



Geometry & Measurement Concepts - NCERT Chapter 4: Long and Short

Students will be able to solve simple, daily-life word problems including addition & subtraction of length

40- 50 min

PRE REQUISITES:

G3.67 Know how to estimate and compare lengths in metres and centimetres



TLM



Threads (any two colours, about 2-3 metres long).

↓ Paper Strips



MISCONCEPTIONS

None

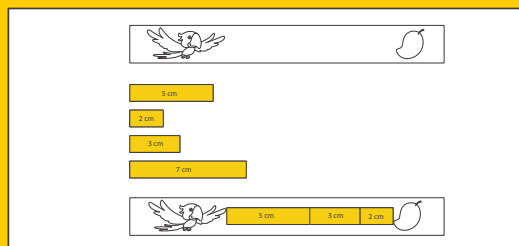


KEY VOCABULARY

None



PLAY



Find the distance between parrot and the mango



Draw a parrot & a mango of the opposite sides of a paper strip as shown



Prepare small strips of different lengths. Mark them as 3 cm, 5 cm, 7 cm etc



Call 2 students & find out the distance between mangoes & the parrot by aligning cm strips between the two

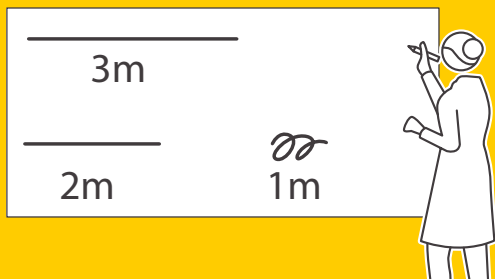


QUESTION

If I place 2 strips of 5cm each, how much is the total distance between the parrot & the mango?



PROCESS



Demonstrate how to add and subtract lengths



Show green & red threads to students. Tell that the length of the green thread is 2 metres & the red thread is 4 metres



Tell that on joining both threads together their combined length will be 6 metres. Write $4 \text{ metres} + 2 \text{ metres} = 6 \text{ metres}$



Place the two thread side by side & point to the longer end of the green thread



Tell that you can find the difference in the lengths of the two threads by subtracting 2m from 4m



Write $4 \text{ metres} - 2 \text{ metres} = 2 \text{ metres}$



Tell the students that red thread is 2 metre longer than the green thread



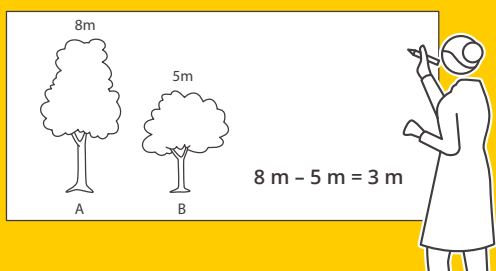
Draw a thread on the blackboard & tell its length is 3m. Tell if a 1m piece is cut off & thrown, 2m of thread remains



Write $3 \text{ metres} - 2 \text{ metres} = 1 \text{ metre}$



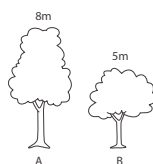
PRACTICE



Draw the question on the black board & ask the students to solve



Help the students solve question 2a from the worksheet. Ask the students to find the difference between the heights of the two trees shown.



Emphasize that we add or subtract lengths of various objects in our daily lives, for eg. we subtract length when we want to find out how tall is one person from the other



QUESTION

Give an example of a situation where you might have to add lengths



QUESTION

If both the trees had the same height, what would be the difference of their heights?

- ① SOLVED EXAMPLE : How long is the black line?

13m	6m
-----	----

$$13 \text{ metres} + 6 \text{ metres} \\ = 19 \text{ metres}$$

- ② There are 2 trees in Tenzing's backyard. One is 8 metres long & the other is 5 meters long.



Circle the taller tree
Write the difference between the height of the two trees

- ③ Measure each pair shown below using a centimeter scale & find the difference between the length of the objects shown

S.No.	Objects	How much longer/ taller
1.		
2.		

- ④ Nayanthara walked 20m & then walked another 50m. Can you tell how much difference did she cover in all?



- ⑤ Add or subtract the lengths

- 10 metres – 9 metres = _____
- 10 cm – 5 cm = _____
- 7 metres – 7 metres = _____
- 5 cm – 0 cm = _____

- ⑥ A kangaroo jumps 4 meters & her child jumps 2 meters. How much shorter is the child's jump as compared to her mother?



How much cloth do you think is required to make a school shirt for you?

How much cloth would be required for your father's shirt?

If you had to buy cloth for your shirt & your father's shirt, how many metres of cloth would you purchase?