

DELHI PUBLIC SCHOOL GHAZIABAD
CLASS – VI
LESSON PLAN
CHAPTER-3: MENSURATION

Unit	Mensuration
Class Transaction	Total: 4 periods (approx. 40 min each)
Pre-requisite for the course	This lesson requires 1. Basic knowledge of boundary of a figure. 2. Knowledge of mathematical operations.
Assessment of qualifying knowledge	1. Written test 2. Lab activity 3. HW notebook
Objective	Students would be able to identify various types of geometrical figures and develop skills of calculating perimeter and area, thereby inculcating competencies like collaboration, critical thinking and creativity
Learning Outcomes	KNOWLEDGE- <i>Students will develop the ability to understand</i> 1. Perimeter is the length of the boundary of a figure. 2. The method of counting the squares to find the area. 3. Calculation of area using the formula. SKILLS and COMPETENCIES- <i>Students would be able to</i> 1. Develop the ability to analyze and differentiate between various types of geometrical figures. 2. Perform numerical skills like calculation of perimeter and area and develop critical thinking and collaboration in the process.
Strategies (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Brain Storming-The class would start with a discussion on what the students have already learnt in the previous classes and hence what is it that they would learn now. They would also be told the significance of the topic that they would be studying. <i>Introduction of the topic-</i> ppt and Digital Content would be shared <i>Guided practice followed by Independent Practice-</i> NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ

	Peer Assessment Case Studies Lab Activities Any Other
Resources	Text Book: NCERT text book for Mathematics Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks. H.W. notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 10 marks On time submission.....2 mark Presentation/ Neatness.....2 mark Content.....6 marks It is also advised that the students come to the class with proper background knowledge of the topic under discussion. They can refer to the resources stated above.
Assessments	Through Pen Paper Test Students will be assessed creatively and critically 4 UNIT TESTS 25 Marks each HALF YEARLY EXAMINATION 80 Marks ANNUAL BOARD EXAMINATION 80 Marks INTERNAL ASSESSMENT 20 Marks • Note Book Submission 10 Marks • Lab Practical (Subject Enrichment) 10 Marks Through lab Practical Students are assessed for Collaboration, Character building.
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For gifted students:</i> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes and formulae, if not written

	• Call parents at regular intervals • Provide grade-up classes • Encourage and motivate them at every level.
Marks	The weightage would be given by CBSE.
ASSESSMENT QUESTIONS	Q2. Answer the following: (i) What is the perimeter of a regular octagon? (ii) What is the area of a square? (iii) What is the area of a rectangle? Q3. Find the area of a square whose perimeter is equal to the perimeter of a rectangle with length 10 cm and breadth 6 cm is: Q4. The cost of fencing a square part at the rate of ₹ 30 per metre is ₹ 27000. Find the length of each side of the square. Q5. If the cost of painting a rectangular wall at the rate of ₹ 20/ m² is ₹ 2200, find the its area of the wall. Q6. Find the area of a square with perimeter 28 cm . Q7. Find the length of a square whose perimeter is 276 mm. Q8. A wire in the shape of an equilateral triangle of side 16 cm is rebent into a regular octagon. Find each side of a regular octagon. Q9. The perimeter of a rhombus is 56 cm. If each of its side is halved, what will be the new perimeter.

DAY	ONE
Objective	Enhance ability to accurately recognize and use appropriate terminology related to perimeter of plane figures and developing the art of communication and critical thinking.
Assessment of qualifying knowledge	Quiz and knowledge testing on finding of perimeter.
Learning Outcomes	<u>KNOWLEDGE</u>- Students will know and identify different plane figures and their boundaries <u>SKILLS and COMPETENCIES</u> Students would be able to Reason effectively and critically to differentiate between figures and their perimeter.
Strategies (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Anticipatory Set: 10 min Facilitator will ask few questions to introduce the topic • What is a plane figure? • What is boundary of a figure? • What is the meaning of fence?

	Discussion of topic through Collaborative Learning: <u>15 min</u> <u>Inquiry based learning</u> (Critical Thinking and Problem Solving) Students would be asked to draw different type of plane figures and find their perimeters. The facilitator would take rounds and ensure that each learner is engaged. <u>Guided practice: 10 min</u> The students will solve the questions from NCERT book, in their notebook in the class with the help of their facilitator. The facilitator would take rounds and help the students in solving the questions. <u>Independent Practice:</u> Students will go through the solved examples of NCERT text book. <u>Closure: 5 min</u> A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Mathematics Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	<u>Independent Practice:</u> Students would do the given questions in their H.W. notebooks.
Assessments	Oral Test (5 minutes)
DAY	TWO
Objective	Students will be able to identify the different geometric figures and would also be able to find perimeter in collaborative manner .
Assessment of qualifying knowledge	Written questions on finding perimeter
Learning Outcomes	KNOWLEDGE- <i>Students will know and</i> Demonstrate the ability to find Perimeter of plane figures. SKILLS and COMPETENCIES- <i>Students will be able to</i> differentiate and classify various types of figures and find perimeter, in collaboration with each other.
Strategies (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Recapitulation: <u>5 min</u> Brainstorming on the previously taught concept would be done. Discussion of topic through Collaborative Learning: <u>15 min</u> (Critical Thinking) An oral quiz will be taken and students will be asked to identify various kinds of figures. <u>practice: 15 min</u> The students, with the help of the facilitator, will solve the questions from NCERT book of Exercise in their notebook in the class with the help of their teacher. The teacher would ensure that each student tries to be independent at the work as well as be under the teacher's guidance. <u>Independent Practice:</u> Students will complete the remaining parts of

	Exercise in their Math HW notebook. Students who would difficulty in solving the problem would solve with the help of their buddies. Closure: 5 min A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Mathematics Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	Oral quiz (5 minutes)
DAY	THREE
Objective	To identify various figures and calculating their areas.
Assessment of qualifying knowledge	Written questions on finding the areas of various figures.
Learning Outcomes	KNOWLEDGE- Students will develop the ability to understand the formula to find areas of plane figures. SKILLS and COMPETENCIES - Students would be able to critically apply the concepts in given situations.
Strategies (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Recapitulation: 5 min Oral test on the previous concept would be taken up. Discussion of topic through Collaborative Learning: 15 min (Critical thinking) Exercise would be discussed and students would solve different questions in groups and then the questions would be crosschecked. Digital content would be used. The facilitator would take rounds and help students with their doubts. Guided Practice: 15 min The students will solve the questions from NCERT book of Exercise in their notebook in the class with the help of their teacher. The teacher would ensure that each student tries to be independent at the work as well as be under the teacher's guidance. Independent Practice: Students will complete the remaining parts of Exercise in their Math HW notebook. Closure: 5 min A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Mathematics Reference Book CBSE Exemplar

Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	MCQ (5 minutes)
DAY	FOUR
Objective	To understand the application of the formula to find the area.
Assessment of qualifying knowledge	Written test on finding the areas of figures.
Learning Outcomes	<u>KNOWLEDGE</u>- Students will develop the ability to understand the Application of formula to find the areas of plane figures. <u>SKILLS and COMPETENCIES</u> - Students would be able to 1. Critically apply the concepts in given situations and collaboratively realize the fact that space enclosed by a figure is area. 2. Comprehend the formula and its application.
Strategies (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Recapitulation: 5 min Quick revision on the previous concept would be taken up. Discussion of topic through Collaborative Learning: 15 min (Creativity, Collaboration) Formulae to find areas will be introduced. This would be discussed in detail with vivid examples. Guided Practice: 15 min The students will solve the questions from NCERT book, in their notebook in the class with the help of their facilitator. The facilitator would take rounds and help the students in solving the questions. Independent Practice: Students will find areas of various figures. Closure: 5 min Discussion of muddiest point. .
Resources	Text Book: NCERT text book for Mathematics Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	Written test (5 minutes)