

CLASS – VI
LESSON PLAN
CHAPTER-15: AIR AROUND US

Unit	CHAPTER-15: AIR AROUND US
Class Transaction	Total: 5 periods (approx. 40 min each)
Pre-requisite for the course	Students recall the properties and various components of air.
Assessment of qualifying knowledge	1. Written test 2. Lab activity 3. Subject enrichment Students would be able to, thereby inculcating competencies like collaboration, critical thinking and creativity
Learning Outcomes	KNOWLEDGE: Students will be able to: 1. List properties & components of air. 2. Explain how does Oxygen becomes available to animals and plants living in water and soil. 3. Explain how the oxygen in atmosphere is replaced. SKILLS and COMPETENCIES 1) Critical thinking and problem solving (working effectively with others), 2) Character building (Taking tasks fearlessly and achieves goals.) 3) Communication (evaluating the information critically and competently. 4) Collaboration (responding open mindedly to different ideas) 5) Creativity (developing ,implementing and communicating new ideas)
Transaction ,Methodology (The teacher can use the mentioned techniques, wherever applicable ,and can use any other too.)	Strategies used- Inductive -deductive reasoning, muddiest point discussion, think pair share. Dimensions Of Learning- D4 (E-I Investigation) D3 (Compare) 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. 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 Daily Practice Problem MCQ Peer Assessment Lab Activities Any Other
Resources	Text Book: NCERT text book for Science
Self Study, Home work Assignments	Independent Practice: Students would do the given questions and diagrams in their notebooks. 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 25 Marks each HALF YEARLY EXAMINATION 80 Marks ANNUAL EXAMINATION 80 Marks INTERNAL ASSESSMENT 10 Marks - Note Book Submission 5 Marks - Lab Practical (Subject Enrichment) 5 Marks Through lab Practical Students are assessed for Collaboration, Critical thinking.
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligence, the classroom might be a diverse arena. The following techniques can be used for various groups: For gifted students: - High order thinking skills questions to be done - Encouragement for referring other resources For weak students: - Short answers 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.

	After explaining the concept , the students would be assessed by asking the following questions:
Q1	Which gas in the atmosphere is essential for respiration?
Q2	How will you prove that air supports burning?
Q3	How will you show that air is dissolved in water?
Q4	How do plants and animals help each other in the exchange of gases in the atmosphere?
Q5	List some uses of wind mill.

TOPIC	DAY ONE :
Pre- Requisite for the course	Students recall about what is air made up of and various components of air.
Assessment of qualifying knowledge	This topic requires knowledge of various properties and components of air.
Objective	To be able to identify the properties and components of air.
Learning Outcomes	<u>KNOWLEDGE</u>- Students will know and understand: ● The properties of air ● The components of air <u>SKILLS and COMPETENCIES</u>- Students will be able to: ● Collaboratively discuss about the properties of air. ● Critically analyse various components of air.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies used- Think pair share. Dimensions Of Learning- D1, D2 Transaction would proceed in the following manner- Anticipatory Set: 10 min The facilitator initiates a conversation with the learner by asking them about presence of air and whether they have seen air around them. After the conversation the facilitator will explain that air is present everywhere. The facilitator will now discuss about the properties and various components

	of air. Discussion of topic and Guided Practice 20 min <u>Inquiry based learning</u> (Critical Thinking and Problem Solving) The students will attempt the questions from the textbook. The facilitator would take rounds and help the students in solving the questions. Independent Practice: Students will go through the activities in 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 Science
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their notebooks.
Assessments	Oral Test (5 minutes)
TOPIC	DAY TWO
Pre- Requisite for the course	Students will recall about the presence of oxygen in our environment.
Assessment of qualifying knowledge	Knowledge testing by asking students to write the uses of oxygen.
Objective	The students will be able to know about the reason why we should not breathe through our mouth.
Learning Outcomes	<u>KNOWLEDGE</u>- The students will be able to know about the properties of oxygen, presence of dust particles and reason for not breathing through our mouth. <u>SKILLS and COMPETENCIES</u>- Critically analyse the properties of oxygen.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Strategies used- Think pair share. Dimensions Of Learning- D1,D2 Transaction would proceed in the following manner- Recapitulation: 5 min Brainstorming on the previously taught concept would be done by asking some Questions like: The following questions will be asked to check their understanding Q1. How does winnowing help in separating a mixture of sand & sawdust? Q2. Have you ever played with a firki?

	Q3. What is the use of weather cock? Q4. List few properties of air. Q5. What is atmosphere? Discussion of topic through Collaborative Learning: <u>15 min</u> (Critical Thinking, Collaboration) The facilitator initiates a conversation asking about why we should not breathe through our mouth. The facilitator will explain them the reason behind breathing through our nostrils. The facilitator will discuss about the presence of dust particles in air. And also with the help of an activity the presence of oxygen in air will be discussed. Guided practice: <u>15 min</u> The students, with the help of the facilitator, will solve the questions in their notebook in the class. 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 question and answer in the notebook. Students who would have difficulty in answering the questions 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 science
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks.
Assessments	Oral quiz (5 minutes)
TOPIC	DAY THREE
Pre- Requisite for the course	This topic requires knowledge about the presence of air in water and soil.
Assessment of qualifying knowledge	Questions from the previous class about the related topic would be asked for the whole class group.
Objective	The students will able to know about: ● The presence of air in water and soil. ● How oxygen is replaced in the atmosphere.
Learning Outcomes	<u>KNOWLEDGE</u>- The students will be able to know about the presence of air in water and soil. <u>SKILLS and COMPETENCIES</u>- Critically analyse the replacement of oxygen in atmosphere.
Transaction Methodology	Strategies used- Think pair share. Dimensions Of Learning- D1,D2

(The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	The facilitator will explain about the presence of air in water and soil. The facilitator will now explain how oxygen is replaced in the atmosphere. The facilitator will conduct One minute quiz to recap the learning of previous day and check the understanding. He/She will ask the questions given below: Q1. In the presence of which gas burning takes place? Q2. What is smoke? Q3. What is the use of long chimneys in factories? Q4. Why is it advised to breathe through the nose? Q5. What is air made up of? Q6. Why do the bubbles come out when the water is added to a beaker containing soil? Q7. Why during the rain, the animals living in the soil come out of the soil? Q8. Who is refilling the oxygen in the atmosphere? Q9. How the plants and animals depend on each other for their survival? Q10. How is the O₂ balanced in the atmosphere? Transaction would proceed in the following manner- Recapitulation: <u>5 min</u> Oral test on the previous concept would be taken up. Discussion of topic through Collaborative Learning: <u>15 min</u> (Critical thinking) Activities 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 answer the questions from the textbook 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 diagrams and revise the answers done in the notebook. A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for science
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their notebooks.
Assessments	Oral quiz (5 minutes)

TOPIC	DAY FOUR
Pre- Requisite for the course	This topic requires knowledge of presence of oxygen in soil and water.
Assessment of	Questions from the previous class about the related topic would be asked for

qualifying knowledge	the whole class group.
Objective	The students will be able to know about: ● How oxygen becomes available to animals and plants living in soil and water.
Learning Outcomes	● <u>KNOWLEDGE</u>- The students will be able to know about presence of air in soil and water. ● <u>SKILLS and COMPETENCIES</u>- Critically analyse how oxygen becomes available to animals and plants living in soil and water.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Dimensions Of Learning- D1,D2 The facilitator will discuss about how oxygen becomes available to animals and plants living in soil and water. The facilitator will explain how aquatic animals survive. Strategies used- Think pair share. After student teacher interaction, students will read the concept from the book and then think for a minute and share it with their partner for better understanding. 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) The facilitator will conduct One minute quiz to recap the learning of previous day and check the understanding. Guided Practice: 15 min The students will answer the questions from book 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 answer the various problems independently. Closure: 5 min Discussion of muddiest point.
Resources	Text Book: NCERT text book for science
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their notebooks.
Assessments	Written test (5 minutes)

TOPIC	DAY FIVE
Pre- Requisite for the course	This topic requires knowledge of all the concepts and terms explained in the chapter.
Assessment of	Questions from the previous class about the related topic would be asked for

qualifying knowledge	the whole class group.
Objective	The students will be able to know about: ● Oxygen is required for burning ● Air is present in soil and water With the help of an activity.
Learning Outcomes	<u>KNOWLEDGE</u>- The students will be able to know about the presence of air in water and soil. <u>SKILLS and COMPETENCIES</u>- Critically analyse the concept by doing an activity..
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Dimensions Of Learning- D1,D2 The facilitator will initiate the conversation by asking the students about the presence of air in water and soil by showing an activity in the lab. The facilitator will explain about the requirement of oxygen for burning a candle by an activity. Strategies used- Think pair share. After student teacher interaction, students will read the concept from the book and then think for a minute and share it with their partner for better understanding. Transaction would proceed in the following manner- Recapitulation: <u>5 min</u> Quick revision on the previous concept would be taken up. Discussion of topic through Collaborative Learning: <u>15 min</u> (Creativity, Collaboration) The facilitator will conduct One minute quiz to recap the learning of previous day and check the understanding. Guided Practice: <u>15 min</u> The students will answer the questions from book 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 answer the various problems independently. Closure: <u>5 min</u> Discussion of muddiest point.
Resources	Text Book: NCERT text book for science
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their notebooks.
Assessments	Written test (5 minutes)