



शाहू शिक्षण संस्था (पं.)  
 अध्यापक महाविद्यालय (बी.एड) शहाड (पश्चिम) - ४२१३०१  
 सरावपाठाचे नियोजन  
**Lesson Planing**

विद्यार्थी शिक्षकाचे नांव : Pandey Divya हजेरी क्रमांक : 07  
 (Name of the Pupil-Teacher) (Roll No.)  
 शाळेचे नांव : Parvati English High School इयत्ता : IX<sup>th</sup> तुकडी : \_\_\_\_\_  
 (Practicing School) (Std.) (Div.)  
 पाठ क्रमांक : \_\_\_\_\_ तासिका : \_\_\_\_\_ वेळ : 7:30 am  
 (Lesson No.) (Period) (Time)  
 विषय : Economic घटक : Urbanisation Pollution  
 (Subject) (Unit) (Sub - Unit)

पाठ्यांशामधील समाविष्ट मूल्य व गाभाभूत घटक :  
 (Including Values & Core - elements)  
Scientific Attitude and Protection of environment

अपेक्षित पूर्वज्ञान :  
 (Expected Previous Knowledge) Students know about the Pollution and types of pollution.

प्रस्तावना :  
 (Introduction)  
Teacher asked following questions to the students in classroom.

- 1] What is pollution?
- 2] What are the effect of pollution?
- 3] Explain the various types of pollution.

Students Answers:

हेतुकथन :  
 (Statement of Aim) So, Today we learn about the topic of Pollution and types of pollution.

संदर्भ साहित्य / शैक्षणिक साहित्य :  
 (Reference Material / Teaching Aids) Banner, charts

पाठ्यपुद्दे Teaching Points	उद्दिष्टे व स्पष्टीकरण Specific Objectives & Specification	शिक्षक कृती Teacher's Acitivity	विद्यार्थी Students
Pollution	<p><u>Knowledge:-</u> To help the students to acquire the knowledge of the pollution.</p>		
	<p><u>Explanation:-</u> Students acquired the knowledge of pollution.</p>		
	<p><u>Understanding:-</u> To help the students to understand the types of pollution.</p>		
	<p><u>Explanation:-</u> Students understands the types of pollution.</p>		
	<p><u>Application:-</u> Help the student to give the example of pollution.</p>		

Your diesel trucks need engine maintenance.

Add one PM and HAP to your atmosphere.

**PARTICULATE MATTER (PM)**

Your family reduces their energy use.

**BREATHE THE FRESH AIR AND TAKE ANOTHER TURN.**

You have a headache from CO or toxic exposure.

Lose one turn.

Start here

**GREEN SPACE**

You may remove any one pollutant.

You are careful not to let your car idle for very long.

Remove one CO, PM and VOC from your atmosphere.



Your wood-burning stove off CO, PM and HAPs.

Add one of each to your atmosphere.

**CARBON MONOXIDE (CO)**



Regional wind patterns carry pollutants long distances.

Take one pollutant from each category and add it to your atmosphere.

You buy a new car that uses an alternative fuel or is a low emissions vehicle.

Remove one ozone and PM from your atmosphere.

You use air-conditioning on hot days instead of a fan.

Add one VOC and ozone to your atmosphere.



**HAZARDOUS AIR POLLUTANTS (HAP's)**

Your sink cabinet and garage contains toxic cleaning solvents and other poisons.

Lose one turn.

You regularly have your car tuned up.

Remove one NO<sub>x</sub> and ozone from your atmosphere.

Your local power plant burns coal.

Add one NO<sub>x</sub> to your atmosphere.



**NITROGEN OXIDES and VOLATILE ORGANIC COMPOUNDS (NO<sub>x</sub> and VOCs)**

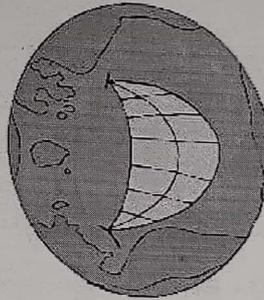
The Clean Air Act passes.

**BREATHE THE FRESH AIR AND TAKE ANOTHER TURN.**

You can't exercise today because high ozone levels make it difficult to breathe.

Lose one turn.

1. Start on a Green Space.
2. Take turns rolling die and moving game pieces. Read aloud and follow instructions on each space you land on. If you land on a pollutant space, add on of that pollutant to your score.
3. Record scores on a tally sheet.
4. The team or player with the lowest score (cleanest air) wins.



# The Clean Air Game



Every member of your family commutes to work alone each day.

Add one ozone to your atmosphere.

**OZONE (O<sub>3</sub>)**

You voice your concerns to your legislators.

Every player may remove one pollutant from their atmosphere.

You ride your bike to work each day instead of driving.

Remove one ozone from your atmosphere.

Start here  
**GREEN SPACE**  
You may remove any one pollutant.

