

Class: VII	Subject: Mathematics	Day:1	Time duration:40 min
Name of the lesson/ unit	CH-10 PRACTICAL GEOMETRY		
Topic/lesson	Construction of parallel lines.		
Learning Objective	To able to draw parallel lines.		
Expected learning outcomes:	Student will be able to draw parallel line using ruler and compass.		
Common misconception (if any):	• Drawing fake arcs • Not using geometrical tools properly • Changing radius while making arc.		
Prerequisite knowledge:	To draw line , line segment , ray and arcs using compass.		
Assessment of qualifying knowledge:	Board Test and Extra Sums		
Transaction methodology			
Starter/ warm up: Activity 5 min	Teacher will ask students to do activity given in the book using paper folding.		
Video : 3 Min	A flipped video will be shown to the students based on Construction of parallel lines.		
Questioning &discussion(Verbal):2 min	Teacher will ask students following questions 1. What is line?’ 2. What is line segment? 3. What is ray? 4. How to draw a line segment ? 5. How to draw a line parallel to a line?		
Demonstration by the teacher on the board, followed by students work in NB: 10 min	Teacher will explain that it’s very difficult to draw a parallel line without using compass and ruler and then explain the method of drawing a parallel line using compass using book question.		
Guided practice: 15 min	<u>Students will be guided to do Questions from Book Exercise .</u>		

Closure/ Plenary(Think Pair and Share) N.B: (5 Min)	<i>Teacher will ask students to book exercise. Teacher will collect the responses and discuss the correct answers.</i>
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII Filpped video



Khaitan Public School,Sahibabad

Class: VII	Subject: Mathematics	Day:2	Time duration:40 min
Name of the lesson/ unit	CH-10 PRACTICAL GEOMETRY		
Topic/lesson	Construction of SSS Triangle		
Learning Objective	To be able to construct triangles .		
Expected learning outcomes:	Student will be able to: Construct a triangle whose measure of all sides are given		
Common misconception (if any):	- Drawing fake arcs - Not using geometrical tools properly - Changing radius while making arc.		
Prerequisite knowledge:	To draw line , line segment , ray and arcs using compass.		
Assessment of qualifying knowledge:	Board Test and Extra Sums		
Transaction methodology			
Starter/ warm up(Notebook) : 5 Min	<u>Teacher will draw few figure in which length of three sides is same but one is forming a triangle and other will not form a proper triangle to show that it is difficult to draw a proper triangle when we know the length of all three sides but we use only ruler and penil.</u>		

	Teacher will explain that if the measure is already given of all three sides then, its difficult to draw using ruler.
Video : 3 Min Directive teaching Questions: 2 min Demonstration by the teacher on the board, followed by students work in NB: 10 min Guided practice: 15 min	A flipped video will be shown to the students based on Construction of triangle using SSS criteria. Teacher will ask following question to the students : 1. Is it possible to draw triangle when all measures are given ? 2. Why do we draw rough sketch before making triangle ? Teacher will explain that it's very difficult to draw a triangle whose all sides are given without using compass and then explain the method of drawing a triangle using compass, measure of whose all sides are given. <u>Students will be guided to do Questions from Book Exercise .</u>
Closure/ Plenary: Peer discussion(verbal): Min	<i>Students will discuss Think , Discuss and Write with their peer and conclude the property of triangle.</i> <i>Teacher will collect the responses of the discussion and sum up the understanding.</i>
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII Filpped video

Class: VII	Subject: Mathematics	Day:3	Time duration:40 min
Name of the lesson/ unit	CH-10 PRACTICAL GEOMETRY		
Topic/lesson	Construction of SAS Triangle		
Learning Objective	To be able to construct triangles .		
Expected learning outcomes:	Student will be able to Construct a triangle whose two sides and included angle is given		
Common misconception (if any):	- Not drawing angle properly - Fake arcs - Not using geometrical tools properly - Changing radius while making arc.		
Prerequisite knowledge:	To draw line , line segment , ray and arcs using compass.		
Assessment of qualifying knowledge:	Board Test and Extra Sums		
Transaction methodology			
Starter/ warm up(Verbal)Questioning by teacher : 5 Min	Teacher will ask If three sided figure is called triangle then why does four sided figure is called quadrilateral After taking students analogy teacher may share In Euclidean plane geometry , a quadrilateral is a polygon with four edges (or sides) and four vertices or corners. Sometimes, the term quadrangle is used, by analogy with triangle , and sometimes tetragon for consistency with pentagon (5-sided), hexagon (6-sided) and so on.		
Demonstration by the teacher on the board, followed by students work in NB : 10 min	Teacher will explain the method of SAS triangle on board using book question and ask students to follow the same in their NB.		

Guided practice: 20 min (Collaborative work) Video : 4 Min	<i>Students will do Book exercise in pairs and discuss the possibility of the construction of the triangle.</i> <i>Teacher will mentor the low students and ask for doubts if any child will have.</i> A flipped video will be shown to the students based on Construction of triangle using SAS criteria
Closure/ Plenary: Thumb gesture : 1 Min	<i>Teacher will ask students to show the thumb gesture to reflect their level of learning. Thumbs up means understood fully, thumb parallel to shoulder means understood half and thumb down means not understood at all.</i> <i>(For thumb down and half way teacher will share the recap of the concept next day)</i>
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII Flipped video



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Class: VII	Subject: Mathematics	Day:4	Time duration:40 min
Name of the lesson/ unit	CH-10 PRACTICAL GEOMETRY		
Topic/lesson	Construction of ASA Triangle		
Learning Objective	To be able to construct triangles .		
Expected learning outcomes:	Student will be able to Construct a triangle whose two angles and included side is given		
Common misconception (if any):	- Not drawing angle properly - Fake arcs - Not using geometrical tools properly - Changing radius while making arc.		
Prerequisite knowledge:	To draw line , line segment , ray and arcs using compass.		

Assessment of qualifying knowledge:	Board Test and Extra Sums
Transaction methodology	
Starter/ warm up(Verbal)Questioning by teacher : 5 Min	Teacher will ask the following questions to the students: 1. Is it possible to draw the triangle when one side is given ? 2. What if both the angles of the same line segment not given ? 3. How to construct a triangle if one angle is given ? Is it possible ? Teacher will collect response from student and discuss the ASA construction of triangle.
Demonstration by the teacher on the board, followed by students work in NB : 10 min Directive teaching Questions:2 Min Guided practice: 20 min (Collaborative work)	Teacher will explain the method of ASA triangle on board using book question and ask students to follow the same in their NB. Teacher will ask students : 1. What is angle sum property ? 2. Do we need while constructing the ASA triangle ? 3. If Yes , then when do we need Angle sum property? <i>Students will do book exercise in pairs and discuss the possibility of the construction of the triangle.</i>
Closure/ Plenary: Peer discussion: 3 Min	<i>Students will discuss Think , Discuss and Write with their peer and conclude the property of triangle.</i>
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII

Class: VII	Subject: Mathematics	Day:5	Time duration:40 min
Name of the lesson/ unit	CH-10 PRACTICAL GEOMETRY		
Topic/lesson	Construction of RHS triangle		
Learning Objective	To be able to construct triangles .		
Expected learning outcomes:	Student will be able to Construct a right angled triangle length of whose any of two sides will be given		
Common misconception (if any):	- Not drawing angle properly - Fake arcs - Not using geometrical tools properly - Changing radius while making arc.		
Prerequisite knowledge:	To draw line , line segment , ray and arcs using compass.		
Assessment of qualifying knowledge:	Board Test and Extra Sums		
Transaction methodology			
Starter/ warm up(Verbal)Questioning by teacher : 5 Min	Q.- What do you know about right angled triangle? Explain (Multiple responses of students will be taken) Q.- To construct a right angled triangle, length of how many sides should be known?		
Demonstration by the teacher on the board, followed by students work in NB : 10 min Directive teaching Questions: 2 Min	Teacher will explain the method of RHS triangle on board using book question and ask students to follow the same in their NB. Teacher will ask students : - Is it possible to draw triangle when hypotenuse is not given ? - What all we need to mention while making rough sketch ?		
Guided practice: 15 min	<u>Students will do book exercise in their notebook</u> on their own and teacher guide those student who are not able to draw.		

Closure/ Plenary: peer activity (5-8 Min)	<i>Students will be told to make a flow chart of the chapter in pairs.</i>
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII Filpped video