



Srini Science Mind
Abdul Kalam Physical Science Group



NEW

8th class

PHYSICAL SCIENCE

MODEL LESSON PLAN



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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 Lesson/Unit	Topic	No.of Periods Required	Timeline for teaching		Any specific information
			From	To	
Some Natural Phenomena (Chapter-9)	Lightning	1	xx/xx/xxxx	xx/xx/xxxx	
	Charging by Rubbing	2	xx/xx/xxxx	xx/xx/xxxx	
	Types of Charges and Their Interaction	2	xx/xx/xxxx	xx/xx/xxxx	
	Transfer of Charge	2	xx/xx/xxxx	xx/xx/xxxx	
	The Story of Lightning	1	xx/xx/xxxx	xx/xx/xxxx	
	Lightning Safety	1	xx/xx/xxxx	xx/xx/xxxx	
	Earthquakes - What is an Earthquake?	2	xx/xx/xxxx	xx/xx/xxxx	
	What Causes an Earthquake?	3	xx/xx/xxxx	xx/xx/xxxx	
	Protection against Earthquakes	1	xx/xx/xxxx	xx/xx/xxxx	

Prior Concept/Skills:

1. What are examples of natural phenomena?
2. What type of charges are transferred on rubbing?
3. Which country faces the most earthquakes?

Learning Outcomes:

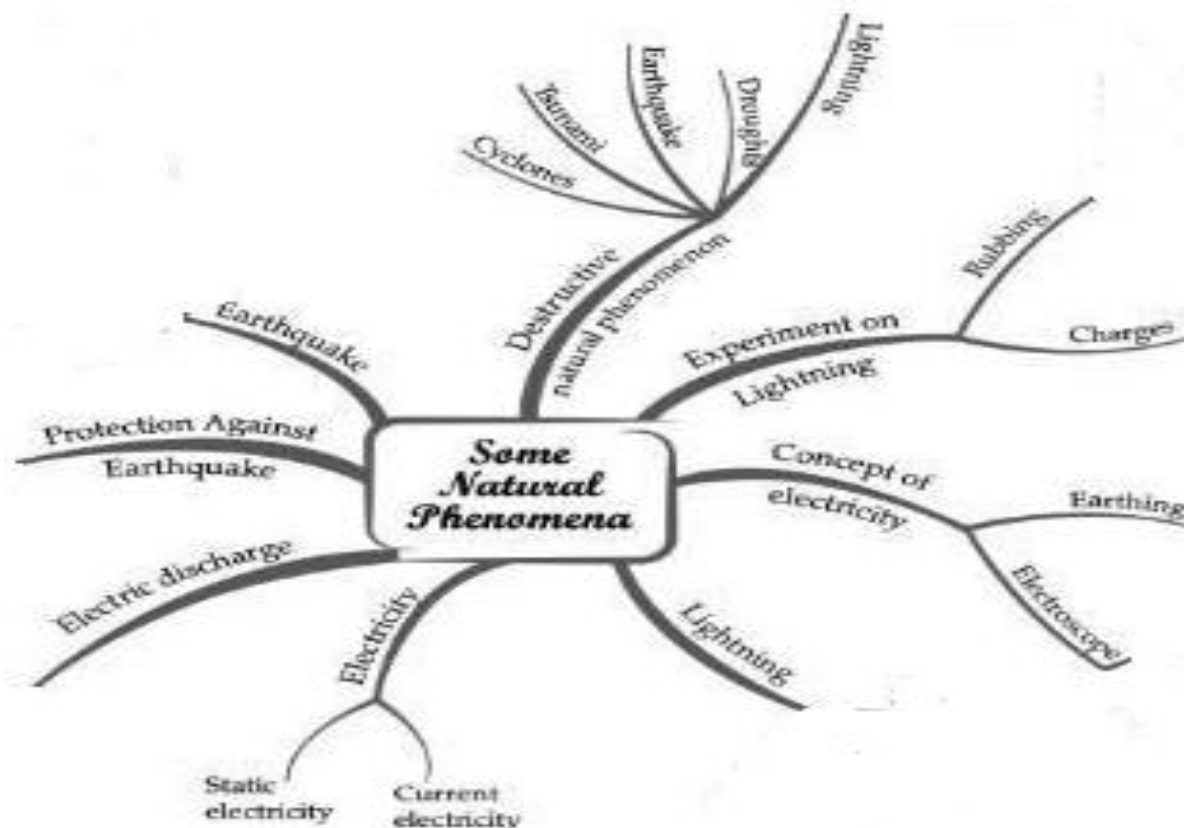
1. Discusses and appreciates stories of Benjamin Franklin.
2. Relates processes and phenomenon of transfer of charge.
3. Construct model using materials from the surroundings and explains the working of the electroscope.
4. Applies learning of scientific concepts in day to-day life, protection from lightning
5. Draws flow charts of do's and don'ts during a thunderstorm.
6. Applies learning of scientific concepts in day to-day life of lightning conductors used to protect buildings from the effect of lightning
7. Explains processes of earth quake
8. Conducts simple investigations to seek answers to queries of TSUNAMI
9. Draws labelled diagram of seismograph
10. Applies learning of scientific concepts in day to-day life, protection from earthquake.
11. Prepare slides about earth quake incidents.
12. Exhibits creativity in designing, planning in construction of buildings to protect from natural phenomena

No. of Periods

- 1
- 2
- 1
- 2
- 1
- 1
- 2
- 1
- 1
- 1
- 1
- 1

TEACHING LEARNING PROCESS

Induction/Introduction:



Experience and Reflection:

1. Students will learn about property and life loss caused by some natural phenomena that occur in daily life and beware of future occurrences.
2. Students take proper precautions in building construction to withstand future earthquakes.
3. Students will know the uses of earthing and must take appropriate measures to ensure earthing in house construction.

Explicit Teaching/Teacher Modelling (I Do)	Group Work (We Do)	Independent Work (You Do)	Notes for:
1. Discussion on Lightning and introduction of Greeks history about sparks.	1. “Cyclones can cause a lot of damage to human life and property” – Group discussion	1. Students give examples of some natural phenomena.	1. Is flood a natural phenomenon?

<p>2. Conduct activities on charging by rubbing.</p> <p>3. Explain the process of charging by rubbing.</p> <p>4. Explain and conduct an activity on types of charges and their interaction with help of inflating two balloons, woolen and pen refills, polythene.</p> <p>5. Explain the concept of unlike charges attract each other and like charges repel each other.</p> <p>6. Explain the transfer of charge through a simple electroscope by using a bottle, Aluminium foil, cardboard and a paper clip.</p> <p>7. Discussion and explain the story of lightning.</p> <p>8. Discussion and explain do's and don'ts during a thunderstorm.</p> <p>9. Explain the lightning conductors.</p> <p>10. Discussion on earthquakes.</p> <p>11. Explain the causes of earthquakes.</p> <p>12. Discussion and explain the working of seismograph.</p>	<p>2. Students conduct an activity</p> <p>3. Students collect the information about charging by rubbing.</p> <p>4. Students conduct an experiment on the interaction of charges.</p> <p>5. Students describe the attraction and repulsion of two charges.</p> <p>6. Students make a simple electroscope and explain how to charge transfer.</p> <p>7. Students collect the information about recent cyclones, earthquakes and thunderstorms which caused major damage.</p> <p>8. A discussion on the role we should play when it comes to lightning</p> <p>9. Students draw the structure of the earth and its parts</p> <p>10. Students identify which places are in the danger zone on the India map.</p> <p>11. Students explain the working of a seismograph</p>	<p>2. Students give examples of charged objects.</p> <p>3. Students give reasons about why rubbing formed a charge on the objects.</p> <p>4. Students collect the balloons, woolen cloth, pen refills and polythene articles.</p> <p>5. Students complete the homework.</p> <p>6. Students draw the simple electroscope.</p> <p>7. Students will read the story of Lightning.</p> <p>8. Students write precautions to be taken in case of thunderstorms.</p> <p>9. Students will give a reason, Why are lightning rods tall?</p> <p>10. Students frame any two questions on the causes of an earthquake.</p> <p>11. Draw a neat diagram of a Seismograph</p>	<p>2. What happens when two objects are rubbed against each other?</p> <p>3. How many types of charges are gained by rubbing objects?</p> <p>4. What happens when a straw is rubbed with a sheet of paper?</p> <p>5. How does rubbing two objects cause equal and opposite charges?</p> <p>6. What are the uses of an electroscope?</p> <p>7. What causes lightning?</p> <p>8. What are 3 tips for lightning safety?</p> <p>9. What is the best conductor for lightning?</p> <p>10. What are the main causes of earthquakes?</p> <p>11. What is the working principle of seismograph?</p>
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13. Discussion and explain of protection against earthquakes	12. Students watch a world wild documentary of effect of earthquakes	12. Students will collect information on earthquakes	12. Which is the most earthquake-resistant structure?
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Check For Understanding Questions		TLM's (Digital + Print)
<p>1. Factual:</p> <ol style="list-style-type: none"> 1. Can thunderstorms occur without lightning? 2. Is cyclone is not a natural phenomenon? 3. What type of force is lightning? <p>2. Open Ended/Critical Thinking:</p> <ol style="list-style-type: none"> 1. Can earthquakes be prevented? 2. Why do thunderstorms happen at night? 3. What are the important considerations in making a house more earthquake resistant? <p>3. Student Practice Questions & Activities:</p> <ol style="list-style-type: none"> 1. Suggest three measures to protect ourselves from lightning. 2. Sometimes, a crackling sound is heard while taking off a sweater during winters. Explain. 3. Suppose you are outside your home and an earthquake strikes. What precaution would you take to protect yourself 4. Name the scale on which the destructive energy of an earthquake is measured. An earthquake measures 3 on this scale. Would it be recorded by a seismograph? Is it likely to cause much damage? 		<ol style="list-style-type: none"> 1. Used prepared Quiz paper. 2. Utilized digital classroom. 3. Provide video links QR codes, DIKSHA App. 4. You Tube video's link.
<p>Assessment:</p> <ol style="list-style-type: none"> 1. Describe with the help of a diagram an instrument which can be used to detect a charged body 2. What causes an earthquake? 3. Explain the precautions to be taken during lightning or thunderstorm. 		

SIGNATURE OF THE TEACHER

SIGNATURE OF THE HEADMASTER

VISITING OFFICER WITH REMARKS