

Class: VII	Subject: Mathematics	Day:1	Time duration:40 min
Name of the lesson/ unit	Ch- 4 Simple equation		
Topic/lesson	Introduction of equation and Verifying the given value as a solution		
Learning Objective	To be able to solve simple equation and framing equations by word problems.		
Expected learning outcomes:	• To be able to understand what is an equation • To verify whether the given value is a solution of the equation or not • Framing equation out of given statement.		
Common misconception (if any):	• Not able to put the given value correctly in given equation • Not able to comprehend the statement correctly • Not able to frame the equations correctly		
Prerequisite knowledge:	Knowledge of variable and constant		
Assessment of qualifying knowledge:	Verifying the value of variable for the given equation(Board test & oral)		
Transaction methodology			
Starter/ warm up: Questioning(Verbal) (5 Min)	Small Quiz will be conducted based on difference of variable & constant and define equation.		
Questioning , discussion & Explanation(Notebook) : 5Min	Equation- teacher will summarize the equation that it is a condition on a variable. The condition is that two expressions should have equal value. And at least one of the expressions must contain the variable. Teacher will explain how to put the given value in the equation and verify whether it is satisfying the equation or not.		
<u>Flipped video – 5 min</u>	Flipped video will be shown to make the concept clear.		
<u>Collaborative Work</u> <u>Independent work</u> <i>followed by discussion on board, students will be</i>	Students will discuss the questions from book and will solve independently.		

called on board to solve the questions: 20 Min	Students will be called on board to solve the questions and teacher will mentor them.
Closure/ Plenary(Think Pair and Share) N.B: (5 Min)	<i>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



Khaitan Public School, Sahibabad

Class: VII	Subject: Mathematics	Day:2	Time duration:40 min
Name of the lesson/ unit	Ch- 4 Simple equation		
Topic/lesson	Solving an equation		
Learning Objective	To be able to solve simple equation and framing equations by word problems.		
Expected learning outcomes:	• <u>Solve the equation doing same operation on both the side</u> • Understand the meaning of equal to sign.		
Common misconception (if any):	• Not doing same operation on both sides		
Prerequisite knowledge:	Knowledge of variable and constant		
Assessment of qualifying knowledge:	Verifying the value of variable for the given equation(Board test & oral)		
Transaction methodology			
Starter/ warm up: Questioning(Verbal) (10 Min)	Oral questions will be asked about balancing the weight .		
Lecture , discussion & Explanation(Notebook) : 5Min	Solving an equation- If we add the same number to both sides of an equality , it still holds .		

Explanation on the board (Notebook) :10 Min (Explanation & Discussion among peers) <u>Collaborative Work</u> <u>Independent work</u> <i>followed by discussion on board, students will be called on board to solve the questions: 10 Min</i>	If we subtract the same number to both sides of an equality , it still holds . If we multiply or divide both sides of equality by the the same non-zero number , it still holds . Teacher will explain few questions on board . Students will discuss questions from books and solve independently. <i>students will be called on board to solve the questions</i>
Closure/ Plenary : (5 Min)	From book Assignment will be given
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII



Khaitan Public School,Sahibabad

Class: VII	Subject: Mathematics	Day:3	Time duration:40 min
Name of the lesson/ unit	Ch- 4 Simple equation		
Topic/lesson	Transposition method		
Learning Objective	To be able to solve simple equation and framing equations by word problems.		
Expected learning outcomes:	Students will be able to • Solve the equation using transposition method. • Understand the meaning of equal to sign.		
Common misconception (if any):	• Not changing the appropriate operation as per the transposition method. • Not solving the brackets. • Not opening the brackets		

Prerequisite knowledge:	Knowledge of variable and constant
Assessment of qualifying knowledge:	Verifying the value of variable for the given equation(Board test & oral)
Transaction methodology	
Starter/ warm up: Flipped video followed by explanation (10 Min)	Flipped video will be shown to the students of Simple Equation <u>Mind reading game- teacher will ask a word problem to frame the equaton.</u>
Questioning , discussion & Explanation(Notebook) : 5Min	Equation: An equation is a condition on a variable such that two expressions in the variable should have equal value. Transposition Method:The most common method used for solving linear equations is the method of transposition. The word transpose means ‘changing the side of the number’. The following rules are followed in this method; +becomes – on changing the side – becomes + on changing the side × becomes ÷on changing the side ÷ becomes × on changing the side Students will write in notebook
Questioning followed by Explanation on the board (Notebook) :10 Min (Explanation & Discussion among peers) Collaborative Work	<i>Teacher will collect the responses of starter and proceed the topic. Students will discuss questions from book in their notebook</i>
<u>Independent work</u> followed by discussion on board, students will be called on board to solve the questions: 10 Min	<u>Students will do questions</u> <u>Teacher will call the students on board for solving the equations</u>
Closure/ Plenary(Think Pair and Share) N.B: (5 Min)	<i>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



Khaitan Public School,Sahibabad

Class: VII	Subject: Mathematics	Day:4	Time duration:40 min
Name of the lesson/ unit	Ch- 4 Simple equation		
Topic/lesson	Transposition method		
Learning Objective	To be able to solve simple equation and framing equations by word problems.		
Expected learning outcomes:	• <u>Solve the equation using transposition method.</u> • Understand the meaning of equal to sign.		
Common misconception (if any):	• Not changing the appropriate operation as per the transposition method. • Not solving the brackets. • Not opening the brackets.		
Prerequisite knowledge:	Knowledge of variable and constant		
Assessment of qualifying knowledge:	Verifying the value of variable for the given equation(Board test & oral)		
Transaction methodology			
Starter/ warm up: Questioning(Verbal) (5 Min)	Oral questions will be asked to make student understand the difference between simple equation and equation with brackets		
Questioning , discussion & Explanation: 5Min Questioning followed by Explanation on the board (Notebook) :15 Min (Explanation & Discussion among peers) <u>Collaborative Work</u>	Teacher will collect the response from starter and discuss with students how to open the bracket while solving the simple equations using transposition method. <i>Students will do questions in their notebook after discussing with peer and teacher will discuss the solution on the board.</i>		

Independent work <i>followed by discussion on board, students will be called on board to solve the questions: 10 Min</i>	<u>Students will do rest of the questions in their notebook and Teacher will call the students on board for solving the equations</u>
Closure/ Plenary(Think Pair and Share) N.B: (5 Min)	<i>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



Khaitan Public School,Sahibabad

Class: VII	Subject: Mathematics	Day:5	Time duration:40 min
Name of the lesson/ unit	Data handling		
Topic/lesson	Application of Simple Equations		
Learning Objective	To be able to solve problems based on Mean , Mode ,Meadian and able to draw bar graphs.		
Expected learning outcomes:	Students will be able to • Comprehend the word problem • Solve the statements of simple equation. • Solve the equation using transposition method. • Understand the meaning of equal to sign		
Common misconception (if any):	• Not changing the appropriate operation as per the transposition method. • Not solving the brackets. • Not opening the brackets. • Wrong Comprehend		
Prerequisite knowledge:	Knowledge of Data and Average of data		

Assessment of qualifying knowledge:	Add & subtraction fractions(Board test & oral)
Transaction methodology	
Starter/ warm up: Questioning(Verbal) (5 Min)	Oral questions will be asked to initiate the topic
Questioning , discussion & Explanation: 5 Min Questioning followed by Explanation on the board (Notebook) :15 Min (Explanation & Discussion among peers)<u>Collaborative Work</u> <u>Independent work followed by discussion on board, students will be called on board to solve the questions: 10 Min</u>	Teacher will discuss the keywords for four operations. (Attachment) <i>Students will do few questions in their notebook after discussing with peer and teacher will discuss the solution on the board.</i> <u>Students will do rest of the questions in their notebook and Teacher will call the students on board for solving the equations.</u>
Closure/ Plenary(Think Pair and Share) N.B: (5 Min)	<i>Students will draw content map of the chapter</i>
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII