

CLASS – IX
LESSON PLAN
CHAPTER-1: NUMBER SYSTEM

Unit	Number System (Chapter 1: Number System)
Class Transaction	Total: 14 periods (approx. 40 min each)
Pre-requisite for the course	This lesson requires 1. Basic knowledge of natural numbers, whole numbers, rational numbers, irrational numbers, real numbers. 2. Knowledge of basic construction and number line. 3. Knowledge of exponents.
Assessment of qualifying knowledge	1. Written test 2. Lab activity 3. HW notebook
Objective	Students would be able to identify the difference between various types of numbers and develop skills of performing various operations on irrational numbers, thereby inculcating competencies like collaboration, critical thinking and creativity
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will develop the ability to understand</i> 1. Natural numbers, whole numbers, integers, rational and irrational numbers. 2. The method of plotting square root of natural and decimal numbers on the number line. 3. The laws of exponents. <u>SKILLS and COMPETENCIES</u>-<i>Students would be able to</i> 1. Develop the ability to analyze and differentiate between various types of numbers. 2. Perform numerical skills like rationalization techniques on irrational numbers and develop critical thinking and collaboration in the process.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D2, D3 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 1. 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 5 marks On time submission..... 1 mark Presentation/ Neatness..... 1 mark Content..... 3 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 20 Marks each HALF YEARLY EXAMINATION 80 Marks ANNUAL BOARD EXAMINATION 80 Marks INTERNAL ASSESSMENT 10 Marks - Note Book Submission 05 Marks - Lab Practical (Subject Enrichment) 05 Marks Through lab Practical Students are assessed for Collaboration, Character building, 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>

	• Spiral Level 3 questions to be done • Encouragement for referring other resources <i>For weak students:</i> • Spiral Level 1 to be completed • 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	1. Express the $2.34\overline{5}$ as a rational number in $\frac{p}{q}$ form. 2. Write two examples each of two irrational numbers whose difference is a rational number and sum is irrational number. 3. Rationalize: $\frac{5 - 3\sqrt{2}}{5 + 3\sqrt{2}}$ 4. Evaluate: $12\sqrt{18} + 6\sqrt{20} - 6\sqrt{147} + 3\sqrt{50} + 8\sqrt{45}$ 5. If $x = 7 + \sqrt{48}$ find the value of $\sqrt{x} - \frac{1}{\sqrt{x}}$

DAY	ONE
Objective	Enhance ability to accurately recognize and use appropriate terminology related to numbers and developing the art of communication and critical thinking.
Assessment of qualifying knowledge	Quiz and knowledge testing on rational numbers and their operations.
Learning Outcomes	<u>KNOWLEDGE</u>- Students will know and identify Natural Numbers, whole numbers, integers, rational numbers. <u>SKILLS and COMPETENCIES</u> Students would be able to Reason effectively and critically differentiate integers with rational numbers.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Anticipatory Set: 10 min Facilitator will ask few questions to introduce the topic • What is a whole number? • What is an integer? • What are fractions? • What is rational number? • What is the Difference between fraction and rational number? • How many rational numbers are there in between 2 integers or two rational numbers? • Can every rational number be represented on number line? • Are there any numbers which can't be represented as rational form • What are exponents? Discussion of topic through Collaborative Learning: 15 min <u>Inquiry based learning</u> (Critical Thinking and Problem Solving) Students would be asked to write different type of rational numbers, integers in the form of rational number, negative rational number, positive rational number, represent integers and rational numbers on the number line. The facilitator would take rounds and ensure that each learner is engaged. Guided practice: 10 min The students will solve the questions from NCERT book, solved examples before Ex 1.1 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 go through the solved examples before Ex 1.1 of NCERT text book. 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 1. CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: 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 difference between various types of numbers and would also be able to plot natural and decimal numbers on the number line in collaborative manner .
Assessment of qualifying knowledge	Written questions on representing integers as rational numbers and representing on number line.
Learning Outcomes	<u>KNOWLEDGE</u> - Students will know and Demonstrate the ability to find numbers between any two given numbers <u>SKILLS and COMPETENCIES</u> - Students will be able to differentiate and classify various types of numbers, in collaboration with each other.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: 5 min Brainstorming on the previously taught concept would be done. Discussion of topic through Collaborative Learning: 15 min (Critical Thinking, Collaboration) An oral quiz will be taken and students will be asked to identify various rational numbers between two given rational numbers and will be able to realize the fact that infinite number of rational numbers can be inserted between two rational numbers and hence like natural numbers and integers there are infinite rational numbers. Guided practice: 15 min The students, with the help of the facilitator, will solve the questions from NCERT book of Exercise – 1.1 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 HW parts given in the monthly planner of Exercise 1.1 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 1. 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 solve the questions of Ex- 1.1 based on operations on real numbers.
Assessment of qualifying knowledge	Written questions on inserting rational numbers between two rational numbers and other operations on rational numbers.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will develop the ability to understand the</i> relationship between natural numbers, whole numbers, integers, rational numbers <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to critically apply</i> the concepts in given situations and collaboratively realize the fact that infinite number of rational numbers can be inserted between two rational numbers.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 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 1.1 would be discussed and students would solve different questions per group 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 – 1.1 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 HW parts given in the monthly planner of Exercise 1.1 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

	1. 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 irrational numbers and difference between rationals and irrationals
Assessment of qualifying knowledge	Written test on identifying whether the given number is rational or irrational.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will develop the ability to understand the relationship between natural numbers, whole numbers, integers, rational numbers</i> <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to</i> 1. Critically apply the concepts in given situations and collaboratively realize the fact that infinite number of rational numbers can be inserted between two rational numbers 2. Comprehend that not every number can be written in rational form and hence are irrational numbers
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 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) Irrational numbers would be introduced to students. They will know how rational numbers and irrational numbers are entirely different and collection of all rational numbers and irrational numbers is called Real numbers. This would be discussed in detail with vivid examples. Guided Practice: 15 min The students will solve the questions from NCERT book, solved examples before Ex 1.2 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 various irrational numbers in view of its definition. Closure: 5 min Discussion of muddiest point.
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks as mentioned in the monthly planner.

Assessments	Written test (5 minutes)
DAY	FIVE
Objective	To understand that square root of prime numbers and non square numbers are irrationals.
Assessment of qualifying knowledge	MCQ on identifying numbers as rationals and irrationals.
Learning Outcomes	<u>KNOWLEDGE</u>- Design new ways to represent irrational numbers on number line in as many ways as possible. <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to</i>Comprehend that rational numbers and irrationals together form set of Real numbers, through collaborative leaning process.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 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 (Critical Thinking, Collaboration) Irrational numbers would be introduced to students. They will know how rational numbers and irrational numbers are entirely different and collection of all rational numbers and irrational numbers is called Real numbers. This would be discussed in detail with vivid examples. Guided Practice: 15 min The students will solve the questions from NCERT book, solved examples before Ex 1.2 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 various irrational numbers in view of its definition. Closure: 5 min Discussion of muddiest point.
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. 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	SIX
Objective	To represent every Real number on number line.
Assessment of qualifying knowledge	Written test on drawing right angle triangle using Pythagoras theorem representing various irrational numbers on number line.

Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> - every Real number can be represented on number line. <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to</i> Apply the given knowledge with 100 % accuracy Creatively represent irrational number on number line with the knowledge of usage of Pythagoras theorem.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: 5 min Oral test would be taken. Discussion of topic through Collaborative Learning: 15 min (Critical Thinking) How to use Pythagoras theorem to represent various irrational numbers on number line would be discussed in detail. Guided Practice:15 min The students will solve the questions from NCERT book of Exercise – 1.2 in their notebook in the class with the help of their facilitator. Independent Practice: Students will complete the remaining HW parts given in the monthly planner of Exercise 1.2 in their Math HW notebook. Closure: 5 min Summarization, preferably by a student, would be taken to check proper assimilation of the topic discussed. .
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. 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)
DAY	SEVEN
Objective	To solve the questions from NCERT book of Exercise – 1.2
Assessment of qualifying knowledge	Written test on drawing right angle triangle using Pythagoras theorem representing various irrational numbers on number line.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> - Every Real number can be is either a rational or an irrational number. <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to</i> - Classify each Real number either as rational or an irrational - Represent irrational number on number line with the knowledge of usage of Pythagoras theorem.

Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: 5 min Warming session would be taken. Discussion of topic through Collaborative Learning: 15 min (Critical thinking, communication) Solved examples from the book would be taken up. Brainstorming on classification of real number as rational and irrational would be done. Guided Practice: 20 min The students will solve the questions from NCERT book of Exercise – 1.2 in their notebook in the class with the help of their facilitator. The facilitator would explain the questions from Ex 1.2 with a collaborative approach towards them. Independent Practice: Students will complete the remaining HW parts given in the monthly planner of Exercise 1.2 in their Math HW notebook. Closure: 5 min Summarization, preferably by a student, would be taken to check proper assimilation of the topic discussed. .
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. 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)

DAY	EIGHT
Objective	To use decimal expansion of numbers to distinguish between rationals and irrationals.
Assessment of qualifying knowledge	Written test on calculating decimal expansion of given number.
Learning Outcomes	<u>KNOWLEDGE</u> - <i>Students will know and understand</i> 1. The various kind of decimal numbers depending on the number being rational or irrational. <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to</i> 1. Critically visualize the representation of real numbers on the number line using their decimal expansion. 2. Differentiate between terminating and non-terminating decimal numbers.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, muddiest point discussion Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: 5 min

too.)	One-minute test would be taken. Discussion of topic through Collaborative Learning: <u>15 min</u> (Creativity) Redefining rational numbers and irrational numbers on the basis of decimal expansion of a Real number. Mind mapping would be used Digital content would be used. Guided Practice: <u>15 min</u> The facilitator would explain through different examples. Collaborative approach would be taken up. Independent Practice: Students will go through the solved examples before Ex 1.3 of NCERT text book. Closure: <u>5 min</u> Summarization, preferably by a student, would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. 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)
DAY	NINE
Objective	Inserting rational number and irrational number between two given irrationals.
Assessment of qualifying knowledge	Oral test on terminating and non-terminating decimal expansion of given number.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and</i> Demonstrate new ways to represent the given irrational number on a number line. <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to</i> 2. Apply critically the knowledge meaningfully and creatively. 3. Develop various techniques to produce more and more digits in the decimal expansion of irrational numbers.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: <u>5 min</u> Oral test would be taken. Discussion of topic through Collaborative Learning: <u>10 min</u> (Communication and critical thinking) Solved examples from the book would be taken up. Mind mapping would be used and would discuss different questions Guided Practice: <u>20 min</u> The teacher, as a facilitator, would explain the questions from Ex 1.3 would be taken up and collaborative approach towards them so that the facilitator would help them with their doubts. Independent Practice: Students will complete the remaining HW parts given in the

	monthly planner of Exercise 1.3 in their Math HW notebook. Closure: 5 min Summarization, preferably by a student, would be taken to check proper assimilation of the topic discussed. .
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. CBSE Exemplar
Self-Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	Oral test (5 minutes)
DAY	TEN
Objective	To solve the questions from NCERT book of Exercise – 1.3
Assessment of qualifying knowledge	MCQ test on terminating and non-terminating decimal expansion of given number and inserting numerous numbers between two given numbers.
	apply the knowledge meaningfully and creatively.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> 2. Infinite numbers of rationals and irrationals can be inserted between two given numbers. <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to</i> 4. Develop various techniques to produce more and more digits in the decimal expansion of irrational numbers, creatively
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: 5 min One minute test would be taken. Discussion of topic through Collaborative Learning: 15 min (Critical and creative thinking) Identification of terminating and non-terminating rational numbers would be done and inserting numerous irrational numbers between two rational or irrational numbers would be done. Guided Practice: 15 min The facilitator would explain the questions from Ex 1.3 with a collaborative approach towards them. Independent Practice: Students will complete the remaining HW parts given in the monthly planner of Exercise 1.3 in their Math HW notebook. Closure: 5 min Summarization, preferably by a student, would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Mathematics

	Reference Book 1. CBSE Exemplar
Self-Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	MCQ test (5 minutes)
DAY	ELEVEN
Objective	Representation of real number through successive magnification
Assessment of qualifying knowledge	Written test on representing real number on number line through successive magnification.
	Apply the concepts and evaluate the given questions with 90% accuracy
Learning Outcomes	<u>KNOWLEDGE</u> - Students will deductively understand 3. Process of successive magnification. 4. Every point on number line is represented by unique point on the number line. <u>SKILLS and COMPETENCIES</u> - Students would be able to Critically visualise the representation and position of number be it rational or irrational on number line.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, muddiest point discussion Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: 5 min Oral Test would be taken up. Discussion of topic through Collaborative Learning: 15 min (Communication and critical) Representation of real number through successive magnification. Guided Practice: 15 min The students, with the help of the facilitator, will solve the questions from NCERT book of Exercise – 1.4 in their notebook in the class with the help of their teacher. Independent Practice: Students will complete the remaining HW parts given in the monthly planner of Exercise 1.4 in their Math HW notebook. Closure: 5 min Summarization, preferably by a student, would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. CBSE Exemplar
Self-Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	MCQ test (5 minutes)
DAY	TWELVE
Objective	Operation on real numbers and rationalizing the denominator.
Assessment of qualifying knowledge	Quiz on conjugate of term with surds and fundamental operations on real numbers.
	Apply the concepts and evaluate the given questions with 90% accuracy
Learning Outcomes	<u>KNOWLEDGE</u> - Students will know and understand

	1. Operations on real numbers 2. Rationalizing the denominator. SKILLS and COMPETENCIES - <i>Students would be able to</i> 1. Creatively represent $\sqrt{n}$ for any positive number n on the number line. 2. Add, subtract, multiply or divide real numbers. 2. Critically rationalize the denominator with surds.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Graphic Organizers, Think, pair and share Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: 5 min Oral Test would be taken up. Discussion of topic through Collaborative Learning: 15 min (Critical and creative thinking) Operation on real numbers and rationalizing the denominator Guided Practice: 15 min The students, with the help of the facilitator, will solve the questions from NCERT book of Exercise – 1.5 in their notebook in the class with the help of their teacher. Independent Practice: Students will complete the remaining HW parts given in the monthly planner of Exercise 1.5 in their Math HW notebook. Closure: 5 min Summarization, preferably by a student, would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. CBSE Exemplar
Self-Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	Quiz (5 minutes)
DAY	THIRTEEN
Objective	Application of law of exponents.
Assessment of qualifying knowledge	Oral test on laws of exponents.
Learning Outcomes	KNOWLEDGE- <i>Students will know and understand</i> 1. Various laws of exponents to operate on real numbers. SKILLS and COMPETENCIES - <i>Students would be able to</i> 1. Critically apply and extend previous knowledge of exponents to irrational numbers.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other	Strategies Used : Inductive Deductive Reasoning, Think, pair and share Dimensions of Learning : D1, D3 Transaction would proceed in the following manner- Recapitulation: 5 min Oral Test would be taken up.

too.)	Discussion of topic through Collaborative Learning: <u>15 min</u> Application of law of exponents. Guided Practice: <u>15 min</u> (Communication) The students, with the help of the facilitator, will solve the questions from NCERT book of Exercise – 1.6 in their notebook in the class with the help of their teacher. Independent Practice: Students will complete the remaining HW parts given in the monthly planner of Exercise 1.6 in their Math HW notebook. Closure: <u>5 min</u> Summarization would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. CBSE Exemplar
Self-Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	Oral test (5 minutes)
DAY	FOURTEEN
Objective	Solving various levels of Spiral
Assessment of qualifying knowledge	Oral test on various concepts being used in chapter.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> 2. Various concepts being applied on number system. <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to</i> 2. Recall the concepts and terms being used in chapter to solve the questions. 3. Critically Apply and solve the questions of spirals.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies Used : Inductive Deductive Reasoning, Think, pair and share Dimensions of Learning : D1, D3 would proceed in the following manner- Recapitulation: <u>5 min</u> Oral Test would be taken up. Discussion of topic through Collaborative Learning: <u>10 min</u> (Critical) Spiral level 1 would be taken up. Guided Practice: <u>20 min</u> The teacher would explain the questions from the spiral Level 1. Independent Practice: Students would try Level 2 questions from the spiral. Closure: <u>5 min</u> Summarization, preferably by a student, would be taken to check proper assimilation of the topic discussed. .
Resources	Text Book: NCERT text book for Mathematics

	Reference Book 1. CBSE Exemplar
Self-Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W.
Assessments	Oral test (5 minutes)