

Topic: Blow Hot, Blow Cold

Pre-Content/content Post-Content	Learning Outcome/Objectives	
<u>Precontent</u>	General	Specific
Students know that air is present everywhere and we need air to breathe. Content: - Composition & Properties of air. - Process of breathing - Uses of Air - Respiratory System <u>Post Content</u> - Stethoscope	Students will be able to: - understand that without air we will not be able to survive name the gases present in air. perform the different activities in which air plays an important role in daily life, - comprehend the importance of clean air and its uses identify the different organs of the human respiratory system - explore the usage of Stethoscope	Students will be able to: - deduce that air is a natural resource supporting life on earth identify the different gases present in the air. differentiate between inhaled and exhaled air. explain the process of breathing identify the difference between hot and cold air. - develop Environmental Sensitivity differentiate between breathing and respiration. - Conceptualize the process of respiration in human beings . - able to count the number of heart beats in one minute

Homework /Assignments: Read the lesson and complete the exercises given in the book.
 Complete the Question/ Answers and assignments given in class.
 Collect pictures of any four wind instruments and answer the questions related to them..

Teacher's Activity	Students' Activity	Teacher's Observation and Remedial action taken
Teacher will - involve all the students in an interactive session - demonstrate different experiments to explain the properties of Air Experiential Learning Annexure 15 A - initiate activity with 2 balloons and a piece of straw to explain the process of breathing. - read aloud the story of "Mian Balishtiye" from the textbook pages 139-141, to explain the difference of hot and cold air. - show the power point presentation and video to explain the process of Global Warming. - perform simple hands on activities to explain the uses of air - show the video to explain the difference between respiration and breathing - demonstrate to count the heartbeat by holding the wrist or their temple and using a stethoscope.	Students will Participate in an interactive session - conduct activities in groups to understand the properties of air, Experiential Learning Annexure 15 a - perform the activity and experience the process of breathing in and breathing out. - be asked to try out the activities given on pages 139-141 - create posters and Slogans to control air pollution - learn to make a paper fan and a paper whistle as given of page 143. - internalize the concept and complete the Worksheet related to the concept. - make a stethoscope using a funnel and a rubber pipe and listen to the heartbeat of their friends.	

Teaching Aids: Pictures of- Respiratory and Circulatory systems, Musical instruments, Stethoscope

Methodology/Innovative Methods: Discussion, Audio Visuals, Demonstration, Activity and project method.

Interdisciplinary Links: Life skills- students will learn the importance of fresh air for healthy life and Environmental Sensitivity.

Annexure 15 A & a

Activity Number-15

Your breath is your anchor

<u>SUBJECT</u>	<u>EVS</u>
<u>CLASS</u>	<u>V</u>
<u>CHAPTER</u>	<u>BLOW HOT BLOW COLD</u>
<u>TOPIC</u>	<u>INHALATION AND EXHALATION</u>
<u>TIME</u>	<u>40 MINS</u>
<u>NATURE OF ACTIVITY</u>	<u>GROUP ACTIVITY</u>

What will I learn ? (Learning Outcome)

To experience the process of breathing in and breathing out and to Identify the different organs of respiratory system

Pranayama exercises to strengthen the respiratory system.

Skills- Comprehending, Analyzing, Applying & Creating

What I have to do ? :

- work in group
- exhibit team spirit
- infer information
- recapitulate and associate previous knowledge to new situation

What do I require ?:

A plastic bottle, balloons, straws, rubber bands, rubber sheet

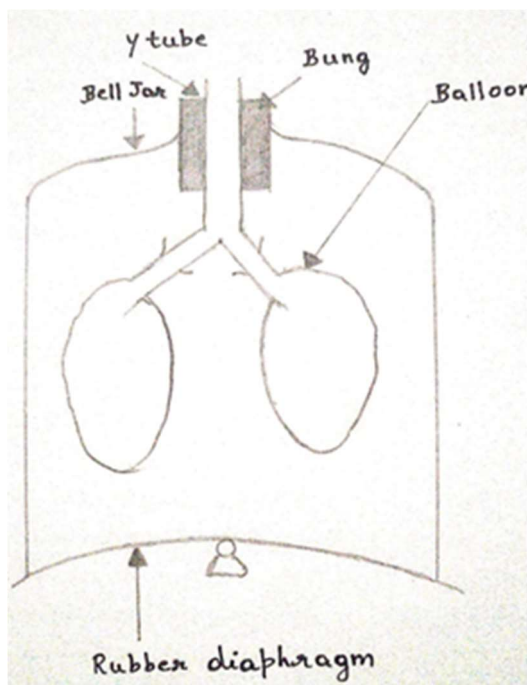
What do I need to know ? :

Living organisms need oxygen to live. It is found in the air around us. Oxygen is needed to breakdown digested food.

Teacher's Activity (Demonstration): Teacher will:

1. explain the concept of breathing and respiration.
2. Insert straws into balloons and tape them together. These depict bronchi and lungs.

3. Insert these through the open bottom of the plastic bottle cut into half,
4. Bring ends of straw up through the neck of the bottle.
5. Stuff neck of plastic bottle with plasticine around straws until spaces are plugged.
6. Place the rubber sheet to cover bottom end of the bottle and use the rubber band to hold it place. This will serve as diaphragm.
7. Grasp bottom of the rubber sheet and pull down and push up.
8. Watch the balloons.



9. Guide the students to perform breathing exercise.

How will I proceed ?

Students' activity :Students will:

- Follow the instructions given by the teacher, perform the activity and record the observations in tabular form.
- Perform breathing exercise as shown in the video to strengthen respiratory system.

What have I observed ? :

What happens to the balloons when-

(i) the rubber sheet below the bottom is pulled downwards?	
(ii) the rubber sheet below the bottle is released?	

What have I learnt ? :

- Mechanism of Inhalation and exhalation
- Organs of the human respiratory system

What am I curious to learn?

Let's find out how Yoga helps in improving the process of breathing

Let me evaluate myself

Q1. Complete the statements:

- (1) When we are asleep or lying down, we breathe _____ times in a minute.
- (2) Increasing levels of pollution leads to respiratory diseases like asthma and _____.
- (3) Exchange of gases takes place in _____ of our respiratory system.
- (4) _____ help to breathe in and breathe out, by contraction and relaxation.
- (5) _____ is a flap of skin that prevents food from passing into the windpipe when we swallow.

Q2. Q1. List the various organs of human respiratory system and state the role of each.

Q3. Why does our heart beat faster after running 100m race?

Q4. How does your breath help you to warm up your hands in winter?

Q5. State the benefits of practicing Pranayama in the morning?
