

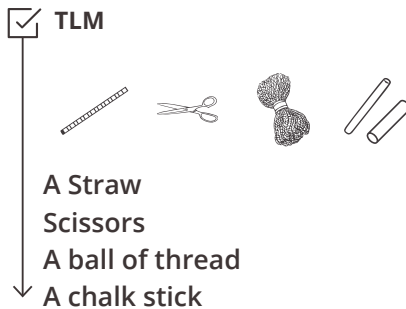
Students will be able to appreciate that length of objects remains the same when moved (Length Conservation)

40- 50 min

PRE REQUISITES:

G3.70 Know how to find the shortest distance between two points

TLM



A Straw
Scissors
A ball of thread
A chalk stick

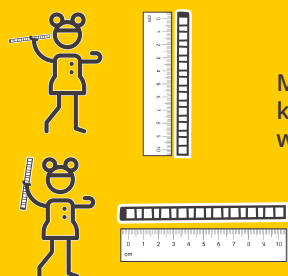
MISCONCEPTIONS

Students might not realize that distance from any point A to any point B is the same as distance from point B to A

KEY VOCABULARY

None

PLAY



Measure a straw by keeping it in different ways

Objects & their lengths

Ask one student to measure a straw in centimetres using a ruler

Call 2 more students to hold the straw in different orientations (parallel to table or diagonally) & measure its length

QUESTION

What was the length of the straw when kept straight?
What was the length when it was kept diagonal?

Place a thread on the table & ask a student to measure it

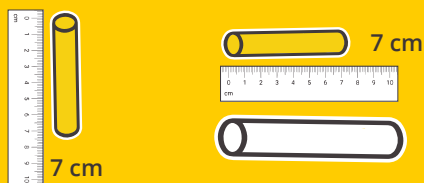
Wind up the thread & call another student to measure the length

Tell the student to straighten the thread before measuring it

QUESTION

Did the length of the thread change by winding it up?

PROCESS



Demonstrate examples for length conservation

Show a chalk stick & measure it with the cm ruler. Tell that it can be taken anywhere around but its length won't change

Place it next to a bigger chalk stick. Measure the chalk stick again & explain that its length is same as before

Tell that while it might look smaller as compared to a bigger piece of chalk, the length of the chalk remains the same

Take a chalk stick, measure it in cm using a ruler, break it into two parts & measure both parts

Write lengths of both parts on the board. Tell how combined length of both the parts is same as original chalk's length

Explain that breaking doesn't change its combined length

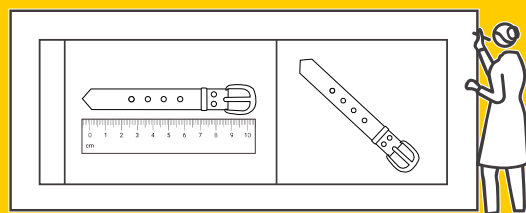
QUESTION

My brother says his clothes become smaller over time. Have the clothes decreased in size? What happened?

QUESTION

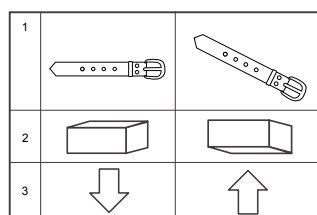
If you are 1 metre tall, what will be your length while sleeping?

PRACTICE



Write the questions on the blackboard and help the students solve them

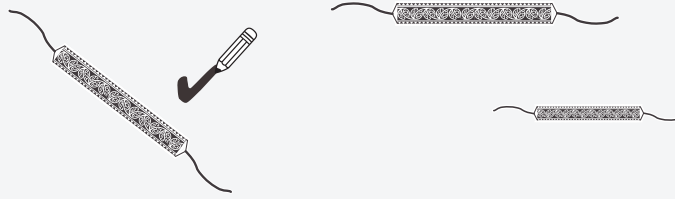
Help the students solve question 3 from the worksheet. Ask the students to measure the length of the objects shown & check if one is longer than the other



Help the students solve question 4 from the worksheet. Ask the students if the distance of a peach tree from a pear tree is 10 metres. What is the distance from the pear tree to the peach tree?

Emphasize that distance between two points does not depend on which of the two points is selected as the starting point for measurement

- ① SOLVED EXAMPLE : Which of the two bracelets has the same length as this bracelet?



- ② This line has been broken into 3 parts. The line is 6cm long. Can you tell what will be the combined length of the three smaller parts?

1		
2		

- ③ Measure the length of the objects shown & check if one is longer than the other

1		
2		
3		

- ④ An upside-down M makes a W. Measure the length of each side of this letter M & W & tell if the lengths of each side is the same.

M W

- ⑤ If the distance of a peach tree from a pear tree is 10 meters. What is the distance from the pear tree to the peach tree?

- ⑥ Measure the front of your hand & then measure the back of your hand. Is the length the same?