

Revision Notes
Class 3 Mathematics
Chapter 4 - Long and Short in 30 Minutes
(Summary, Solved Examples, Practice Problem)

Long and Short

- Your hand is shorter than your father's hand.
- If you measure the length of the table with your hand it will count more.
- You can say measuring with your hand will take more units while measuring the table compared with your father's hand.
- Your height is shorter than your mother or father.
- You know your hand is shorter than your body.
- Your tongue is longer than your teeth.

Solved Example 1: which is longer your hand or your pen?

Ans: your pen is always shorter than your hand. So your hand is longer than your pen.

What is a Unit?

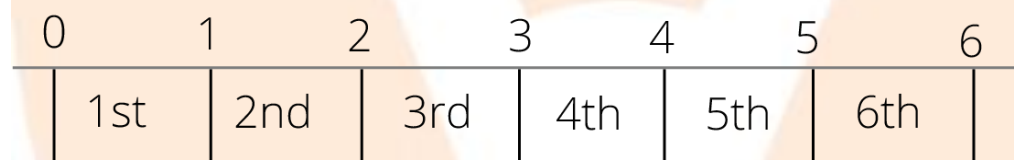


Image: units representation.

- Here are 6 units, 1, 2, 3, 4, 5 and 6.
- If you jump from 0 to 1 or 1 to 2 or 2 to 3, it will be 1 unit.
- The object which used more units is long.
- The object which used fewer units is short.

Solved Example 1: How many units long is the caterpillar?

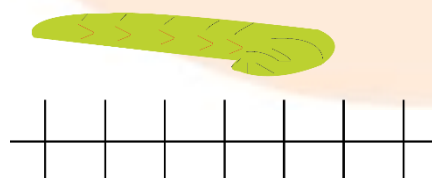


Image: Length of Caterpillar

Ans: By counting the length of the caterpillar is 4 units.

Measurements using Scale



Image: Measurement Scale

- Measurements always start with '0'.
- Every digit from 0 to 8 is at one centimetre.
- In one centimetre there are 10 small sections.
- Each small section is one millimetre.
- 10 millimetres is equal to 1 centimetre.

Solved Example 1: how many millimetres are there in 2 centimetres?

Ans: we know that there are 10 millimetres in 1 centimetre.

So, there will be 20 millimetres in 2 centimetres.

Centimetre versus Millimetre

Centimetres	Millimetres
1	10
2	20
3	30
4	40
5	50

What is a Centimetre?

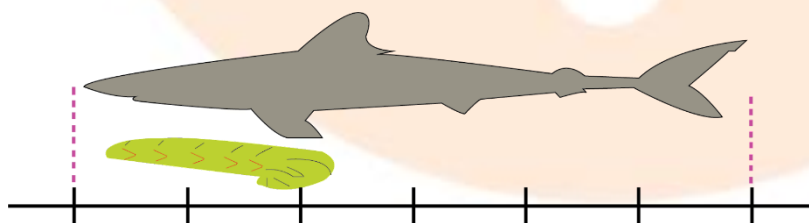


Image: Length comparison of the Shark and the Caterpillar.

- Here the caterpillar is 4 centimetres long.
- The baby shark is 13 centimetres long.

Solved Example 1: Which one is long and which is short?

Ans: Baby sharks are long and caterpillars are short.

Solved Example 2: which is mapping more units in the above image?

Ans: As we know, a longer object takes more units so a baby shark is mapping more units.

- You never come to know exactly how long an object is if you measure it with rope, hand, shoe-string, thread etc.
- For an exact measurement, always use a **measuring tape** or a **measurement rod**.

How long is a Metre?

- You know, there are 100 centimetres in 1 metre.
- A measurement rod is 1 metre long and it is used by shopkeepers to measure clothes.
- Here are some objects listed which are longer than or shorter than 1 metre

Longer than 1 metre	Shorter than 1 metre
Length of bed	Length of books
Width of bedroom	Length of shoe
Length of whiteboard used in the classroom	Length of writing pen
Length of see-saw in children’s park	Height of puppies
Length of school bus	Length of the TV remote

- Now there are millimetres, centimetres and metres.
- 1 millimetre is shorter than 1 centimetre.
- 1 centimetre is shorter than 1 metre.

Solved Example 1: which unit is used to measure the length of a mobile phone?

Ans: centimetre

Solved Example 2: which unit is used to measure the length of a car?

Ans: metre

Centimetres or Metres?

- For shorter objects, we will use centimetres as a unit.
- For longer objects, we will use metres as a unit.
- To measure the length of shoes we will use centimetres as a unit.
- To measure the distance between your home to the school we will use metres as a unit.

Measured in Centimetre	Measured in Metre
Waist of your friend	Height of the school gate
Length of drum stick	Length of yoga mat
Height of cat	Height of building
Width of your hand	Length of the cricket pitch
Length of your fingers	Length of the train

Solved Example 1: How wide can the thumb be, 1 millimetre or 1 centimetre or 1 metre?

Ans: The width of the thumb can be 1 centimetre.

Solved Example 2: What can be the length of the pen 10 millimetres or 10 centimetres or 10 metres?

Ans: The length of the pen can be 10 centimetres.

Solved Example 3: How long can the sari be, 5 millimetres or 5 centimetres or 5 metres?

Ans: The length of the sari can be 5 metres.

Metres or Kilometres?

- For shorter distances, we will use metres. For example, the length and width of classrooms, halls, bedrooms, etc.
- For longer distances, we will use kilometres. For example, the distance between two cities. The distances between your home to your school.
- There are 1000 metres in 1 kilometre.

Solved Example 1: The distance between two railway stations can be, 10 metres or 10 kilometres.

Ans: The distance between two railway stations can be 10 kilometres.

Solved Example 2: which one is longer, the distance between your home and your friend's home is 200 metres or the distance between two cities is 200 kilometres?

Ans: The distance between two cities is longer than the distance between your home and your friend's home.

Practice Problem

Question 1. Which animal has the longest and which has the shortest tail among monkey, rat, pig and house lizard?

Question 2. Match the following

Object	Length or Distance
1. Width of the writing pad	a) 100 kilometres
2. Distance between two cities	b) 30 centimetres
3. Width of the classroom	c) 18 centimetres
4. Width of bed	d) 6 metres
5. Length of your hand	e) 2 metres

Ans:

1. Monkey has the longest tail and the house lizard has the shortest tail.
- 2.

Object	Length or Distance
1. Width of the writing pad	b) 30 centimetres
2. Distance between two cities	a) 100 kilometres
3. Width of the classroom	d) 6 metres
4. Width of bed	e) 2 metres
5. Length of your hand	c) 18 centimetres