

Lesson Plan/ Learning Plan	
Topic- PERIMETER AND AREA	Grade: V
Concept (<i>If Applicable</i>)	Perimeter and area
<u>Mapping of skills/competencies/attitudes :</u> <i>(Skills/competencies/attitudes that a teacher plans to develop through the learning engagements)</i>	Competencies : Collaboration ,Critical Thinking Skills: Thinking , communication and self management skills Attitudes: confidence , cooperation, curiosity
Lesson Plan Duration : <i>(flexible based on the requirements of the topic)</i>	7 days
Learning Engagements for Active Learning: <i>(examples : KWL chart, Brainstorming, Bundling, Pair-share, Role-play, PPTs, Audio-Video ,live objects from the classroom, Reflections)</i>	Brainstorming, In The Hot Seat , Rally Robin , Find the rule , Think pair share
Questioning Technique/s to be Used : <i>(Probing/Comprehension/Simple/Multiple choice, open-close ended)</i>	Pose, Pause, Pounce and Bounce
Learning objectives: By the end of the topic, the learners will be able to: (<i>write in pointers, use verbs from Bloom's Taxonomy</i>) • Derive the formula for finding perimeter and area of regular figures . • Apply the formulas and find the area and perimeter of square and rectangle. • Analyze and find the perimeter or area in word stories based on real life situations . • Construct figures having same perimeter and analyze their area.	
Annexure 1 (Kolb's Model)	
Connecting to Prior knowledge <i>(How do you check what learners already</i>	Day 1. The facilitator will take 3groups of students in the open where 2/ 3 Stapu of same measure

<i>know?)</i>	would have been already drawn .The students will be asked to play and side by side find the length of the outer boundary of the Stapu using their footsteps.  shutterstock.com • 310905293 The facilitator will guide and check that the learner don't leave space between their steps and are able to find the perimeter using their tiny foot steps . Later the learners will discuss the perimeter of stapu obtained by each. . Aha moment !!
Resources Required:	Black board ,smartboard, ruler , notebook , pencil, cut out of polygon , thread , fevicol., graph paper, ground (open space). Chalk.
Implementation of lesson plan - Stage 1	
	Day1:(Learning engagement 1) Through the activity In The Hot Seat the facilitator will try to connect students to the topic. Few of the students will have slip pasted under their chair. One by one as per facilitator's instructions the learners will open their slip and answer the following question. Q1. Identify the things in your bags having border? Q2. Identify the things around you in class / school having border on its boundary?

Q3. Mention the measuring instrument which can be used to measure the length and breadth of class black board and playground?

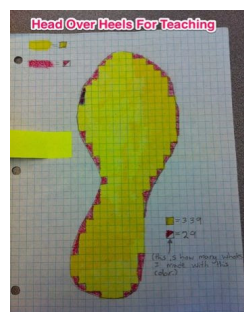
Q4. How can you measure the length of the border of the black board and playground?

LE-Brainstorming, In The Hot Seat,

The facilitator will simultaneously check the answer given by learners and will give her inputs if required.

Day4: (Learning engagement1)

The facilitator will provide 1-1 graph paper each to the learners sitting in pairs and ask them to trace their 1-1 foot print on it and analyze whose footprint is bigger and why?



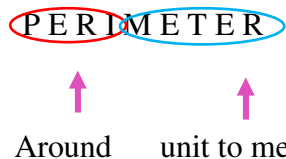
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Area of the given figure is calculated by multiplying the area of 1 square with the number of squares.

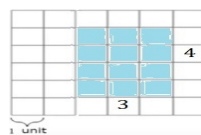
Competencies : Critical thinking – Reason effectively

Rubric : Uses various types of reasoning as appropriate to the situations.

Communication – Accesses and Evaluates

	Information :Evaluates information critically and competently. The facilitator will check the answer by counting the number of squares.
Proceeding further <i>(What strategies will be used in the class to achieve the lesson objectives?)</i>	Day 1 : (Learning engagement 2) LE- Find a rule , think pare share The learners in the pairs will think for different ways in which they can find perimeter of given figure in less time. As a conclusion the learners came up with few formulas: FOR SQUARE: $P = S+S+S+S$ $P = 4 \times \text{Side}$ Where S is side FOR RECTANGLE: $P = L+B+L+B$ $P = 2L+2B$ $P = 2(L+B)$ Where L is length and B is breadth The facilitator will tell the learners that length of the boundary means perimeter.  Around unit to measure length Competencies – Critical thinking -Reason effectively Rubric : uses various types of reasoning as appropriate to the situation. Day2:(Learning engagement 1) The learner in the groups of 4 will be provided a graph paper (1cm grid) with various regular polygons . The learners will one by one take turns

and solve the perimeter of one polygon each and pass the graph paper to another learners in the group for finding perimeter.



Eg: $P = 2(4+3) = 2 \times 7 = 14\text{cm}$

LE- Rally Robin

Competencies – Critical thinking -Uses systems thinking .

Rubric :Analyzes how parts of a whole interact with each other to produce overall outcomes .

Day3:(Learning engagement 1)



The learners in group of 4 will be given a sheet with a polygon already drawn on it . The learners will use a thick thread or wool to find the perimeter of the polygon . They will paste it at the border of the polygon . After pasting it the extra thread/wool will be cut. The learners will remove the pasted wool / thread and measure it using the ruler.

Length of the thread = Perimeter of the Polygon .

Competencies :

Collaboration -Collaborates with others

Rubric: Assumes shared responsibility for collaborative work.

Day4: (Learning engagement2)

The facilitator will tell the steps to find area of figures on graph paper :

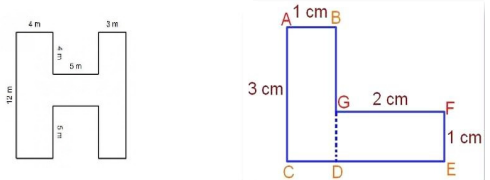
*Area of 1 square = 1cm^2

*Area of square more than

	half = 1cm^2 *Area of square less than half – ignore *Find the area of full and more than half square and add to find total area of the figure. The facilitator will tell the steps to find area of figures on graph paper : *Area of 1 square = 1cm^2 *Area of square more than half = 1cm^2 *Area of square less than half – ignore *Find the area of full and more than half square and add to find total area of the figure. After discussion the learners will come up with the solution that the learner who occupied more space has bigger foot. On this the facilitator will explain the learners that the space occupied by your foot is the area of your foot . Day5: (Learning engagement1) The facilitator will draw few regular figures whose length , breadth and area will be given . The learners will be able to observe the pattern and derive the formula :  Area of rectangle = Length x breadth Area of square = side x side LE: Find the rule
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	Day6: (Learning engagement1) The learners will be provided with the cards : P A *P is for perimeter *A is for area The facilitator will read few word stories based on perimeter and area. The learners will raise their hand and show P if the word story is related to finding perimeter and A if it is related to area. If any learner shows wrong card then the facilitator will explain the question once again and if needed what should be done. Competencies – Critical thinking -Uses systems thinking . Rubric :Analyzes how parts of a whole interact with each other to produce overall outcomes . *The facilitator will ask learner to always remember : POEM Perimeter we can measure Add all the sides Area is the treasure Everything inside .
Learning Logs <i>(How learners keep a track of what they are learning, includes reflections)</i>	Day 1 : (Learning engagement 3) After deriving the formulas they will note them down in their note books. Day2:(Learning engagement 2) The learners will be able to independently solve the sums and find the perimeter. Spiral – Pg 57-Q1 Day3:(Learning engagement 2) The learners will be able to independently solve and find the perimeter of square and

	rectangle . Spiral – Pg 58-Q3 and 4 Day4: (Learning engagement 3) The learners will apply the formulas and find the area. Spiral -Pg 60- Q1 Competencies – Critical thinking -Uses systems thinking . Rubric :Analyzes how parts of a whole interact with each other to produce overall outcomes . Day5: (Learning engagement2) The learners will apply the formula and solve the sums based on area of square and rectangle. Spiral - Pg 60,61- Q1,2,3 . Day6: (Learning engagement2) The learners will solve the word stories of area and perimeter under facilitator’s guidance. The learners will apply the formula and solve the word stories based on perimeter and area . Spiral - Pg 59- Q5,6 and Pg 61 – Q4.
Lesson Plan : Stage 2	
Formatives/Unit test <i>(How will the facilitator check for comprehension?)</i> <u>*Integration of Arts/ICT</u>	Day 2 : The facilitator will ask the learners that if length of each square of the chess board is 2cm then what will be the perimeter of the whole chess board ?

	The facilitator will check the perimeter the learners will calculate. Day 5 : Q Find the area of the given figures:  resource : google.com Competency – Critical thinking : Make judgements and decisions. Rubric : Reflects critically on learning experiences and processes.
Teacher Interventions <i>(Addressing the concerns and issues faced during the transactions)</i>	Day 5 : As the learner will get confused between perimeter and area and some of them may use wrong formula the facilitator will give individual attention and will explain giving examples.
Extending the Lesson Further <i>(Creating through Active experimentation)</i>	Day 3: The facilitator will ask the learners to find the perimeter of their math notebook. Day6: (Learning engagement2) Real life situation sums Q1. Find the area of the courtyard of 20m length and 14m breadth? Q2. A square picture is 58cm in length. What will be the length of the wooden frame required to make it around it?
Summative Assessment <i>(How will the facilitator check that learning objectives have been achieved?)</i>	
Day 7: Using geo board and rubber bands form 5 different polygons having perimeter 16cm .	

Find out whether they have same area also?

Competency : Critical thinking – Make judgements and decisions

Rubric :Effectively interprets information and draws conclusion based on the best analysis .