

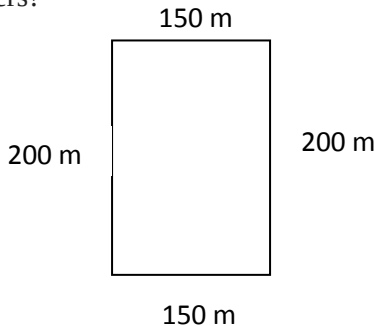
Lesson Plan/ Learning Plan	
Topic- Area and Perimeters	Grade: IV
Concept (If Applicable)	
<u>Mapping of skills/competencies/attitudes :</u> <i>(Skills/competencies/attitudes that a teacher plans to develop through the learning engagements)</i>	Skills: Thinking skills, Communication skills, Social Skills, Research skills Attitudes: Confidence, Independence, Curiosity, Creativity Competencies: Critical Thinking (reasons effectively, solves problems) Communication (communicates clearly, uses and manages information) Collaboration (collaborates with others) Creativity (Generates ideas) Character (Zest, Grit, self-control)
Lesson Plan Duration: <i>(flexible based on the requirements of the topic)</i>	8 days
Learning Engagements for Active Learning:	Numbered heads together, Rally Robin, Co-operative group task, Problem solving
Questioning Technique/s to be Used:	Pose-Pause-Pounce & Bounce
Learning objectives: By the end of the topic, the learners would be able to: • Understand the concept of length of the boundary • The student will understand measurements in lengths and widths. • Calculate the perimeter and area of a square and rectangle • Derive the formulas for perimeter and area • The student will practice their addition skills as they learn how to find the perimeter of a figure. • Use the units for area and perimeter appropriately • Differentiate between area and perimeter	
Annexure 1 (Kolb's Model)	

Connecting to Prior knowledge <i>(How do you check what learners already know?)</i>	Day 1 Since students are already aware of the properties of a square and rectangle, facilitator will take a quick recap by asking questions like: • How many sides does a square has? • Are all the sides equal? • Is rectangle a polygon? • Are all the sides of rectangle equal? Learning engagement: Numbered Heads Together Students will be divided into groups of 5 or 6. Every group as well as each child in the group will be given a number. After the groups discuss the properties of square and rectangle, facilitator draws a group number and a participant number to respond to the questions given above. Competency- Communication (communicates clearly) Collaboration (collaborates with others) Character (zest)
Resources Required:	Blackboard, pencils, erasers, ruler, measuring tape, graph paper, Rubik's cube
Implementation of lesson plan - Stage 1	
	Finding Perimeter Day 1: Learning Engagement 1: Rally Robin Facilitator will form pairs and ask each student in the pair to measure all the sides of the notebook and school diary (in cm) using a ruler. One child will measure the sides of a notebook while the other will measure sides of a diary. They will add up all the sides and find the answer. Both the students will share the answers with each other. Students will get involved in measuring other small objects with ruler. After reinforcement by facilitator, they will conclude that they are measuring the boundary of a closed figure Competency- Communication (communicates clearly) Collaboration (collaborates with others)

Proceeding further <i>(What strategies will be used in the class to achieve the lesson objectives?)</i>	Character (zest) Day2 After previous day's recap, facilitator will introduce the term 'perimeter' to the students. She will make them understand that length of the boundary of a closed figure is called its Perimeter. Units for measuring perimeter (m, cm, km) will also be introduced. Learning engagement 1: Think, Pair and Share Facilitator will provide graph papers (1 cm by 1 cm) to students. Each child is supposed to draw squares/rectangles (4-5) of given measurement on the graph paper under the guidance of facilitator. They will find the perimeter of all the closed figures followed by checking the answers with their peers. Competency- Communication (communicates clearly) Character (zest) Critical thinking (reasons effectively) Day 3: Learning engagement: Problem Solving Students will be given few examples to find the perimeter of a square and a rectangle. Terms like side, length and breadth will be introduced. For ex: side of a square is 4cm. what will be its Perimeter? $P = 4+4+4+4= 16 \text{ cm}$ Length and breadth of a rectangle are 8cm and 3cm respectively. What will be its perimeter? $A= L+B+L+B = 8+3+8+3= 22\text{cm}$ After finding perimeter by adding up all the sides, facilitator will ask students to form groups and deduce the formula to find the same. As each group derives the formula, it says 'Voila'. (Aha Moment) Competency- Communication (communicates clearly) Character (zest, grit) Critical thinking (reasons effectively)
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	Collaboration (collaborates with others, uses and manages information) Day 4 Learning Engagement: Co-operative group task Students will be divided into groups and given the task to measure things in the classroom using a measuring tape eg: table, notebook, book etc. Measurement will be made in cm. They will note their findings on an A4 sheet. Competency- Communication (communicates clearly) Character (zest, grit) Critical thinking (reasons effectively) Collaboration (collaborates with others, uses and manages information) Day 5 Learning Engagement: Students will use Rubik's cube to understand the concept of area. Facilitator will give the instructions to count the number of squares in the cube. After each child counts, the facilitator explains the term area to the students. Units for measuring area (m², cm², km²) will also be introduced. Competency- Communication (communicates clearly) Character (zest) Day 6 Learning Engagement: Find the Rule Facilitator will divide the students in groups of 3. They will be asked to cover the surface of their table using rough papers. As they complete doing it, they will be required to tell number of papers used to cover the surface. In another example, each child will count the number of squares in chess board. Facilitator will encourage students to derive the rule. They will conclude that area is the space occupied by an object. Competency- Communication (communicates clearly)
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	Character (zest, grit) Critical thinking (reasons effectively) Collaboration (collaborates with others, uses and manages information) Day 7 Learning Engagement: Think, Pair and Share Facilitator will provide graph papers to students. Each child is supposed to draw squares/rectangles (4-5) of given measurement on the graph paper under the guidance of facilitator. They will find the area of all the closed figures followed by checking the answers with their peers. They will also compare all the figures to find out the greatest area. Competency- Communication (communicates clearly) Character (zest) Critical thinking (reasons effectively) Day 8 Learning engagement: Students will be given few examples to find the area of a square and a rectangle. Facilitator will help them understand the formulas to find area of a square and a rectangle. For ex: side of a square is 9cm. what will be its area? $A = s \times s$ $= 9 \times 9 = 81 \text{ cm}^2$ Length and breadth of a rectangle are 6 cm and 2 cm respectively. What will be its area? $A = L \times B = 6 \times 2 = 12 \text{ cm}^2$ Facilitator will give the measurements orally and ask the students to solve mentally and give the answer. Day 9 Learning engagement: Pose, Pause, Pounce and Bounce (Questioning technique) Pose: Facilitator provides questions in the spiral
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	Pause: Facilitator gives time to students to solve them Pounce: Facilitator selects who will provide the answer Bounce: Teacher bounces the answer from student to student to gain knowledge of their understanding. Competency- Communication (communicates clearly) Character (zest, grit) Critical thinking (reasons effectively)
Lesson Plan : Stage 2	
Formatives/Unit test <i>(How will the facilitator check for comprehension?)</i> <u><i>*Integration of Arts/ICT</i></u>	Day 3: Attempting the questions given in the spiral. Day 4: Closure worksheet on perimeter. Day 8: Closure worksheet on perimeter.
Teacher Interventions <i>(Addressing the concerns and issues faced during the transactions)</i>	Day 2: Few students may find drawing squares and rectangles on graph paper difficult. So, facilitator will have to draw one example on few graph papers. Day 3: Some students will not be able to apply their knowledge of perimeter to deduce the formula. Facilitator will guide the students in the right direction.
Extending the Lesson Further <i>(Creating through Active experimentation)</i>	Day 4: Learning Engagement: Give one, Get one Students will be given a word problem on perimeter. Ramu goes for a walk around the field every morning. Every day he takes four rounds of his field. What is the total distance he covers?  Students will solve the word story in pairs. Once everyone has

solved it, they will find another pair and give their sheet and check the solution to the problem

Day 9: Students will write their first names on square centimeter graph paper. They will find area and perimeter of each letter and add those together to find the area and perimeter of their entire name. Students love to compare the sizes of their letters and names.



Summative Assessment (*How will the facilitator check that learning objectives have been achieved?*)

- Pen paper test
- Students will create a game of ludo in groups. Facilitator will give them clear instructions to prepare the game.
 - Board should be of the square shape.
 - Side of each square should be 1 cm.

After students have prepared the game, they will calculate the area as well as perimeter of the game.