# **PEER LESSON PLAN: 2**

School:
Class: VIII
No. of Students:
Subject: Science
Topic: Combustion
Textbook:

Average Age: 13+ Teachers Name:
Date:

### **General Objectives:**

1. The pupils will be able to recall different Science related terms, formulas, symbols, rules, principles, laws, etc.

- 2. The pupils will be able to define different Science related I terms.
- 3. The pupils will be able to develop Scientific attitude.
- 4. The pupils will develop powers of thinking and reasoning.
- 5. The pupils will develop a scientific and realistic attitude towards life.
- 6. The pupils will be prepared for elementary as well as higher education in different branches of science, economics, engineering, etc.
- 7. The pupils will develop an appreciation for the significance of the Scientific truth.

## **Specific Objectives:**

#### 1. KNOWLEDGE:

- (i) The students will be able to define combustion, explosion.
- (ii) The students will be able to define the term ignition temperature.

(iii) The students will be able to <u>recall</u> the burning of a candle.

#### 2. UNDERSTANDING:

- (i) The students will be able to <u>explain</u> the different types of combustion.
- (ii) The students will be able to give examples of rapid and spontaneous combustion.
- (ii) The students will be able to <u>differentiate</u> rapid and spontaneous combustion.

#### 3. APPLICATION:

- (i) The students will be able to find out whether a substance is combustible or non-combustible.
- (ii) Pupils will be able to identify the examples of explosion if a set of examples are given.

# **Teaching Aids:**

1. General teaching aids: Chalk, Black Board, Textbook, Duster etc.

# **Introduction:**

Steps	Teacher's Activities	Pupils' Activities
I N T R O	After Entering the classroom (virtual) the teacher will ask the students to mute themselves and turn the videos on and also greet them.  Then, to introduce the topic, the teacher will ask the following questions:	The pupils will turn on their videos and greet the teacher.
U C T I O N	<ol> <li>Name a fuel used in our home?</li> <li>What fuels are used for running automobiles?</li> <li>What is the difference between the burning of a candle and burning of fuel like coal?</li> </ol>	Pupils will try to give answers.

# **Announcement of the Topic:**

After getting the expected responses the teacher will say that – candle burns with a flame whereas coal does not. Similarly, you will find many other materials burning without flame. So, today we shall learn about chemical process of burning which is combustion. The teacher will announce the topic and write it down the blackboard (Virtual).

# "COMBUSTION"

The teacher will ask the students to note down the topic.

## **Presentation:**

Steps	Teaching Point	Teacher's Activities	Pupils' Activities	Learning Outcomes	Microteaching Skill
	1. Definition of	The teacher will say – whatever we burn, they all burn	Pupils will	Pupils will be	Explaining
Р	Combustion: A	in presence of air. Without air or oxygen, a substance	observe and	able to define	
R	chemical process in	will never burn. We know that while a substance burns	listen	combustion.	
E	which a substance	it gives heat, this process of reaction with air to give	attentively.		
S	reacts with oxygen	heat is termed as combustion.			
E	to give heat is				
N	called combustion.	Then the teacher will say write the definition of the			
Т		combustion on the blackboard and ask the pupil to			
Α		note it down.			
Т					
I		<u>Combustion:</u> A chemical process in which a substance	Pupils will write		Blackboard
0		reacts with oxygen to give heat is called combustion.	down the		Writing
N			definition		
		Then the teacher will say that – the substance that		Pupils will be	
		undergoes combustion is said to combustible and the		able to name	
				combustible	

		substance that does not undergoes combustion is said to be non-combustible.		and non- combustible	
		to be non combustible.		substance.	
P		To assess the students learning the teacher will ask the following questions –	Pupils will try to give answer		Questioning
R E S		Name some non-combustible substances?			
E N		2. What is necessary for combustion of a substance?			
A T	2. Definition of Ignition	The teacher will say that – You must have experienced that a piece of catches fire easily when a matchstick Is	Pupils will listen attentively	Pupils will be able to define	Explaining
O N	temperature: The lowest temperature at	bought near it, but a piece of wood does not. This tells us that different substances catch fire at different temperature.		ignition temperature	
	which substances catches fire.	Then the teacher will write definition of ignition temperature and explain it. The teacher will ask the			
		students to write the definition on their notebook.			
		<u>Ignition Temperature:</u> The lowest temperature at which a substance catches fire is called its ignition temperature.	Students will note down the definition	Pupils will be able to compare the	Blackboard writing
		To assess the students learning the teacher will ask the	definition	ignition temperature of	
		following questions –		various material	

		1. Which has the lowest ignition temperature, a piece	Pupils will try to		Questioning.
		of cloth or a piece of wood?	give answer		
	3. Types of Combustion: Three	The teacher will say that – you must have observed that the gas burns rapidly and produces heat	Pupils will listen attentively	Pupils will be able to define	Explaining
P R	types of combustion are –	and light whenever we brought a matchstick neat it.  This type of combustion is termed as rapid combustion.	attentively	rapid and spontaneous	
E S E	(a) Rapid combustion (b) Spontaneous	There are some substances which burns in air at room temperature. This type of combustion is termed as spontaneous combustion.	3	combustion	
N T A	Combustion (c) Explosion.	Then the teacher will write the definition of rapid and spontaneous reaction on the blackboard(virtual).			
T I O N		Rapid Combustion: Rapid combustion is a form of combustion in which large amounts of heat and light energy are released.	Students will write down the definition on their notebook.		Blackboard writing
		Spontaneous Combustion: The type of combustion in which a material suddenly burst into flames, without the application of any apparent cause is called as	then notesook.		
		spontaneous combustion.  After that teacher will say that – we generally have	Pupils will listen	Pupils will be	Explaining
		fireworks on festivals days. It burst with evolution of heat, light and sound. This is also type of combustion which is termed as explosion.	attentively	able to define explosion	

P R E S	Then the teacher will write the definition of explosion on the blackboard and explain it.  Explosion: When a sudden reaction takes place with the evolution of heat, light and sound and a large amount of gas is formed, such reaction is called as explosion.  Students will write down the definition.	Blackboard writing
T A T I O N	To assess the students learning the teacher will ask the following questions —  1. Give one examples of rapid combustion.  2. State one difference between rapid and spontaneous combustion.  Pupils will try to give answer	Questioning

# **Conclusions:**

Steps	Teacher's Activities	Pupils Activities
C O N C	The teacher will consolidate the main points with the students and will write the following question on the blackboard as their homework and will ask the students to note it down.  Homework:	The students will cooperate with the teacher.
L U S I O N	Q1. Make a list of combustible and non-combustible substances.  Q2. List conditions under which combustion can take place.  After students write, the teacher will thank the students and close the virtual class.	Students will write down the homework.

