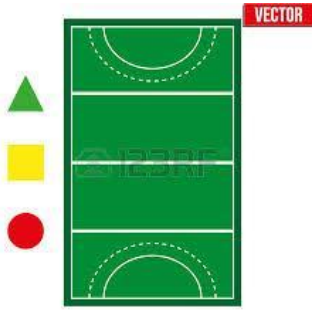
Class	Subject	Lesson no/name	Skill focused	TLO	Suggested Activity	LAT
IV	Subject-Mathematics	Lesson-13(Field and Fences)	Knowledge Understanding Computation Problem solving  	Calculates the total length of the boundary of regular and irregular shapes. Knows the concept of perimeter Finds the number of squares inside a regular shape. Solves day to day life problems related to area and perimeter Understands the meaning of fields(area) and fences(perimeter). Compares using threads ,graph	Keeping math textbook on teachers table to see how many are needed to cover it. 2.Use of graph paper to find area and perimeter of objects. 3.Find the area perimeter of irregular shapes ,including their own hands and feet by comparing them to a square grid. 4. Solve day to day life situation example boundary of the field. Link https://youtu.be/rQ1d_IFk0R4?list=PL878190747F2AA508 **Recapitulation Activity**: **Conceptual area**: Intuitive understanding of length, area **Material**: Pencils or sticks of different lengths, irregular shapes made out of card board etc… **Instructions**:	1.Find perimeter of triangle with sides: (a) 14cm, 12cm, 9cm _____ (b) 240m, 150m,150m _____ 2.Find the perimeter of square whose side is 7 cm _____ 3.Find the perimeter using scale. (a)  (b)  (b) 4. The perimeter of a square is 200cm. Find the length of its side. 5. Each side of a triangle is 8 cm and side of a square is 7 cm. Which one has more perimeter? 6. If perimeter of a rectangle is 22 m, What are its length and breadth? 7.Draw the different shapes by joining two squares on a squared sheet.How long is the boundary of each shape? 8. If asquare has perimeter of 20 cm ,find its side? 9. Draw a rectangle and square of same perimeter.

				paper, counting squares. Finds the number of squares inside a regular shape using 1 sq cm paper.	Give the child two pencils and ask: “which one is bigger and which one is shorter?” Give a pair of flat shapes and ask: “Which is bigger”? (Observe how the child keeps one on top of the other to compare area) Also observe if the child compensates for the bits that stand out. **Preparatory Activity 1:** **Conceptual Area:** Understanding length, measurement and using ruler Material: Standard scale or ruler with cm marking, Paper, Strips of paper, pencil Using the ruler with cm marking 1. Measure the lengths of strips of paper 2. Draw a line on the blank paper and measure its length Ask children to measure any thin object say (a piece of thread, hair etc..) Ask children to give reasons as to why it was difficult to measure the length of thin objects accurately. What is the smallest length that you can measure accurately using the ruler with cm marking? Ask children to draw a line segment of length 12 cm, 8 cm, 5 cm etc..	10. Collect 4 leaves from your garden. Trace out their edges on squared paper and find which is the biggest leaf and which is the smallest. 11. How many math textbooks needed to cover teacher’s table? 12.Find out the length of a boundary /perimeterof teacher’s table? 13.A hockey field is 30meters long and 55 meters wide.How long the boundary of the field?  Find the Perimeter

Ask children to draw a line segment that is less than 5 cm long.

Preparatory Activity 2:

Conceptual Area: Understanding length measurement and using ruler.

Material: Ruler with broken edge (ruler without zero mark), different objects like book, notebook, pencil, pencil box, lunch box…

Instructions:

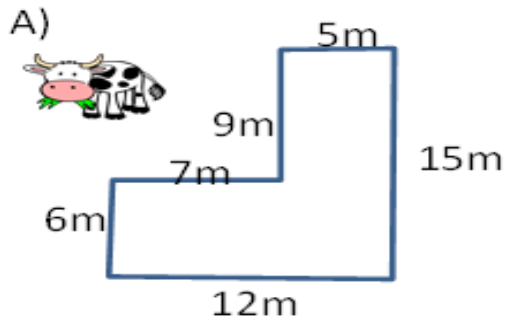
Provide children with a ruler with broken edge (get a ruler with zero mark broken or improvise a ruler) and ask them to measure the lengths of various objects using the broken ruler.

Name of the object	Length with broken ruler	Length with good ruler
Notebook		
Pencil box		
Math-Magic text book		

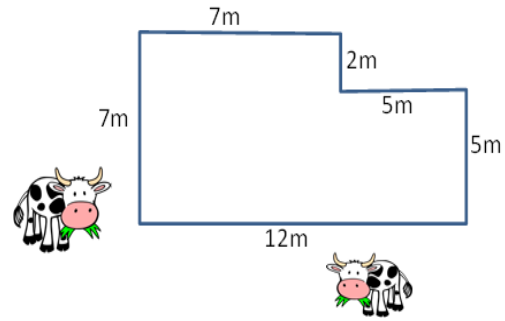
If a child has not done proper measurement, give the child a good ruler and ask the child to measure the same object.

Ask them to compare the lengths of the same object measured with both the rulers.

A)



B)



<u>Word Problems:</u>

A playground is 81 metres and 45cm long and 65 metres wide.

How long is the boundary of the playground?

Reason out the difference between the two measurements

Activity 3

Conceptual Area: Understanding length measurement and using ruler.

Material : Several objects like pencil box, geometry box, notebook, text books, square plate, circular plate, CD, objects that is longer than 15 cm

Instructions:

Give a 15 cm ruler and observe how the child measures object which is

a) Longer than 15 cm
b) Which is curved
c) Which is zigzag

Observe the strategy used and give thread, or wire if the child asks for it.

Activity 4 to 6

Activities from Math-Magic Class IV NCERT publications

1. Pages 149 – 150
2. Pages 151 – 152
3. Pages 153 – 154

Statement	m	cm
1.Length of the playground	81	45
2. Width of the playground	65	
3.Length of the playground	81	45
4.Width of the playground	65	
Length of the boundary	292 m	90 cm

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