

CLASS – VI
LESSON PLAN
CHAPTER-8: DECIMALS

Unit	Decimals
Class Transaction	Total: 5 periods (approx. 40 min each)
Pre-requisite for the course	This lesson requires 1. Basic knowledge of natural numbers, whole numbers, 2. Knowledge of number line. 3. Knowledge of basic operation of addition and subtraction..
Assessment of qualifying knowledge	1. Written test 2. Lab activity 3. HW notebook
Objective	Students would be able to express the numbers as decimals and develop skills of performing various operations on decimal numbers, thereby inculcating competencies like collaboration, critical thinking
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will develop the ability to understand</i> 1. To express fractions as decimals. 2. The method of representing decimals on the number line. 3. The operation of addition and subtraction. <u>SKILLS and COMPETENCIES</u>- <i>Students would be able to</i> 1. Develop the ability to analyze the need to express fractions as decimals. 2. Perform numerical skills like expanded notation and comparison of decimals. 3. Perform addition and subtraction 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 KWC CHART-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/ HIT IT/ PASSWORD 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	Q1. Add the following. (i) $600.58 + 90.8 + 50.031$ (ii) $206.5 + 34.356 + 297.32$ Q2. Subtract: (i) $1008.563 - 156.6$ (ii) $14.3 - 8.342$ Q3. Ramlal covers 26 km 868 m by car, 2km 8 m by rickshaw and 976 m on foot to reach his friend's house. How far is his friend's house from his residence? Q4. Mary, Charu and John have Rs 25876.75, Rs 18234.79 and Rs 8564.45 respectively in their personal bank accounts. How much money do they have altogether? Q5. Anju bought a box of chocolates for Rs 45.75. She gave Rs 100 to the shopkeeper. How much balance did she receive?

DAY	ONE
Objective	Enhance ability to accurately recognize and use appropriate terminology related to decimals 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 express fractions as decimals <u>SKILLS and COMPETENCIES</u> Students would be able to Reason effectively and critically express fractions as decimals.
Transaction Methodology (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 and ask students to respond the same in their KWC Chart. • What is a whole number? • What is a fraction? • How can we express fractions as decimals?

	<u>Inquiry based learning</u> (Critical Thinking and Problem Solving) Facilitator with the help of KWC chart will introduce the topic and ask students to write different fractions in the form of decimals, and express them on the number line. 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, solved examples before Ex 8.1 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. <u>Independent Practice:</u> Students will go through the solved examples before Ex 8.1 of NCERT text book. <u>Closure: 5 min (HIT IT)</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 smaller and bigger decimals and would also be able to plot decimal numbers on the number line individually.
Assessment of qualifying knowledge	Written questions on comparing of decimals and representing on number line.
Learning Outcomes	<u>KNOWLEDGE-</u> <i>Students will know and</i> Demonstrate the ability to compare the decimals with appropriate sign. <u>SKILLS and COMPETENCIES-</u> <i>Students will be able to</i> differentiate and classify decimals according to their values, in collaboration with each other.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- <u>Recapitulation: 5 min</u> Brainstorming on the previously taught concept would be done. <u>Discussion of topic through Collaborative Learning: 15 min</u> (Critical Thinking, Collaboration) THINK PAIR AND SHARE An oral quiz will be taken and students will be asked to identify the bigger decimal between two given decimal numbers and will be able to realize the fact that infinite number of decimal numbers can be inserted between two decimal numbers and hence like natural numbers and integers there are infinite decimal numbers. <u>Guided practice: 15 min</u> The students, with the help of the facilitator, will solve the questions from

	NCERT book of Exercise – 8.2 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 of Exercise 8.2 and 8.3 in their Math HW notebook. Students who would difficulty in solving the problem would solve with the help of their buddies. Closure: <u>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	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- 8.4 based on converting quantities with different units to same unit..
Assessment of qualifying knowledge	Written questions on converting one unit to another unit and perform other operations on decimals.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will develop the ability to understand the relationship between the values of various units.</i> <u>SKILLS and COMPETENCIES</u> - <i>Students would be able to critically apply the concepts in given situations and collaboratively realize the fact that quantities of same kinds can be converted to same unit.</i>
Transaction Methodology (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 HOT SEAT Some students will solve the questions on the board. Discussion of topic through Collaborative Learning: <u>15 min</u> (Critical thinking/ Think pair and share) Exercise 8.4 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: <u>15 min</u> The students will solve the questions from NCERT book of Exercise – 8.4 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 of Exercise 8.4 in their Math HW notebook. Closure: <u>5 min</u>

	Digital content is shown for recapitulation.
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	Independent practice (5 minutes)
DAY	FOUR
Objective	To perform the addition on decimals.
Assessment of qualifying knowledge	Written test on addition of decimals after converting them to the same unit.
Learning Outcomes	KNOWLEDGE- <i>Students will develop the ability to understand the</i> Addition on decimal after converting them to the same unit. SKILLS and COMPETENCIES - <i>Students would be able to</i> Critically apply the concepts in given situations and collaboratively realize the fact that quantities with the same units can be added. Comprehend that for addition units should be same.
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) Students will know that for addition units should be same. 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 8.5 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 would do the given questions in their H.W. notebooks. 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)
DAY	FIVE

Objective	To understand the subtraction on decimals.
Assessment of qualifying knowledge	Quiz on Decimals using HEAD THE NUMBER LAB ACTIVITY
Learning Outcomes	<u>KNOWLEDGE</u> -Express quantities to the same units to subtract them. <u>COMPETENCIES</u> - <i>Students would be able to</i> Comprehend that decimals with the same unit can be subtracted through collaborative leaning process.
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 (Critical Thinking, Collaboration) Conversion of units is important for subtraction 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 8.6 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 would do the given questions in their H.W. notebooks. 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	MCQ (5 minutes)/ HEAD THE NUMBER/ LAB ACTIVITY.