?

Answer: A person who lives farthest from the school is Rohit

* How many children live less than 1 km away from your school?

Answer: Me and Sohail. That means total two children lives less than 1 km away from school

* Is there anyone who lives more than 5 km away from the school?

Answer: Yes, Rohit lives more than 5 km away from the school

* How do they come to school?

Answer: They come to the school by school bus.

Guess and Find Out

Question: 25

How long is the thread in a reel?

Answer: The length of thread can be measured depending on the thickness of reel.

It may be 60 metres, 90 metres, 100 metres or 400 metres or more

Question: 26

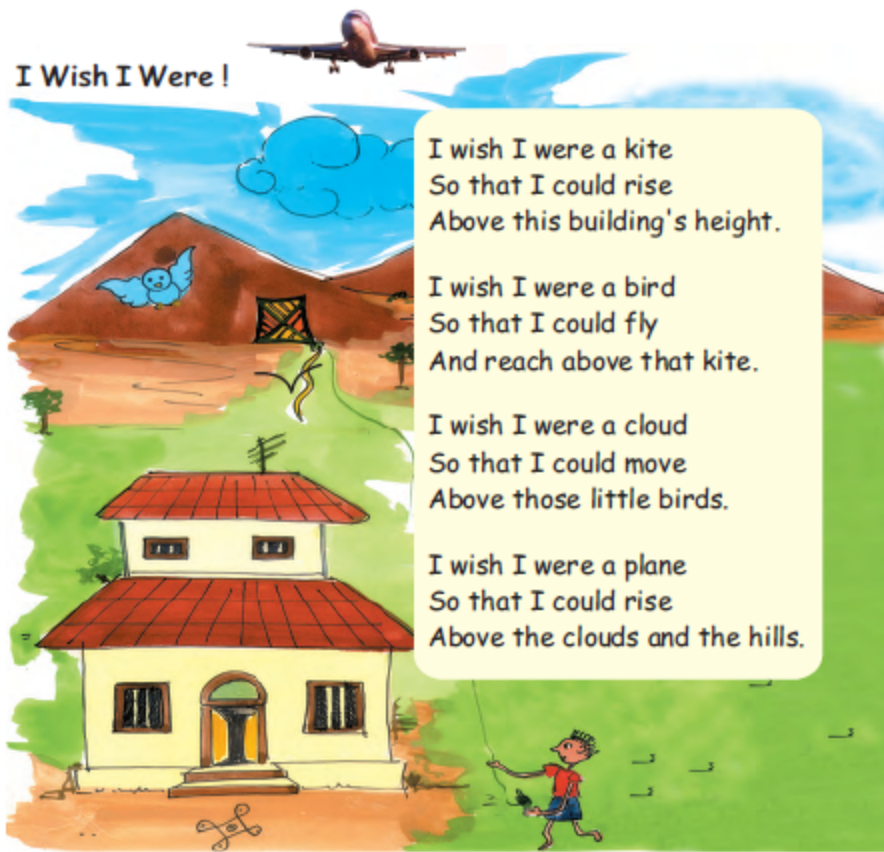**How long is the string of a kite reel? Can it be more than a kilometre long?**

Answer: A kite reel can be more than a kilometre long. It may be 500 metres, 900 metres, 1000 metres long.

Question: 27

If a handkerchief is made out of a single thread, how long would that thread be?

Answer: A handkerchief produced from a single thread may have a length of up to 4000 meters.

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I Wish I Were !

I wish I were a kite
So that I could rise
Above this building's height.

I wish I were a bird
So that I could fly
And reach above that kite.

I wish I were a cloud
So that I could move
Above those little birds.

I wish I were a plane
So that I could rise
Above the clouds and the hills.

Try to find out:

Question: 28

Which is the highest building that you have seen? About how many rooms high was it?

Answer: The Qutub Minar is the tallest structure I have ever seen. It is roughly twenty-five rooms high.

Question: 29

How high can a kite go? Can it go higher than the Qutub Minar?

Answer: The Qutub Minar is hardly taller than a kite, indeed. It may reach a height of roughly 100 meters.

Question: 30

How high can a plane fly? Can it fly higher than Mount Everest which is about 9 km high?

Answer: An aircraft can soar above 10,000 meters. Yes, it is capable of flying higher than the roughly 9 km-tall Mount Everest.

Benefits of NCERT Solutions for Class 4 Maths Chapter 2

NCERT Solutions for Class 4 Maths Chapter 2 "Long and Short" offer several benefits that enhance a student's learning experience:

Conceptual Clarity: The solutions provide clear explanations and step-by-step methods to help students grasp the fundamental concepts of measurement, focusing on differentiating between long and short objects.

Practical Application: By working through real-life examples and exercises, students learn how to apply measurement concepts in everyday situations, making the subject more relatable and useful.

Accurate Measurement Skills: The solutions guide students in using both standard (centimeters, meters) and non-standard (hand spans, footsteps) units of measurement, fostering accuracy and precision in measuring lengths.

Confidence Building: With well-structured solutions, students can practice independently, reinforcing their understanding and boosting their confidence in solving problems related to measurement.

Problem-Solving Ability: The variety of exercises included in the solutions helps develop critical thinking and problem-solving skills, enabling students to approach measurement challenges with ease.