

CLASS – VII
LESSON PLAN
Ch 17 Forests: Our Lifeline

Unit	Physics (Chapter 17 Forests:Our Lifeline)
Class Transaction	Total: 9 periods (approx. 40 min each)
Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest. 2. Basic Knowledge of food chain and deforestation
Assessment of qualifying knowledge	1. Written test 2. Lab activity 3. Group Discussion 4. HW notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to classify different layers of forest. They would be able to examine deforestation with 90% accuracy.
	DoL- D1, D2, D3, D4
Learning Outcomes	<u>KNOWLEDGE-</u> Students will know and understand • Students will be able to define food chain and deforestation.. • Students will be able to classify different layers of forests. • Students will be able to judge interdependency of forests and humans. • Students will be able to describe water cycle. • Students will be able to justify use of forests. • Students will be able to construct a model for conservation of energyy. <u>SKILLS AND COMPETENCIES-</u> Students would be able to • Critically analyze conservation of energy,. • Appreciate importance of forests collaboratively. • Collaborate in groups and discuss interdependency of forests and human. • Design Creative methods to construct model n food chain. • Built Character amongst themselves by discussing importance of animals and plants. Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic. <u>ATTITUDES AND BELIEFS –</u> Students will be able to

	Develop citizenship by visualizing and observing day to day phenomena and present it in form of skit to sensitize others.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active Learning- <i>Frayer Model</i> on forests (Critical Thinking) Group Learning- The class will be divided into eight groups. <i>Jigsaw</i> Expert Group: The group will be given worksheet on different layers of forests Learning Group: Students will teach each other canopy and understoreys. (Communication, Collaboration) Differentiation- The students in groups of 8 will be demonstrating the water cycle. (Character, Communication) Questioning- Multiple level question- Teacher will prepare a list of question about deforestation and will ask these questions after discussion. (Critical Thinking, Communication) 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. Introduction of the topic- PPT and Digital Content would be shared. Facilitation of content The facilitator will enable the learners to understand the fundamental concept of Heat. He/ She will compare and contrast different modes of transfer of heat. Approaches The facilitator should apply some or all the approaches while administering the teaching learning process. • Didactic Approach • Summarizing Approach • Feedback Approach Techniques to be used: • Quiz • MCQ • PPT • Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions

	• Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities <i>Guided practice to be followed by Independent Practice- NCERT questions to be discussed in the classroom.</i>
Resources	Text Book: NCERT text book Reference Books CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W note books as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 Rubrics On time submission.....1 mark Presentation/ Neatness.....1 mark Content(critical thinking and creativity).....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	4 UNIT TESTS25 Mark each=100 Marks HALF YEARLY EXAMINATION80+20 (internal)=100 Marks ANNUAL EXAMINATION 80+20(internal)=100 Marks By administering pen paper test, we assess creativity and critical thinking. INTERNAL ASSESSMENT20 Marks in each Term • Subject Enrichment Activity 10 Marks With the help of subject enrichment activities we assess communication, collaboration, character building and citizenship (Demonstration and implementation of on force and pressure in our daily life). The students in a group of 5 will be demonstrating the activity. • Note Book Submission 10 Marks

Addressing Classroom Diversity	It's a different classroom today: As the kids are from different socio-economic background, So are their needs, demands and aspirations. Today all kinds of students including the gifted, the average and the differently able are mainstreamed into one class. So the teaching learning process must be devised in such that can cater to the needs and aspirations of students of abilities . The following techniques can be used for different groups: <i>For the gifted:</i> • Preparing a debate • Making PPT • Designing an exhibit • Writing a report • Preparing a talk • Encouragement for referring other resources <i>For the average/slow learners:</i> • Making a Chart/diagram/poster/ flashcards • Buddy system help to be provided • Provide grade-up classes <i>For differently able:</i> • Ignore grammatical inaccuracy • Call parents at regular intervals • Provide grade-up classes
Marks	The weight age would be given by CBSE.
	Q1. How do forests prevent soil erosion? Q2. What are decomposers? Name any two of them. What is their role in the forests? Q3. How do forests help in maintaining the balance between oxygen and carbon dioxide in nature? Q4. Explain in brief the factors leading to deforestation Q5. How does a pipal sapling grow on the side wall of a school or a building? Q6. What is a food chain?

Unit	Day 1(Visit to Forests)
Class Transaction	40 min
Pre-requisite for the course	The lesson requires • Basic knowledge of forest • Basic knowledge of components of forests
Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to understand components of forests with 90% accuracy
DOL	D1, D2,D3
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> Students will be able to • Recall forests • Define forests • Classify components of forests Students' responses will be listed on the blackboard by using the KWL chart KWL- <i>What you Know, What you will Learn, What you have learned.</i> <i>Students will be able to</i> Identify components of forests. • Students will be divided into seven groups and will be taken to educational trip to nearby forests <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Critically analyse components of forests. • Appreciate the importance forests in Collaboration • Built character amongst themselves by discussing communicating in <i>understanding the importance of trees in daily life.</i> Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic. Attitudes and beliefs- <i>Students will be able to</i> • Develop citizenship in visiting nearby forests or zoo by understanding their role and duties.
Transaction Methodology (The teacher can use the mentioned	Transaction would proceed in the following manner- Active learning- students will explore different trees in nearby reserve (Critical thinking) Questioning- <i>Multiple level question</i>- Teacher will prepare a list of questions based on trip to nearby forests. (Critical thinking,

techniques, wherever applicable, and can use any other too.)	Communication) 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. Introduction of the topic- PPT and Digital Content would be shared Guided practice followed by Independent Practice- NCERT questions to be discussed in the classroom. Techniques to be used: • Quiz • MCQ • PPT • Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities Guided practice to be followed by Independent Practice- NCERT questions to be discussed in the classroom.
Resources	Text Book: NCERT text book Reference Books CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W notebooks as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: Assessment Parameters: The total marks for the activity is 5 marks On time submission.....1 mark Presentation/ Neatness(creativity).....1 mark Content(critical thinking and creativity).....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.
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.

Topic	Day 2 (some forests animals and plants)
Class Transaction	40 min each
Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest. 2. Basic Knowledge of food chain and deforestation
Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to list plants name and animals name found in forests with 90% accuracy
	DOL - D1, D2, D3
Learning Outcomes	<u>Knowledge-</u> <i>Students will know and understand</i> Students will be able to • Explain different types of plants. • Classify trees based on different categories. • Classify types of animals found in forests.. <u>Skills & Competencies-</u> Students would be able to • Critically analyse types of plants and animals found in forests. • In Collaboration they will understand importance of plants and animals in forests. • Built character amongst themselves by discussing /communicating in <i>understanding forests</i>. Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and	Transaction would proceed in the following manner- Active learning- 5 <i>Why's</i> for gathering information which help in deeper understanding of topic. (Critical thinking) Questioning- Multiple level question- Teacher will prepare a list of question about classification of plants and animals in forests.. (Critical thinking, Communication)

can use any other too.)	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. Introduction of the topic- PPT and Digital Content would be shared Techniques to be used: • Quiz • MCQ • PPT • Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities <i>Guided practice to be followed by Independent Practice</i>- NCERT questions to be discussed in the classroom.
Resources	Text Book: NCERT text book Reference Books CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W note books as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 Rubrics On time submission.....1 mark Presentation/ Neatness.....1 mark Content (critical thinking and creativity).....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.

Closure	Involving students in summarizing by asking them to prepare questions based on the topic
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Unit	Day 3 (Plants and Their Products)
Class Transaction	40 min
Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest. 2. Basic Knowledge of food chain and deforestation
Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to list plant products with 90% accuracy
	DOL - D1, D2,D3,D4
Learning Outcomes	<u>Knowledge-</u> <i>Students will know and understand</i> Students will be able to • Illustrate with examples different type of products obtained from plants. • Judge importance of plants in forests. • List products obtained from forests <u>Skills & Competencies-</u> Students would be able to • Critically analyse importance of plant products from forests. • In Collaboration they will be able to demonstrate plant products. • Built character amongst themselves by discussing /communicating in understanding use of plants.. Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning-5 <i>Why's for gathering information which help in deeper understanding of topic</i> (Critical thinking) Questioning- Multiple <i>level question-</i> Teacher will prepare a list of question about clinical plant and plant products and its uses. (Critical thinking, Communication) <i>Brain Storming-</i>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 Techniques to be used: • Quiz • MCQ • PPT • Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities <i>Guided practice to be followed by Independent Practice-</i> NCERT questions to be discussed in the classroom
Resources	Text Book: NCERT text book Reference Books CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W note books as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 Rubrics On time submission.....1 mark Presentation/ Neatness.....1 mark Content (critical thinking and creativity).....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.
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Unit	Day 4 (Canopy and Understorey)

Class Transaction	approx. 40 min each
Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest. 2. Basic Knowledge of food chain and deforestation
Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to understand canopy and understorey with 90% accuracy
	DOL -D1, D2,D3,D4
Learning Outcomes	<u>Knowledge-</u> <i>Students will know and understand</i> Students will be able to • Define canopy and understory. • Classify different layers of forests • Analyse importance of canopy and understorey. • Justify layers in forests <u>Skills & Competencies-</u> Students would be able to • Critically analyse layers of forests. • In Collaboration they will be able interpret use of canopy and understorey. • Built character amongst themselves by discussing /communicating in <i>understanding layers of forests..</i> Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- Students will demonstrate different layers in forests with help of model.(Critical thinking) Questioning- <i>Multiple level question-</i> Teacher will prepare a list of question on the topic and will ask these questions during discussions. (Critical thinking, Communication) <i>Brain Storming-</i>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 Techniques to be used: • Quiz • MCQ • PPT • Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities <i>Guided practice followed by Independent Practice-</i> NCERT questions to be discussed in the classroom
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W notebooks as mentioned in the monthly planner. HW 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.
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.

Unit	Day 5 (Interrelationship of plants and soil)
Class Transaction	(approx. 40 min each)

Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest. 2. Basic Knowledge of food chain and deforestation
Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to interpret interrelationship of plants and soil. They would be able to cite examples of interrelationship of plants and animals with 90% accuracy
	DOL - D1, D2,D3
Learning Outcomes	<u>Knowledge-</u> <i>Students will know and understand</i> Students will be able to • Judge interdependency of plants, animals and soil. • Define decomposers, auto tropes and saprotropes. • Interpret interaction of plants and soil. <u>Skills & Competencies-</u> Students would be able to • Critically analyse interrelationship of plants animals and soil.. • In Collaboration they will be able to conclude plants and animals depend upon each other. • Built character amongst themselves by discussing /communicating in <i>understanding interaction of plants and soil.</i> Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- <i>5 Why's for gathering information which help in deeper understanding of topic.</i> (Critical thinking)? 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. Introduction of the topic- PPT and Digital Content would be shared Techniques to be used: • Quiz • MCQ • PPT

	• Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities Guided practice to be followed by Independent Practice- NCERT questions to be discussed in the classroom.
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W note books as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 Rubrics On time submission.....1 mark Presentation/ Neatness.....1 mark Content (critical thinking and creativity).....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.
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.

Unit	Day 6 (Balance of oxygen and carbon di-oxide)
Class Transaction	(approx. 40 min each)
Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest. 2. Basic Knowledge of food chain and deforestation

Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to understand balance between oxygen and carbon di-oxide in nature. They would be able to state interdependency of oxygen and carbon di-oxide in nature with 90% accuracy.
	DOL - D1,D2,D3
Learning Outcomes	<u>Knowledge-</u> <i>Students will know and understand</i> Students will be able to • Compare and Contrast balance of oxygen and carbon di-oxide. • List uses of oxygen and carbon dioxide • Identify interdependency of gases on plants and animals <u>Skills & Competencies-</u> Students would be able to • Critically analyse balance of oxygen and carbon di-oxide • In Collaboration they will be able judge importance of gases on plants and animals • Built character amongst themselves by discussing /communicating in understanding use of oxygen and carbon di-oxide. Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- <i>CAF(consider all factors)</i> on balance of gases in nature. (Critical thinking) Differentiation- The students in a group of 10 will demonstrate importance of gases in nature. (Character, Citizenship) Questioning- Multiple <i>level question-</i> Teacher will prepare a list of question about the balance of oxygen and carbon di-oxide and will ask these questions during discussions. (Critical thinking, Communication) <i>Brain Storming-</i>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

	Techniques to be used: • Quiz • MCQ • PPT • Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities <i>Guided practice to be followed by Independent Practice- NCERT questions to be discussed in the classroom.</i>
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Self-Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W note books as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 Rubrics On time submission.....1 mark Presentation/ Neatness.....1 mark Content (critical thinking and creativity).....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.
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.

Unit	Day 7 (Food Chain)
Class	(approx. 40 min each)

Transaction	
Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest. 2. Basic Knowledge of food chain and deforestation
Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to examine food chain in forest. They would be able to list ways to conserve energy with 90% accuracy
	DOI - D1, D2,D3,D4
Learning Outcomes	<u>Knowledge-</u> <i>Students will know and understand</i> Students will be able to • Define food chain • Demonstrate food chain in nature • Construct a model on food chain. • Judge conservation of energy. <u>Skills & Competencies-</u> Students would be able to • Critically analyse food chain. • In Collaboration they will be able to conclude that energy is transferred from one source to another. • Built character amongst themselves by discussing /communicating in understanding Conservation of energy. Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- student will prepare a model on food chain to understand energy transfer. (Critical thinking) Questioning- Multiple <i>level question-</i> Teacher will prepare a list of question about forests will ask these questions during discussions. (Critical thinking, Communication) <i>Brain Storming-</i>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

	Techniques to be used: • Quiz • MCQ • PPT • Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities <i>Guided practice to be followed by Independent Practice- NCERT questions to be discussed in the classroom.</i>
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W note books as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 Rubrics On time submission.....1 mark Presentation/ Neatness.....1 mark Content (critical thinking and creativity).....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.
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Unit	Day 8 (Water Cycle)
Class Transaction	(approx. 40 min each)

Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest. 2. Basic Knowledge of food chain and deforestation
Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to construct model on water cycle. They would be able to list process of water cycle with 90% accuracy.
	DOL - D1, D2,D3,D4
Learning Outcomes	<u>Knowledge-</u> <i>Students will know and understand</i> Students will be able to • Compare and contrast evaporation rate and condensation rate • Identify process involved in water cycle • Describe water table • Analyse formation of water cycle <u>Skills & Competencies-</u> Students would be able to • Critically analys water cycle. • In Collaboration they will be able to construct a model on water cycle • <i>Built character amongst themselves by discussing /communicating in understanding use of water cycle. Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic.</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- Active learning- <i>5 Why's for gathering information which help in deeper understanding of topic</i> (Critical thinking) Questioning- <i>Multiple level question-</i> Teacher will prepare a list of question about water cycle and will ask these questions during discussions. (Critical thinking, Communication) <i>Brain Storming-</i>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 Techniques to be used:

	• Quiz • MCQ • PPT • Computer aided simulation/3D pictures • Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities <i>Guided practice to be followed by Independent Practice- NCERT questions to be discussed in the classroom.</i>
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W note books as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 Rubrics On time submission.....1 mark Presentation/ Neatness.....1 mark Content (critical thinking and creativity).....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.
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.

Unit	Day 9 (Deforestation)
Class Transaction	(approx. 40 min each)
Pre-requisite for the course	This lesson requires 1. Basic knowledge term forest.

	2. Basic Knowledge of food chain and deforestation
Assessment of qualifying knowledge	Written test Group Discussion Lab activity HW Notebook
Objective	Given the content (chapter) the learners will be able to importance of forest. Students will be able to judge effects of deforestation. They would be able to interpret conservation of forests with 90% accuracy
	DOL -D1,2,3
Learning Outcomes	<u>Knowledge-</u> <i>Students will know and understand</i> Students will be able to • Define deforestation • Interpret effects of deforestation. <u>Skills & Competencies-</u> Students would be able to • Critically analyse deforestation. • In Collaboration they will be able to examine adverse effects of deforestation • <i>Built character amongst themselves by discussing /communicating in understanding deforestation. Answer knowledge, understanding, application and diagrammatic skill based questions based on the topic.</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- <i>Active learning- Students will prepare model to explain adverse effects of deforestation. (Critical thinking)</i> Questioning- Multiple <i>level question-</i> Teacher will prepare a list of question about deforestation and will ask these questions during discussions. (Critical thinking, Communication) <i>Brain Storming-</i>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 Techniques to be used: • Quiz • MCQ • PPT • Computer aided simulation/3D pictures

	• Skit/Role playing • Group discussion • HOTS questions • Peer Assessment • Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, • Lab Activities <i>Guided practice to be followed by Independent Practice-</i> NCERT questions to be discussed in the classroom.
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W note books as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 Rubrics On time submission.....1 mark Presentation/ Neatness.....1 mark Content (critical thinking and creativity).....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.
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.