

Air

We'll cover the following key points:

- Water does Air Contain?
- Air Pollution
- Moving Air and Wind Vane



Hi, I'm EeeBee

Do you Remember:

Fundamental concept in previous class.

In class 1.. we learnt

- Air and Its's Properties
- Uses of Air

Still curious? Talk to me by scanning the QR code.



Learning Outcomes

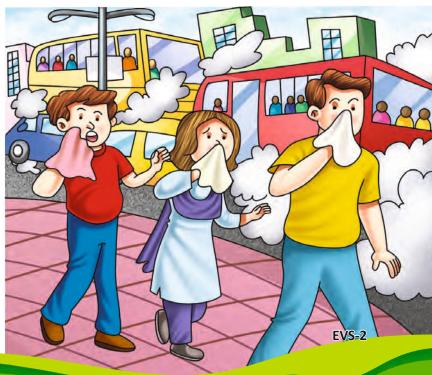
By the end of this chapter, students will be able to:

- Understand that air is all around us and we cannot see it.
- Learn that air helps us breathe and stay alive.
- Know that air moves, and we can feel it as wind.
- Understand that plants need air to live and grow.

Let's Start

Effects of air pollution.





Air is everywhere. But we cannot see it as it has no colour. Air is useful to us in many ways. We need air to live. Plants and animals too need air to live.

WHAT DOES AIR CONTAIN?

Air contains gases, vapour and many small parcles of dust and ash. They are so small that they cannot be seen by our naked eyes.

Air contains many gases. Like oxygen, nitrogen and carbon dioxide etc.

Oxygen gas is necessary to live. Some gases like carbon dioxide, etc. are poisonous.

Air contains water vapour.

When water boils, it turns into vapour. It mixes with air.

When wet clothes dry under the sun, water goes into air as water vapour.





Water vapour due to boiling water

Clothes drying under the sun



On a sunny day, find a window which has sunlight coming through a small gap. Look carefully at the rays of the sunlight. You will see small parcles of dust.

Smoke come out of factories and vehicles. It is also caused by burning of something or cooking. Dust keeps flying and geng into the air while sweeping.



Smoke from the factory



Flying of dust



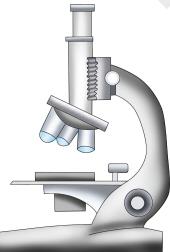
Smoke from the vehicles



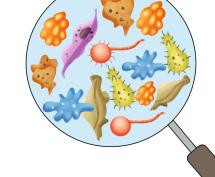
Smoke due to burning

The dust and smoke in the air makes it dirty. It is called **pollution**. Polluon is very harmful for us.

Air contains millions of germs. Germs are very small. We can see them only under a microscope or under a magnifying glass. Germs can cause us become ill.



Microscope device



Germs as seen under a magnifying glass





Moving air is called wind.

A light wind is called **breeze**.

A strong wind is called gale.

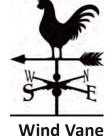
Very strong winds are called **storms**.

Storms can uproot trees and can cause a great damage. Winds have different speeds and directions. We can find out the direction of the wind with the help of a wind vane.











Make a wind vane.

Take a twig (a soft piece of wood like stem of a plant). Take a piece of paper and make an arrow with it.







Paper Arrow Twig

Wind Vane

Fix the arrow on the twig with a pin in such a way that it moves freely. Your Wind Vane is ready. It will tell you the direcon in which the wind is blowing.

Word Treasure

 Smoke : Gas given off due to burning.

: Parcles giv en off by burning things. Ash

• Polluon` : Dirty.

• Microscope: A device that helps to see things which cannot be seen with a naked eye.

 Uproot : Pulled out of the soil.





- We need air to live. Air is made of gases, vapour, smoke, dust and ash etc.
- Moving air is called wind. It is also called breeze, gale or storm.

Clean and Green Exercises





Gap Analyze Take a Test

A. Fill in the blanks. Take help from the box:

	St	torm	wind vane	Smoke	Microscope	water vapour				
	1.		is e	emi ed by c	himneys of factori	es.				
	2.	We can see germs only under a								
	3.	Whenw	e boil water,		is fo	rmed.				
	4.	Very strong wind is called								
	5.	Direcon of wind can be measured with the help of a								
В.	. Answer the following quesons:`									
	1.	What does air contain?								
	2.	Where	loes smoke co	ome from?						
	3.	I for us?								
	4.	Whatis	wind?							
				• • • • • • • • • • • • • • • • • • • •						



C. Find five things from the word search which air contains:

W	Α	Т	Е	R	V	А	Р	O	U	R
L	X	В	V	E	Н	L	R	N	Р	Q
M	R	D	U	S	Т	K	Q	Т	Υ	G
С	W	D	С	0	G	S	Y	S	В	А
Р	0	L	L	U	Т	1	0	N	0	S
Z	Р	W	F	Q	W	J	Т	J	M	E
			D	V	X		M	U	0	S
0	Н	U	R	V	^		IVI			5

D. Collect at least five pictures of things which cause air polluon. Paste them here.







Here are some steps that make air dirty. What will you do to keep it clean? Write in the next column. You can ask your teacher also. One is done for you.

Making air dirty	Part of the plant		
Cung tr ees	Planng mor e trees		
Burning wood, etc.			
Using petrol and diesel			
Burning wastes in field			



If you feel at some place that air is dirty there, what will you do?







Wonder Explorers



What is Wind?

STEM

Air in moon is called wind. Let's learn how it moves and how we can measure its direcon.

Acvity: Make a Wind Vane

- 1. **Task:** Take cardboard, a pencil, a straw, and paper to create a wind vane.
- 2. **Steps:** Cut an arrow shape from the paper.

Attach it to the straw.

Fix the straw on a pencil stuck in a clay base.

Place it outside to observe wind direcon.

3. **Acvity:** Discuss how wind helps in daily life (e.g., flying kites, turning windmills).

Learning

Learn how moving air (wind) is measured and its importance in weather predicon.

Skills Covered: Observation, Creativity, Communication

Little Techies

Arficial In telligence

Ask an AI device like Alexa or Siri:

- 1. What is air polluon?
- 2. How can we reduce air polluon in our daily lives?

Skills Covered: Logical thinking, Digital literacy, Curiosity

Colors and Creations

Art

Draw pictures showing uses of clean air (e.g., plants growing, people playing outdoors) and polluted air (e.g., factories releasing smoke). Use colors to make your drawing lively and present it to the class.

Skills Covered: Creativity, Expression, Collaboration

Language Links

Learn and write the word for "air" in your mother tongue and one other language. Discuss how people in different regions view air as a natural resource.

Skills Covered: Language awareness, Social skills

