

## **MODEL LESSON PLAN**

**CLASS: 08** 

**SUBJECT: PS** 

Name of the Teacher: M.SRINIVASA RAO

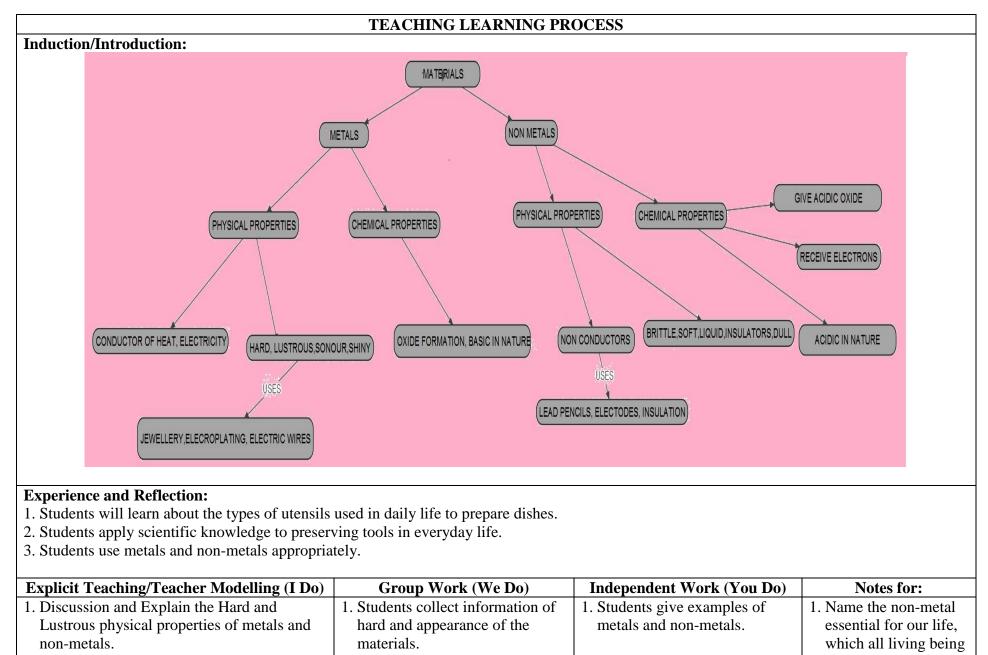
Name of the School: A.G.K.M.H.School, Gudivada

Name of the	Торіс	No.of Periods	Timeline for teaching		Any specific
Lesson/Unit		Required	From	То	information
	Physical Properties of Metals and Non-metals: Hard, Lustrous	2	xx/xx/xxxx	xx/xx/xxxx	
	Malleable, Ductile	2	xx/xx/xxxx	xx/xx/xxxx	
<b>Materials:</b>	Sonorous and good conductors of heat and electricity.	2	xx/xx/xxxx	xx/xx/xxxx	
Metals and Non-Metals	Chemical Properties of Metals and Non-metals: Reaction with Oxygen	3	xx/xx/xxxx	xx/xx/xxxx	
(Chapter-6)	Reaction with Water	2	xx/xx/xxxx	xx/xx/xxxx	
	Reactions with Acids	2	xx/xx/xxxx	xx/xx/xxxx	
	<b>Reactions with Bases- Displacement Reactions</b>	2	xx/xx/xxxx	xx/xx/xxxx	
	Uses of Metals and Non-metals	1	xx/xx/xxxx	xx/xx/xxxx	

Prior Concept/Skills:
1. What metals are cooking utensils made of?

2. What metals are agricultural implements made of?3. What element is in the pencil you use?

Learning Outcomes:	No. of Periods
1. Draws flow chart of physical properties of metals and non-metals.	1
2. Differentiates materials as good conductor of heat and electricity.	2
3. Draws labelled diagram of electric tester.	1
4. Discusses and appreciates stories of scientific discoveries of metals and non-metals.	1
5. Classifies materials based on physical and chemical properties of metals and non-metals.	2
6. Writes word equation for chemical reactions of metals and non-metals with air, water and acids.	1
7. Prepare slides about chemical reactions of metals.	1
8. Relates process with causes of non-metals do not react with water though they may be very reactive in air.	1
9. Explains processes and phenomenon of acidic nature of non-metallic and basic nature of metallic substances.	1
10. Explains processes of displacement reactions of metals.	1
11. Conducts simple investigations to seek answers to queries of Why do we add salt and sugar in pickles and murabba?	1
12. Applies learning of scientific concepts in day-to-day life of using appropriate metals and non-metals for various purposes.	1
13. Draws flow chart of uses of metals and non-metals	1
14. Exhibits creativity in designing, planning, making use of metals.	1



2. Conduct an activity on the malleability of<br/>metals and non-metals with help of iron2. Students describe the<br/>malleability property of2. Students give reasons why are<br/>metals malleable?inhale during<br/>breathing.2. Conduct an activity on the malleability of<br/>metals and non-metals with help of iron2. Students describe the<br/>malleability property of2. Students give reasons why are<br/>metals malleable?inhale during<br/>breathing.

materials.		
3. Students draw the electric tester diagram.	3. Students express the procedure of the activity in their own way.	<ol> <li>Which non-metal is the best conductor of electricity.</li> <li>Which metal has the</li> </ol>
in the ductility property of materials. 4. Discuss "Goldsmiths why gold		highest ductility?
5. Group discussion on all metals exhibits sonorous property.	4. Students write the physical properties of metals and non-metals.	5. Why are metals called sonorous?
6. Students conduct an activity and mentioned the precautions.	5. Students write the chemical equation of the reaction of oxygen with metal with a suitable example.	6. Why non-metals are stored in water?
7. Students observe the nature of metallic oxides.		7. What is formed when oxygen reacts with a non-metal?
8. Students write the chemical equations of sulphur dioxide is dissolved in water sulphurous acid is formed.	6. Students complete the homework.	8. Why do metals react with air?
9. Students conduct an experiments of the reaction of acids with metals.	7. Why don't non-metals react with water?	9. How metals and non- metals react with water?
	8. Students describe the activity and record the precautions.	10. Why do some metals not react with acids?
10.Students collect the information of reactions of metals and non- metals with acids and bases, represent dada in tabular form.	9. What happens when metals and nonmetals react with bases?	11. Which bases do not react with metals?
11. Students conduct an experiment of displace reactions	10. Students complete the homework.	12. Why does displacement take
12. Students draw the flow chart of chemical properties of metals and non-metals.	11. Write the uses of metals and non-metals.	place?
	<ul> <li>diagram.</li> <li>4. Discuss "Goldsmiths why gold is preferred for making jewelry?</li> <li>5. Group discussion on all metals exhibits sonorous property.</li> <li>6. Students conduct an activity and mentioned the precautions.</li> <li>7. Students observe the nature of metallic oxides.</li> <li>8. Students write the chemical equations of sulphur dioxide is dissolved in water sulphurous acid is formed.</li> <li>9. Students conduct an experiments of the reaction of acids with metals.</li> <li>10.Students collect the information of reactions of metals and non- metals with acids and bases, represent dada in tabular form.</li> <li>11. Students conduct an experiment of displace reactions</li> <li>12. Students draw the flow chart of chemical properties of metals and</li> </ul>	<ul> <li>diagram.</li> <li>4. Discuss "Goldsmiths why gold is preferred for making jewelry?</li> <li>5. Group discussion on all metals exhibits sonorous property.</li> <li>6. Students conduct an activity and mentioned the precautions.</li> <li>7. Students observe the nature of metallic oxides.</li> <li>8. Students write the chemical equations of sulphur dioxide is dissolved in water sulphurous acid is formed.</li> <li>9. Students conduct an experiments of the reaction of acids with metals.</li> <li>10.Students collect the information of reactions of metals and non- metals with acids and bases, represent dada in tabular form.</li> <li>11. Students conduct an experiment of displace reactions</li> <li>12. Students draw the flow chart of chemical properties of metals and non-metals.</li> </ul>

Check For Understanding Questions	TLM's (Digital + Print)				
1. Factual:					
1. Why metals are used in ringing bells?	1. Used prepared				
2. Is rust acidic, basic or neutral in nature?	Quiz paper.				
3. Why are wooden or plastic handles used for cooking utensils?					
	2. Utilized digital				
2. Open Ended/Critical Thinking:	classroom.				
1. What happens when a copper vessel is exposed in moist air?					
2. A doctor prescribed a tablet to a patient suffering from iron deficiency. The tablet does not look like iron. Why?	3. Provide video links				
3. Why are sodium and potassium stored in kerosene?	QR codes, DIKSHA				
	App.				
3. Student Practice Questions & Activities:					
1. Can you store lemon pickle in an aluminium utensil? Explain.	4. You Tube video's link				
2. What happens when					
(a) Dilute sulphuric acid is poured on a copper plate?					
(b) Iron nails are placed in copper sulphate solution? Write word equations of the reactions involved.					
3. What are the differences between metals and nonmetals according to their physical properties					
4. What is malleability? Name two most malleable metals.					
Assessment:					
1. Collect the information of the uses of metals and non-metals in daily life.					
2. Explain that metals are good conductors of electricity with the help of an activity.					
3. When an iron knife is kept dipped in blue copper sulphate solution the solution changes to light green. Why?					

## SIGNATURE OF THE TEACHER

## SIGNATURE OF THE HEADMASTER

## VISITING OFFICER WITH REMARKS