

MACRO-TEACH RECORD

PEDAGOGY OF PHYSICS

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Period plan - I

Name of the student teacher: S.N.S Sowmya

Class: 7

Roll no: 11

Subject: Science

Name of the unit: climate changes - (weather conditions)

Name of the topic: changes in climate & Atmospheric changes

Name of the Supervisor:

Date: / /

Time: 45min

Academic standards Achieved

1. Conceptual understanding

- we will know the meaning of climate
- Surroundings are interlinked with climate, to know the relation between them.
- To know from where the weather reports come.
- To know the new things such as temperature, rainfall etc.

2. Questioning and Reasoning

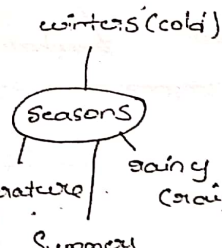
- Students questioning about temperature and rainfall.
- Students question how the changes takes place in the weather.

→ when do you expect rains.

3. Gathering information techniques and related projects:-

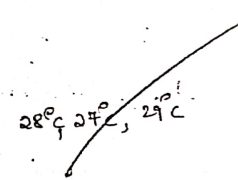
→ By collecting the weather reports from different newspapers.

→ To know the minimum and maximum temperature in the present day

S.No	Steps	Teaching Learning process	Black board work	T.L.M
1.	Greetings	T: Good Morning students P: Good Morning teacher T: How are you students? P: Fine sir		Black board
2.	Mind Mapping with questioning	T: How is the brightness of sun in summer? P: Too high & bright T: How is the climate in winters? P: It will be cold T: How is the climate in rainy season? P: Rainfall will be heavy T: Now the changes in climate, temperature is called as? P: "changes in weather conditions"		Black board
3.	Announcement of the topic	T: Now we will learn "how the changes in weather" takes place?	"change in weather"	

S.No	Steps	Teaching Learning process	Black board work	T.I.M
I				
1.	Reading the text book of identifying the keywords	T: Raju Read the paragraph from page no. 61 P: Raju will start reading the paragraph	climate, Rainfall, heat in atmosphere, temperature, feel, wetness	Text book
2.	Group Discussion	T: Students not discuss the handout in this lesson P: started discussing in the peer group	Atmosphere, Rainfall, temperature, sunrise, sunset, humidity	
3.	Discussion/questions on the content	P: what is the meaning of atmosphere T: The place which consists of heat, cold, wind, rains etc are considered to be as atmosphere P: what is the meaning of weather conditions T: Discussing about the report about the changes in atmosphere which is going to happen or the changes which have already taken place is called atmosphere P: what is the meaning of temperature T: talking about the heat in a particular place is called temperature P: what is the meaning of sunrise T: The time when the sun rises is called as sunrise	Atmosphere Report on weather or Atmosphere Temperature Sunrise	Black board text book Textbook Black board
II				
1.	Organization of Activities	T: write a weather report, how the weather is going to be in upcoming 3 days in village		

S.No	Steps	Teaching Learning process	Black Board work	T.L.M (5)
2.	Discussion of Activity : 1	P: what is the meaning of max temperature T: The maximum heat in the day. P: what is minimum temperature? T: The minimum heat in the day T: In the atmosphere the changes different continuously. P: when the clouds are in sky will it rain completely T: chances to rain will be more.		Graph sheet Black board
Activity : 2	Discussion of Activity	plot the temperatures on the graph sheet observed in a week P: what are we going to plot on x-axis T: Days P: what are we going to plot on y-axis T: Temperature P: what are the units. How is it measured? T: centigrades (°C)	x-axis y-axis Centigrade	Graph Black board
IV	Discussion of Demonstration	P: what is the meaning of atmosphere? P: The place which consists of heat, cold, wind, rain etc are considered to be as atmosphere T: What all things disclosed in the table?	Atmosphere max temp, min temp, wind, sunset, sunrise	Graph, max temp, rainfall etc; things will be considered:

S.No	Steps	Teaching Learning process	Black Board work	T.L.M
		P: minimum temp, max temp, rain fall, wind, sunrise, sunset T: Is the temperature, wind and other things remains the same everyday? P: NO T: what is the maximum temperature in the table P: 28°C, 27°C, 29°C T: Teacher will tell the conclusion of the topic T: Students tell me what all you have learned in the class today. S₁: The things like heat, cold, wind, rains together at a place is called atmosphere S₂: The temperature keeps to on changing in the atmosphere. S₃: The heat in a place is called temperature S₄: The impact of temperature will be on our lives	 28°C, 27°C, 29°C Atmosphere Temperature	Black Board
IV	Conclusion of Evaluation			

Period plan - 2

Name of the student/teacher :- S.N.'s Saumya

Class :- 7

Roll no :- 11

Subject :- Science

Name of the unit :- climate changes - weathering conditions

Name of the topic :- measuring the things in atmosphere

Name of the Supervisor :-

Date :-

Time :- 45 min

Academic standards achieved :-

1. Conceptual understanding :-

- Knowing about the weather forecast and weather report.
- Knowing the difference between the minimum and the minimum temperature.
- To measure the minimum and maximum temperature using the tools.
- To know the how to measure the temperature.

2. Questioning and Reasoning

- knowing the reasons why the atmospheric temperature changes.
- knowing how to measure the atmospheric temperature using the tools.

→ Try to make a lesson how to measure temperature (not the max temp).

3. Experimentation:-

→ How to measure the air temperature using the thermometer.

→ To plot the reading on the graph sheet

4. Gathering the information techniques and objects related:-

→ Gathering the temperature from different places and plot them on the graph-sheet.

S.No	Steps	Teacher Learning process	B.B.W!	T.L.M
1.	Greeting	T: Good Morning Students. P: Good Morning Teacher T: How are you students. P: Fine Teacher		
2.	Mind mapping with questioning	T: How do we measure length P: scale T: what is the unit for length P: cm, metre T: what are things consists in atmosphere P: Temperature, humidity, climate, wind T: can we measure these P: You can be measured		Scale Black board
3.	Announcement of the topic	T: Now we will come to know the things present	"Things in atmosphere"	

S.No	Steps	Teaching Learning process	B.B.W	T.L.M
II		in the atmosphere and how to measure it.		
1.	Reading the text book & identifying the key words.	T: stand up read the paragraph from pg 62 P: student will start reading the paragraph T: Now take out the keywords from the paragraph P: weather forecast, weather report, thermometer, Alcohol, chemicals	weather forecast, weather report, thermometer, Alcohol, chemicals	Black board Text book
2.	Group Discussion	T: Now start discussing about the keywords P: started discussing		
3.	Discussion/Question on the content	P: what do you mean weather forecast? T: The thing which predict and tell us about the temperature in the atmosphere is called forecast. P: what is the meaning of weather report? T: which tell us about the temperature which is already there in the atmosphere is called weather report. P: how can we say that the atmosphere is cold or hot? T: It depends of the days temperature P: what is the use of thermometer? T: The tool which tells us about the	weather Report weather Report Temperature Thermometer	Black board Text book T.L.M

S.No	Steps	Teaching Learning process	B.B.W	T.L.M
III 1.	Organisation of activity	maximum and minimum temperature. Example How to measure the minimum & maximum temperature in the atmosphere? T: using the thermometer we use to measure the temperature.	using thermometer we have to measure the temperature.	thermometer, mini-temp, maxi-temp, Textbook, Black board.
2.	Discussion on activity	P: why we use mercury in the thermometer? T: To expand and decrease the heat in the atmosphere using the thermometer we use mercury. P: why is it named as max thermometer? T: Because it has been discovered by a person called max.	mercury	thermometer
IV	Discussion & Demonstration	P: using a thermometer can we measure the temperature of any place? T: yes, we can measure. P: will the weather report people using this thermometer? T: yes, by using this tool, they will measure the temperature. P: when the I₁ indicator glows high? T: when it reaches to the maximum temperature.	I₁ indicator max temperature	max thermometer min thermometer etc.

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
V	Conclusion and Evaluation	P: when the I_2 indicator goes up? T: when it reaches the min temperature P: when will I_1, I_2 will come to their standard positions. T: with the use help of magnet it comes to the normal position.	I_2 indicator minimum temp weather Report	Black board
		T: students make the note of the points you have learned today? P: The tool which tells us about the recorded temperature is called "weather report". P: The tool which records the future temperature is called "weather forecast". T: Answer the following questions P: Rain guard P: Afternoon P: Summer Season	weather Forecast 1. what things we have in atmosphere? 2. when the temp will be high? 3. when the temp will be high which season	Text book Thermometer

period plan-3

Name of the student teacher :- S. N. S. Soumya

Roll no :- 11

class :- 7

Subject :- science

Name of the topic :- Rain gauge

Name of the unit :- Atmosphere - climate condition

Name of the Supervisor :-

Date :-

Time :- 45 min

Academic standards Achieved

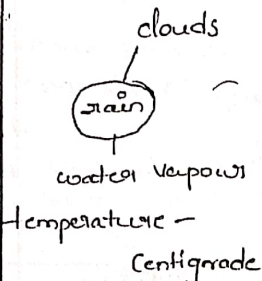
1. Conceptual understanding

- we will know the measure of rain.
- uses of the Rain gauge.
- Difference between rain and rain gauge.
- How to measure the thickness of rain

2. Questioning and Reasoning

- Asking the uses of the Rain.
- How does the rainfall happens.

- To make assumptions on how are we going to measure the rainfall.
- The name of the tool to measure the rain
3. Experimentation, Researching on Land:-
- using a beaker, filter & making a "Rain Guard" to measure the rainfall.
4. Acquiring the information techniques project work:-
- Gathering the information about how the farmers use the rain water.
- Discussion about the festivals celebrated by the farmers.
5. using & consuming the concept in daily life
- using the rainwater in daily life.
- "knowing how to use the rain 'Gauge' in one life."

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
I	1. Greetings	P: Good Morning Madam T: Good Morning Students T: How are you students P: Fine teacher		Black Board
2.	Mind Mapping with questioning	T: Students how does rainfall? P: Because of clouds. T: How does clouds form P: Because of the water vapour T: Can we measure the rainfall P: Yes we can measure		

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
II 1.	Announcement of the topic Reading the text book of Identifying the key words.	T: How? P: I don't know T: Today we will talk about the topic named "Rain Guard" T: Students, Every one open pg. 65 P: started reading the paragraph T: Discuss the handwritings from the paragraph P: will say the handwritings	Rain Guard Rain guard, pallano meter, Sharpness	Black board
2.	Group Discussion	T: Students form into groups & discuss about the handwritings. P: They will start discussing.		Textbook
3.	Discussion/question on the content	P: what is the meaning of rainfall? T: The amount of rain in a particular place is known as rainfall. P: what is the meaning of humidity? T: Measuring the wetness in the atmosphere is called humidity P: what is the meaning of rain gauge? T: To measure the speed of the rain we use rain gauge we call it as pallano meter	Rainfall units :- centimeter Humidity	
III 1.	Organisation of Activity	Task:- use beaker & filter to make a rain gauge to measure the rain.	use "Rain Gauge" & measure the amount of rain	Textbook, Beaker, filter, Black board

S.NO	Steps	Teacher Learning process	B.B.W	T.L.M
2.	Group Discussion on Activity	P: What should be the capacity of the beaker? T: 10cm P: How can we find the thickness of rain? T: If the depth is 1cm then we can say that P: To know the amount of rain, what kind of technique will be used by the news reporters? T: Rain Gauge P: Can we measure the amount of rain using the thing prepared by us? T: Yes we can.	Beaker's capacity 10cm Rain Gauge	Black board Textbook
IV 3.	Discussion of Demonstration	T: Students write about the things we have discussed in the class so far? stu 1: To know the amount of rainfall, people use rain gauge. stu 2: Rain gauge is called as pallano meter. T: Answer the questions P: 10cm P: pongal	Rain Gauge pallavano meter Anthrometric	Rain Gauge Black board
V	Conclusion of Evaluation		Rain gauge pallavano meter ① How much should be the length of the beaker? ② Tell me the festival celebrated by farmers	
2.40	2.40	10cm 10cm 10cm	B.B.W	T.L.M

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period plan-4

Name of the student teacher :- S. N. S. Sastry

class :- 7th

Roll no :- 11

Subject :- Science

Name of the unit :- Atmosphere + climate conditions

Name of the topic :- Direction of wind

Name of the Supervisor :-

Date :-

Time :- 45 min

Academic standards Achieved

1. Conceptual understanding

- what is the difference between wind and air.
- what are the reasons behind blowing the air.
- Direction of the flow of the air.
- How does the air travel from one place to the other.

2. Questioning and Reasoning

- By questioning how does the air travel from one place to the other.
- what is the relation between the wind and the air.

3. Experimentation :-

→ Anemometer is the tool to measure the direction of the air

S.No	Steps	Teacher Learning process	B.B-W	T.L.M
I	1. Greetings	P: Good morning Teacher T: Good morning students T: How are you students	East West North South Directions "Direction of air"	
	2. Mind Mapping with questioning	T: How many directions do we have and what are they? P: They are east, west, north, south T: In which direction does the air flow P: I can't say	"Direction of air"	
	3. Announcement of the topic	T: Now we are going to learn about the "Direction of the wind."		
II	1. Reading the text book & identifying the keywords	T: Mahesh take out pg no. 66 and read the paragraph P: He will start reading T: underline the difficult words from the paragraph. P: wind speed of wind, Anemometer, cardboard	wind speed of wind Anemometer cardboard	Black board Text book
	2. Group Discussion	T: students form as a group & discuss the hard words. P: They will start discussing the hard words		Blackboard

Sub	Steps	Teacher Learning process	B.B.W	T.L.M
3.	Discussions/ questions on the content	P: wind meaning T: The direction of flow of air is called wind P: what is the meaning of speed of wind. T: The speed at which the air flows is called wind. P: Anemometer meaning? T: The tool used to tell the flow of wind is called Anemometer. P: what is the meaning of cardboard? T: The thing which is used to make a anemometer is called cardboard.	wind Speed of wind Anemometer Direction of wind Cardboard	Black Board Tenitbook
II	1. Organisation of Activity	Task: By using the cardboard make a Anemometer which can find out the flow of air.	To find out the direction of air	
2.	Discussion on Activity	P: Anemometer is made of? T: Help of cardboard P: Anything else can we make it T: which are light in weight Example thermocol P: what is the use of Anemometer T: To know the direction of wind. P: how do the weather report news comes to know the direction of the wind. T: with the help of anemometer.	Anemometer cardboard Thermocol Speed of air	cardboard Thermocol

S.No	Steps	Teacher Learning process	B.B.W	T.L.M (10)
IV	Discussion of Demonstration	P: In which direction does the Anemometer made of T: It will be in the form of a bow or arrow P: can we exactly find the direction of wind using Anemometer. T: yes we can P: Is the flow of wind remains same for the whole day T: No P: Is the speed of wind remains same T: No	Arrow of a Bow Anemometer No No Speed of wind No	Black board Text book
V	Conclusion of Evaluation	T: Students → answer the questions written on the board Student 1: wind S2: Anemometer S3: card board T: Tell me the things you learned in class S1: The shape of the anemometer is like a arrow S2: The direction of the air is called wind S3: As the speed of the wind increases it can also lead to cyclone	1. what is the direction of the air called? 2. what is the tool used to measure the wind? 3. what does the Anemometer made of?	Black board

Period plan - 5

Name of the student teacher :- S.N.S. Sawanya

Roll no :- 11

class :- 7th

Subject :- science

Name of the unit :- climate changes

Name of the topic :- ~~humidity~~

Name of the Supervisor :-

Date :-

Time :- 45 min

Academic standards Achieved

1. Conceptual understanding

- They will come to know the meaning of humidity.
- In which places does the humidity will be more ~~is~~ what they learn.
- Giving the examples where the humidity is more.
- what are the condition to have high humidity in nature.

2. Questioning and Reasoning

- what is the reason to increase the humidity in atmosphere
- Knowing the different focus of humidity

3. Experimentation

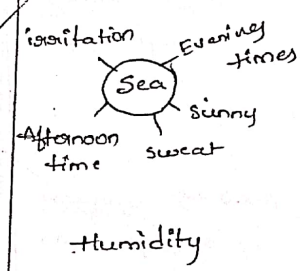
→ To do a Experiment to know how does a water change into vapour

4. To know the information Techniques

→ To write a Survey on the state of humidity in different places of India.

5. Using the Experimental on the real life

→ To know what clothes to wear in the Summers to be so that we can be away from the humidity

S.No	Steps	Teacher Learning Process	B.B.W	T.L.M
I 1.	Greetings	T: Good Morning Students P: Good Morning Teacher T: How are you all today P: Fine, thank you mam		
2.	Mind mapping with Questioning	T: Students do you all like sea P: Yes mam T: How does sea looks like at Evening time. P: Very pleasant to watch T: So can you all tell me when it sunny & if you are at the beach how do you all feel? P: We feel sweetly and irritating T: Do you all know the reason why? P: We don't know mam T: The reason behind it is humidity.		Black Board

S.no	Steps	Teacher Learning process	B.B.W	T.L.M
3.	Announcement of the topic	T: Today we are going to learn about the humidity	Humidity	Black Board
II 1.	Readings textbook & Identifying the keywords.	T: Rajesh, get up and read the paragraph about humidity. P: student will start reading		
		T: Now underline the keywords from paragraph P: cotton clothes, humidity, sea coast	Cotton clothes, humidity, sea coast	Black Board Text Book
2.	Group Discussion	T: students now form into groups & start discussing about the hard words.	+ Humidity Cotton clothes	Textbook
3.	Discussion/questioning of the content	P: what are the uses of cotton clothes T: These are clothes we prefer to wear in summers because they will absorb the sweat and keeps our body cool.		Black Board
		P: when does the humidity in the air will be more? T: Summer Season	Summer Season	
		As it will be too hot, the water changes the vapour & thus the amount of humidity increases.		
III 1.	Organisation of Activity	Task: Let's us do a Experiment to show how the water changes into vapour.	"Experiment on how water changes to vapour"	"Business, be candle, water, stand."

S.No	Steps	Teacher Learning process	B.B.W	T.L.N
2.	Discussion on Activity	P: why does the bubbles have come? T: why we boil the water, the oxygen inside the water comes out. P: why does the water level in the oceans needles in summers. T: As the water change into vapour P: where does it go after changing into Vapour? T: It will mix in the air. P: Does the sea water also needles in the summer? T: Because of the heat the water changes the vapour. P: The one who stay near the sea coast do they sweat more in the summers? T: Yes. As the water turns into vapour and it get mixed in the air. Eg: In summers when compared to the people in vizag sweat more. P: In summers what kind of clothes are we supposed to use? T: Cotton clothes!	Bubbles Oxygen Vapour where does the water go? (Vapour) Vapour Hyderabad Vizag Cotton clothes	Black Board Textbook Black Board Cotton

S.no	Steps	Teacher Learning Process	B.B.W	T.L.M
IV	Conclusion & Evaluation	Because they absorb the sweat. Q: When does the level of humidity remain alone in air? T: Summer season. T: Student Let us revise the points, which we have learned in the class today Stu1: As the water vapour increases the humidity also increases. Stu2: Does the level of humidity in Summers will be move? T: yes it will be move? T: Lets start answering to the questions written on the board Stu3: It get mixed in air Stu4: Hyderabad. Stu5: cotton clothes As they absorb the sweat and keeps our body cool.	humidity Summer season 1. where does the water vapour go? 2. In Summers which place remains cool? Hyd & Vizag 3. which kind of clothes we are supposed to wear in Summers	

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period plan-6

Name of the student teacher :- S.M.S Saanya

Roll no :- 11

class :- 7

Subject :- Science

Name of the unit :- Atmosphere - climate conditions

Name of the topic :- climate conditions

Name of the Supervisor :-

Date :-

Time :- 45min

Academic Standards Achieved

1. Conceptual understanding :-

- They will come to know the meaning of climate conditions.
- what is the relation between weather and climate conditions.
- what is the relation between weather and climate condition
- what are the effects on climate conditions.

2. Questioning and Reasoning the concept

- To come to a conclusion that the climate and the weather conditions differ from place to place.
- They will question the meaning of climatic conditions.

→ To understand and know how the climate conditions takes place.

3. Experimentation

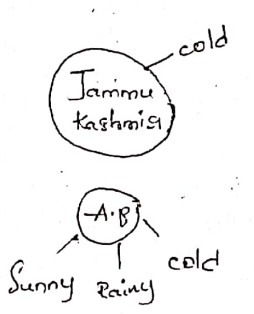
→ To Experiment to know-how and why the climate conditions differ from place to place.

→ Visiting two places and do a survey on the climate condition.

4. using the daily Life

→ As the climate condition differs from place to place we generally live in a place.

→ On Basing of the climate conditions discuss about the way of living of the human beings who live there.

S.No	Steps	Teacher Learning process	B.B.W:	T.L.M
I.	Greetings	P: Good Morning man T: Good Morning children		
2.	Mind Mapping with questioning	T: Tell me the weather condition in Kashmir P: It will be very good T: tell me the weather conditions in A.P P: The climate conditions like Sunny, cold, rainy T: why it changes from place to place P: Because of the climate conditions.		Black Board
3.	Announcement of the topic	T: Now I will talk about the climate conditions.	climate conditions	Black Board
II	Reading the textbook & identifying the key words	T: Ramya open pg 68 and read the paragraph P: she will start reading	Temperature	Black Board

S.No	Steps	Teacher Learning process	B.B.W	T-L-M
		P: she will start reading T: Now all of you underline the headings. P: Temperature, Rainfall, wind, humidity T: form into the groups and discussion the headings. P: They will start discussion.	Rainfall wind - Humidity Temperature, Rainfall, wind, humidity, climate conditions.	Text Book Black Board Text Book
	2. Group Discussion			
	3. Discussion/Questions on the content	P: what do you mean by temperature. T: The amount of heat in a place is called the temperature. P: what do you mean by rainfall T: The amount of rainfall in the place P: what is the meaning of weather T: The things which deals with heat, sun, cold, wind etc is called as the weather P: what do you mean by climate conditions T: A temp in particular place is called climate conditions	Temperature Rainfall - Humidity Temperature heat cold wind Rain	Black Board Text Book i - i - vi
III	1. Organization of Activity	* Compare the two places called Raama Gundum & Aarogyavaram & diff the weather conditions	knowing the climate conditions	
	2. Discussion on Activity	T: In which place the temperature is high Raama Gundam or Aarogyavaram P: Raamagundum	Rama Gundum Aarogya varam	

S.No	Steps	Teacher Learning process	B.B.W	T-LM
IV	Discussion & Demonstration	T: In which places does the rainfall is high. P: what are the units to measure rainfall P: millimeters. T: what are the units to measure rainfall P: Centigrade (°C), Fahrenheit (°F) P: will the temperature of one certain place remains the same always. T: NO it changes But the temperature in a particular month and the temp in the next year in the same month can be same. P: will be similar conditions in a particular place remains the same Bangalore — It will be dry Kolkata — Little cold Rajasthan — Hot	M.M Centigrade (°C) Fahrenheit (°F) Temperature 25 years Climate Conditions	Temperature Tool to measure the table of rainfall Black Board Text Book
V	Conclusion & Evaluation	T: Let us write the summary of the lesson P: The climate condition change in 25 yrs P: climate depends on heat, cold, rainfall P: It depends from place to place T: students answer the questions S1: as sun rays fall straight S2: June S3: The students food, clothing depends upon the climate conditions	① How come the Earth becomes hot ② when can we expect heavy rainfall ③ How does climatic conditions show impact on people	Black Board Text Book

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period plan-7

Name of the student teacher :- S.N.S Sounarya

Roll no :- 11

Subject :- science

class :- 7th

unit :- Atmosphere climate conditions

topic :- Atmosphere - Life style

Supervisor :-

Date :-

Time :- 45 min

Academic standards Achieved :-

1. Conceptual understanding

- knowing about the atmosphere conditions
- to know how the atmosphere conditions show impact on our life style.
- what is the relation between the atmosphere and climate conditions.

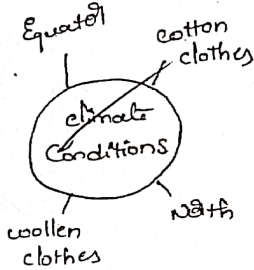
2. Questioning and Reasoning

- what kind of impact will be there on our life style because of atmosphere
- why does the climate conditions differ from place to place
- Relation between the climate conditions and our life style

3. Applying on the Life style

- make a survey and write the report of the climate conditions in your place
- How can we talk about the life style of a people depending on climate conditions.

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S.No	Steps	Teacher Learning process	R.B.W	T.L.M
I.1.	Greetings	P: Good Morning teachers T: Good Morning students		
2.	Mind Mapping with questioning	T: The people who stays in centre of the earth, what kind of clothes do they wear? P: cotton clothes T: The places which are cold, what kind of clothes do they wear? P: wollen clothes T: Will the climate conditions impact on our living & Life style P: yes		Black Board
3.	Announcement of the topic	T: Today we are going to learn about the topic called "Impact of climate conditions on our life style."		Black Board
II.1.	Reading the text Book & identifying the keywords	T: students take out pg 68 and read the paragraph P: students will start Reading T: Now underline the keywords P: Kashmiri,ooty, Atmosphere	Kashmiri, ooty, -Atmosphere	Text Book

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
2.	Group Discussion	T: Now make into groups and start discussing the handwritings. P: Students start discussing.		Text Book
3.	Discussion/questions on the content.	P: A person who got used to one particular climatic conditions, can he fit into other place? T: Yes, but he have to stay in new place for few days that he gets habituated to the new climate. P: If it rains in the month of June in Ap? Then how the climatic conditions will be at Rajasthan. T: No it differs from place to place Task: make a table and make the observation of the climatic conditions	Atmosphere Kolkata - Humidity Rajasthan - Hot	Text Book Text Book Black Board
III	1. Organization of Activity	P: The atmosphere in all the places in India remains same T: No P: How does the climate will be in Kolkata in the month of June? T: It will be rainy	Make a table and note down the temp	
	2. Discussion on Activity	P: How does the climate will be in the month of June in Rajasthan. T: It will be hot P: How does the climate in Jammu Kashmir	Kerala - Rainy Rajasthan - Hot Kolkata - Humidity Jammu & Kashmir - cold	Text Book Black Board Atmosphere Table Atmos

S.No	Steps	Teacher learning process	B.B.W	T.L.M
IV	Discussion of Demonstration	T: It will be cold T: which place in the whole India, which country climate will be cold? P: Jammu - Kashmir P: on what basis in a particular place the house, the clothes, the food they take depends on? P: Atmospheric at the climate P: which state in our country does the rainfall starts? T: Kerala P: why? T: Because that is towards the South.	Jammu & Kashmir - cold Atmosphere Kerala	Atlas Atmosphere Table Black Board Black Board
V	Conclusion and Evaluation	T: Lets write the main points from the lesson S: Atmospheric Effects on the living conditions S₁: The places where there is cold, these the people wear woolen clothes. S₂: people wear cotton clothes in summer T: write the answers to the following P: Kerala P: Jammu & Kashmir, cotton, Amul P: Yes, its effects	① In which part of the state it rains first? ② Tell the places which will be very cold in winters. ③ with the climatic conditions effects on once life style? ④ once in how many years does the climate changes?	

period plan-8

Name of the student teacher :- S.W.S. saanya

Roll no :- 11

Subject :- science

class :- 7

Name of the topic :- Construction of the cells

Name of the unit :- Flow of current - Results.

Name of the Supervisor :-

Time :- 45 min

Date :-

Academic Standards Achieved

1. Conceptual understanding

- students will come to know how to prepare that
- to know how to prepare cells by their own
- they will come to know about the new metals like zinc and
- the relation between the battery and the cells.

2. Questioning and Reasoning

- to question what is the meaning of cells.
- learn how to put batteries in the torch light
- how does the light glow in bulb with the help of fuse.

3. Experimentation and practicality:-
→ with the help of zinc & Sulphuric we make cells.
4. Appreciation and knowing the beauty in it
→ As the students perform the Experiment in a proper way they get appreciations from all the teachers.
5. How to use it in day to day life, life style and showing the concern towards it
→ They will come to know the usage of batteries in day to day life.

S.No	Steps	Teacher Learning process	B-B-W	T-L-M
11.	Greetings	P: Good Morning Teachers T: Good Morning students P: How is everyone today T: Fine mam, thank you. T: With the help of what does the torch light on? P: Bulb, Battery T: What else does a torch consists of P: wire and a switch T: we can make a torch by our own. P: No we can T: Today we learn how to make the cells by our own T: One of you get up and need paragraph from pg no 41 P: Now start underling the keywords		

S.No	Steps	Teacher Learning process	B.B.W	T.L.m
3.	Discussion & Demonstration	P: Can we use H_2SO_4 and any other things T: we can use Ammonium chloride P: what is the formula for the sulphuric acid T: H_2SO_4 P: How do we use the terminals in LED T: They both will be used as charges P: why did the amount of H_2SO_4 reduced T: As the H_2SO_4 is used to generate the Electricity to light	Ammonium chloride Sulphuric Acid H_2SO_4 LED why H_2SO_4 reduced cells	Black Board H_2SO_4 LED Terminals
IV	Conclusion/ Evaluation	T: write the summary which you have learned P: To make a cell we use Zinc sheets, Copper wires T: Answer the following questions P: Ammonium chloride P: Tin cutter P: yes we can use P: yes we can fix	① write content can be used instead of H_2SO_4 ② which tool should be used to cut the zinc sheet. ③ Can we use the cell we made out home ④ Can we fix a switch to the cell we made?	Tin cutter

period plan-9

38

Name of the student-teacher :- S.N.S Saurabh

Roll no :- 11

class :- 7

Subject :- Science

Name of the unit :- flow of current and its effects

Name of the topic :- what does a battery consists of

Name of the Supervisor :-

Date :-

time :- 45min

Academic standards Achieved :-

1. Conceptual understanding

- knowing the differences between the battery and the cells.
- knowing the usage of the batteries.
- knowing the reasons how does the battery generate the electricity.

2. Questioning and Reasoning

- Questioning how does the battery generate the electricity.
- knowing about the things which a battery consists of.

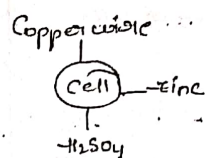
3. Experimentation and the facts

→ Noticing the things present in a battery by breaking it.

4. Drawing the related things and labelling it

→ Drawing the parts of battery and labelling it.

(37)

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
I.1.	Greetings	P: Good Morning Teacher T: Good Morning students		
2.	Mind Mapping with questioning	T: so to prepare a cell what all things we have used so far? P: H_2SO_4 , zinc, copper wire. T: so do you know the materials which we use to make the cells of attach light P: we don't know	 what is this is the cell?	Black Board
3.	Announcement of the topic	so today we are going to learn what all things we consist in the cell.		
II.1.	Reading the text book of Identifying the keywords	T: Divya, open pg 72 and read paragraph P: she will start reading. T: Now underline the keywords P: carbon dioxide powder, zinc vessel, ammonium chloride, solid acid	Carbon rod Carbon powder Zinc vessel Ammonium chloride	Text book Black Board
2.	Group Discussion	T: make into groups and discuss the words P: They started discussing		Text Book
3.	Discussion/Question	P: what is usage of carbon rod in a battery	Carbon Rod - poles	Black powder

S.NO	Steps	Teacher Learning Process	B.B.W	T.L.M
	on the content	T: In a cell carbon rod plays a main role P: what is the usage of zinc vessel in the cell? T: In the zinc vessel we have the poles P: for how many days a cell works. T: In general a cell works till the chemicals in the cell completes P: what is present beside the carbon rod? T: carbon powder. P: what is chemicals around carbon powder T: Ammonium chloride	Carbon Rod - poles Zinc vessel chemicals Carbon powder Ammonium chloride	Textbook Battery (cell)
III	1. Organisation of Activity	* Experimenting by breaking the cell and seeing what are the things it made of P: what is the name of that black rod? T: Carbon Rod	Carbon Rod	Carbon Rod
	2. Discussion of Activity	P: what is name of the powder inside carbon rod T: Carbon powder P: what is name of the chemical on the carbon powder called T: Ammonium chloride.	Carbon Rod Ammonium chloride	Ammonium chloride
IV	Discussion of Demonstration	T: How does the carbon rod work?		

S.no	Steps	Teacher learning process	B.B.W	TLM
V	Evaluation & conclusion	P: It works also as a other pole. P: what is the other name of carbon rod T: Graphite P: How does ammonium chloride works T: chemical used to generate electricity P: How does the cell works? In what. T: clock watch and to light the torch. T: Lets discuss about the main topics from the lesson P: Battery consists of carbon rod and carbon powder P: Battery consists of zinc vessel and Ammonium chloride T: Answer the questions written on the board P: clock, torch bulb, motor cycle used to play P: we can expect or predict P: North pole, South pole	clock watch torch light	① Where can we use the battery ② Till how many days does a cell works ③ What poles does a battery contains

period plan-10

Name of the Student teacher :- S.N.S Saumya

Roll no :- 11

Subject :- Science

class :- 7th

Name of the unit :- Flow of current and its results

Name of the topic :- Electronic utensils - Symbols

Name of the Supervisor :-

Date :-

Time :- 45min

Academic standard Achieved:-

1. Conceptual Standards.

→ To know the different types of Electronic utensils

→ By knowing the different types of Electronic utensils using the symbols.

→ To knowing the utensils when it is on and when it is off, the differences.

2. Questioning and Reasoning

→ By questioning how can we know which are the Electronic utensils looking at symbols.

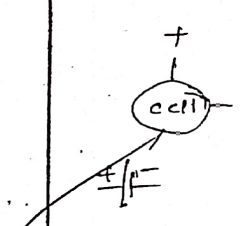
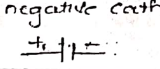
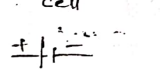
→ Write a short notes on the usage of the Electronic utensils

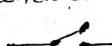
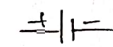
3. To know the information techniques and project related

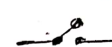
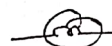
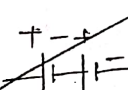
→ By collecting the few things by going to the electrical shop

4. Applying the concept on day to day life

→ Showing the circuit easily in the day to day life using the symbols.

S.No	Steps	Teacher Learning process	B.B.W	T.Lm (4)
I.1.	Greetings	P: Good Morning teacher T: Good Morning students		
2.	Mind Mapping with questioning	T: with what symbol we show to add P: '+' symbol T: To subtract which symbol we use P: '-' symbol T: To show a cell which symbol we use P: Don't know mam T: To show a bulb which symbol do we use P: Don't know mam T: To show a bulb which symbol do we use.		Black Board
3.	Announcement of the topic	T: Today we will learn various 'Electronic utensils and their symbols'		
II.1.	Reading the textbook & Identifying the key words	T: students one of you get up & read pg 72 T: Now start underlining the keywords from topic P: cell, electric bulb, switch, fuse	cell Electric Bulb	Text Book
2.	Group Discussion	T: start forming the groups & discuss P: The students start discussing the hardware	Switch Fuse	Black Board
3.	Discussion/Questions on the content	P: what is a cell T: positive & negative cathode is called as a cell T: 	cell 	cell.

S.NO	Steps	Teacher Learning process	B.B.W	T.L.M (42)
III	1. Organisation of Activity	P: what is a switch T: To start the flow of current and to stop the flow of current switch is used symbol 	Switch 	Switch
	2. Discussion on Activity	P: what is the symbol when a bulb is on T:  P: what is a battery T: The series of two or more cells is a battery * we will make a table and write the electric utensil name and the symbols to fit P: what is the symbol for a cell T:  P: when a light is off which symbol we use T:  P: what is the use of a fuse T: It is used to protect the flow of current & material inside symbol of fuse is  T: write few things about fuse P: Fuse is used to protect the electric circuit P: symbol of fuse is 	Bulb is on  + F + Name of Electric Utensils & these symbols   	Bulb Battery cell when switch is off fuse
IV	Discussion and Demonstration			

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
		T: what is the symbol when switch is off P: off switch  symbol T: what are uses of switch P: To start to flow and to stop the flow of current switch is used T: what is the symbol when bulb is off P: 	   	fuse switch Bulb Battery
IV	Conclusion and Evaluation	T: we will write the summary of the topic P: The combination of two or more cells is a battery P: To protect the Electric circuit fuse is used. P: The symbols of on, off bulb T: Answer the following question P:  P:  P: 	What is the symbol to show a cell ⓐ symbol when a bulb is on ⓑ symbol when a bulb is off ⓒ symbol of fuse.	

period plan-II

Name of the student teacher:- S.N.S Sowmya

Roll no :- 11

class :- 7

Subject :- Science

Name of the unit :- Flow of current- Result

Name of the topic :- Electric circuits

Name of the Supervisor :-

Date :-

Time :- 45 min

Academic standards Achieved :-

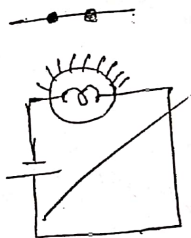
1. Conceptual understanding

- Having a clear picture on the Electronic circuits.
- Showing the difference between Electric circuits and Electric Symbols.
- Knowing how to prepare the Electric circuits.
- Knowing the difference when the flow of current is there and when it is not there.

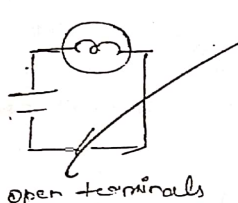
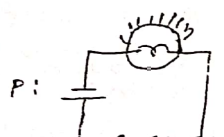
2. Questioning and Reasoning

- What is the meaning of Electric circuit
- Knowing the preparation of the Electric circuit
- Asking questions when the circuit is closed and when the circuit is open

3. preparing of circuits and examples of diagram
 → To draw the Electric circuit
 → Drawing the Examples of the Electric circuit
 4. using it in the Real Life
 → By separating few things like torch light etc at home

S.No	Steps	Teacher Learning Process	B.B.W	T.LM
I	1. Greeting	P: Good Morning Teachers T: Good Morning students		
	2. Mind Mapping with questioning	T: what is the symbol for switch  what is the symbol for battery — — what is the symbol for bulbs  All together will make a circuit? No "Electric circuit" to know the making of it	 Electric circuit	Black Board
3.	Announcement of the topic	"Electric circuit" to know the making of it		
II	1. Reading the text book & identifying the keywords.	T: Monica take out pg no 74 and read the paragraph T: Now underline the keywords P: Symbols, Electric circuit, off circuit, on circuit	Symbol Electric circuit off circuit on circuit	Black Board Textbook

S.No	Steps	Teacher process Learning	B.B.W	T.LM
2.	Group discussion	T: Now form into groups and discuss handwireds P: They all will start discussing		
3.	Discussion/Questions on the content	P: What is a circuit diagram T: The circuit made using the symbols P: What is a closed circuit T: When the circuit bulb is on is closed circuit P: What is the meaning of open circuit T: When the bulb is off it is called open circuit P: Do we have different kinds of circuits T: Yes we do have kinds in it	circuit diagram on circuit open circuit	
III	1. Organisation of Activity	Arranging the bulb, battery and switch in a circuit	Arranging in order	Battery, Switch, Bulb
	2. Discussion on Activity	How to separate the positive & negative terminals of the battery T: By using the cycle tube rubbers P: Can we fix the big bulb also. T: We have to take the small bulb as the capacity of the battery be sufficient	Positive terminal Negative terminal Capacity of the battery	Black Board Battery, Switch, Bulb

S.No	Steps	Teacher Learning process	B.B.W	T.Lm
IV	Discussion & Demonstration	P: when the bulb is not connected to the switch, will turn on? T: Let us discuss terminals what do? P: Switch off the plug. P: will the bulb light when the terminal T: No, it won't P: where to fix the switch in circuit. T: Anywhere in the circuit P: when does the bulb light	Yes, more than one  open terminals	Battery Bulb Switch
V	Conclusion & Evaluation	T: Lets discuss the things we have learned P: when the terminals are closed bulb will on P: when the terminals are open bulb with the circuit P: we can use more than one battery in the circuit P: How ans to the question which on board P: we can use P: two opposite charges  P:	① Can we use more than one battery in the circuit ② How many charges do a battery consist ③ Draw the diagram of circuit	

period plan-12

(4/8)

Name of the student teacher - S.N.S Saanya

Roll no. - 11

class - 7

Subject - Science

Name of the unit - flow of current - Results.

Name of the topic - Arrange cells in the Series Connection

Name of the Supervisor -

Date -

time - 45min

Academic standards Achieved

1. Conceptual understanding

- what is the difference between complete circuit & incomplete circuit
- Connecting the batteries in the Series.
- Differences between the parallel and perpendicular series of arrangement
- Tell me them how does a circuit works.

2. Questioning and Reasoning

- Questioning what is the meaning of closed cell.
- Questioning what is the meaning of open cell.

3. Drawings

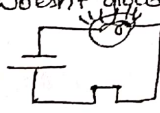
- Drawing the cells arranged in the parallel series

- prepassing the cells arranged in the parallel series
 4. using them in the life style
 → They can repair the torch light at home if it doesn't work.

401

S.No	Steps	Teacher Learning process	B.Bw	T.L.m
I. 1.	Greeting	P: Good Morning Teacher T: Good Morning students		
2.	Mind Mapping with questioning	T: Symbol to show to Electric bulb P:  T: How do we show the cell. Symbolically? P:  T: How do we show switch Symbolically? P:  T: How can we arrange the circuit P: Don't know Teacher T: 2 types ① parallel series ② perpendicular	Bulb cell, Switch ↓ Switch circuit ↓ perpendicular parallel	Black Board cell, Battery Switch
3.	Announcement of the topic	Today we will know to how to arrange the circuits	"forms in circuits"	Black board
II. 1.	Reading the text book & identifying the key words	T: students open pg no 74 and read the paragraph T: Now underline the keywords P: parallel series perpendicular series	perpendicular parallel series Incomplete circuit flow of current	Black board Text book

S.NO	Series	Teacher Learning process	B.B.W	T.L.M
2.	Group discussion	Incomplete series: flowing of current T: Now discuss the hardware forming into groups. P: They started discussing in groups		
3.	Discussion/questions on the control	P: In how many ways we can arrange the circuits. T: Two ways parallel & series P: what is parallel series T: Both have two terminals P: what is flow of current T: when battery generates electricity P: what is incomplete terminal T: In a series it one incomplete terminal	parallel series Torch light flow of current incomplete terminal	Black board text book
III 1.	Organisation of Activity	Task: Arrange the batteries in a parallel series and try to light the bulb.	Lighting bulb in parallel connected	
2.	Discussion on Activity	P: why did the first bulb didn't light T: Because two battery negative terminals are connected P: In a circuit how many batteries can we arrange T: ya we can arrange but limited P: what will happen if we increase the no. of batteries?	Negative terminals	Battery Bulb series connected

S.No	Steps	Teacher Learning process	B.B.W	T.L.m (5)
IV	Discussion of Demonstration	T: So that the bulb will go brighter P: How do we connect the batteries T: Series connection P: How many charge does a battery have T: positive charge Negative charge P: when two charges touch, how does bulb glow T: Yes P: when the filament in bulb stop working will it light T: No	Series Connected positive charge Negative charge flow of current filament	Bulb Battery
V	Conclusion & Evaluation	T: Now discuss the points from lesson P: In a series if one battery stops working the bulb will glow. P: Two types of connection i) parallel ii) series. T: Answer the following questions P: Doesn't glow P:  P: Bulb light	① If two charges of battery doesn't touch will the bulb glow ② Draw a picture connected in series ③ Example when cell connected in series	

period plan-B

Name of the student teacher:- S.N.S Sowmya

Roll no :- 11

class :- 7

Subject :- Science

Name of the unit :- flow of current - Results

Name of the topic :- Connecting Electric cells Equally

Name of the Supervisor :-

Date :-

Time :- 45 min

Academic Standards Achieved:-

1. Conceptual understanding

- Differences between the cells connected in series and parallel.
- Knowing the uses when the cells are connected parallel.
- Knowing how to connect the cells parallel.
- Know how we represent in diagram from when cells connected parallel.

2. Questioning and Reasoning:-

- Questioning why the brightness have been decreased.
- By Questioning how does the bulb light even after removing the batteries.

→ By questioning how to connect the batteries parallelly.

3. Drawing the diagrams and naming them

→ Drawing the cells connected parallelly and naming them

→ using the batteries and we will show how the bulb glow

4. using in the daily life

→ Normally bulbs at home are connected parallelly. So we can repair the switch board.

S.NO	Steps	Teacher Learning process	B.B.W	T.L.M
I. 1.	Greetings	P: Good Morning teacher T: Good Morning Students		
2.	Mind Mapping with questioning	T: Can we connect the batteries in series? P: Yes we can connect T: What will happen if we remove one battery from the series. P: The circuit will open T: If I will want the bulb to work even though we remove a battery from series P: we have to connect in parallel.	Series connection ↓ The connection will open. Parallel connection ↓ The connection will close	
3.	Announcement of the topic	T: Today we will learn how to "connect the batteries in parallel" way.	Connecting the batteries parallelly	
II. 1.	Reading the text Book identifying the keywords	T: Students take out pg no 75 and start reading the first paragraph.	Complete terminal Incomplete terminal	Black Board Text Book

→ By Questioning how to connect the batteries parallelly.

3. Drawing the diagrams and naming them

→ Drawing the cells connected parallelly and naming them

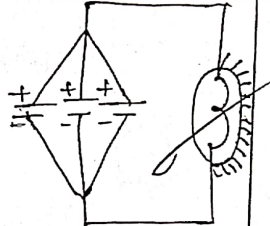
→ using the batteries and we will show how the bulb glow

4. using in the daily life

→ Normally bulbs at home are connected parallelly. So we can repair the switch board.

S.NO	Steps	Teacher Learning process	B.B.W	T.L.M
I. 1.	Greetings	P: Good Morning teacher T: Good Morning Students		
2.	Mind Mapping with questioning	T: Can we connect the batteries in Series? P: yes we can connect T: what will happen if we remove one battery from the series. P: the circuit will open T: It will want the bulb to work even though we remove a battery from series P: we have to connect in parallel.	Series connection ↓ The connection will open. parallel connection ↓ The connection will close	
3.	Announcement of the topic	T: Today we will learn how to "connect the batteries in parallel" way.	Connecting the batteries parallelly	
II. 1.	Reading the text Book identifying the keywords	T: Students take out pg no 75 and start reading the first paragraph.	Complete terminal Incomplete terminal	Black Board Text Book

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
2.	Group Discussion	P: Complete terminal, incomplete terminal series connection, parallel connection T: Now form into groups and start discuss P: The students will form into group & discuss	parallel connection	Black Board Text book
3.	Discussions/questions on the content	P: what is the meaning of a complete terminal T: when we turn on the switch, if the bulb glows then it is a complete terminal. T: when we turn off the switch, if the bulb goes off, then it is a incomplete terminal P: what is a parallel connection T: The things is in use separately connected P: what is the usage of connecting parallelly T: so that one does not work, even then with the help of other cell's bulb will work preparing a circuit by arranging all the batteries and trying to glow the bulb.	Complete terminal Incomplete terminal parallel Connection	Black Board Switch Battery Bulb
III	1. Organisation of Activity	Preparing a circuit by arranging all the batteries and trying to glow the bulb.	uses of parallel connection Arranging the batteries in a parallel	Battery, Bulb, Copper wires
2.	Discussion on Activity	P: In a parallel connection how many batteries can we arrange T: It depends on the volts of bulb P: what if we increase the no of batteries? T: the brightness of the bulb increases	parallel connection	

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
IV	Discussion of Demonstration	P: what is the symbol to show the parallel connection and the Example for it. T: The things we used at home like bulb T: what we remove the battery when connected parallelly P: The brightness of the bulb decreases T: How many bulbs can we connect P: It depends on the volts of bulb T: what is the use in connecting parallelly P: Even though we remove one battery it will		
V	Conclusion and Evaluation	T: So what all we have learned in today's class P: Battery should be connected by positive charge & negative charge to glow the bulb. P: The bulb in parallel connection glow Even though we remove one bulb. T: Students now answer the questions. P: The way our bulbs at home are arranged. P: The brightness of the bulb increases P: Even though we remove a battery the bulbs will glow	① Example for the parallel connection ② what will happen when we reduce the no. of batteries in parallel connection ③ what is the use of connecting cells parallelly	

period plan - 14.

Name of the student teacher :- S.N.S Sowmya

Roll no :- 11

class :- 7

Subject :- Science

Name of the unit :- Flow of current and its result

Name of the topic :- Connecting the bulb in Series

Name of the Supervisor :-

Date :-

Time :- 45 min

Academic standards Achieved :-

1. Conceptual understanding

- Know the differences how to connect the bulbs in series and the batteries in series
- Explaining how to control connect the bulbs in series
- Knowing the uses of connecting the bulbs in series

2. Questioning and Reasoning

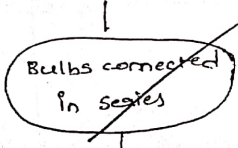
- Questioning how do we control connect the bulbs in series
- How does the increase in batteries react on the brightness of the bulb

3. Drawing the diagrams and Labelling them.

- Draw a diagram to show how we connect the bulb in series.

R.B.

- Connect the bulbs to show in series using the batteries.
4. Appreciating the projects done by the students.
- Students will make the census & appreciating them for the good work.

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
I	1. Greeting	P: Good Morning teacher T: Good Morning students	 Connected in Series	
	2. Mind Mapping with questioning	T: can we connect the batteries in series? P: yes we can connect T: Draw the picture to show how we can connect the batteries in series? T: Do you know how to connect the bulbs in series?		
	3. Announcement of the topic	T: we will learn how to "connect the bulbs in series"		
II	1. Reading the textbook Identifying the keywords	T: students everyone open pg 76 & read the paragraph T: underline the keywords P: Bulb filaments, Series connection, parallel connection, Brightness	 parallelly connected	
	2. Group Discussion	T: students form into groups and discuss the words P: students will start the discussing.		

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
	Discussion/Questions on the content	P: what is the use of filaments in bulb T: to light the bulb filament is used P: Does the bulb light without a filament T: No, it won't P: on what does the brightness of the bulb depends. T: Depends on the volts of the bulb and battery capacity. P: Does the brightness differ if it connected in series or in parallel. T: when it connected in series the brightness of the bulb will be more P: How to connect the bulbs in series T: Bulbs will be connected then the battery	Bulb filament filament Bulb voltage capacity of the battery	Black Board Text Book
III	1. Organisation of Activity	* Connecting the bulbs in the series	Connected in series	
	2. Discussion on Activity	P: How to connect the bulbs in series T: Have to connect the three bulbs in a line	Bulbs connected in series In a line	Three Bulbs, One battery, Copper wires, Three Bulbs

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
IV	Discussion and Demonstration	P: How does the brightness in the bulb decreased T: As the no. of bulbs decreased and the batteries are less. P: will the brightness depends on batteries T: yes, it depends on the batteries. P: what kind of bulbs are we supposed to use for Experimenting T: using less volts bulb is better P: what is the examples of bulbs connected in series! T: In weddings and in festivals.	Batteries count is less Brightness increase Battery wedding festivals	Small Bulb Battery LED Bulbs
V	Conclusion and Evaluation	P: Let us see what are we studied T: Answer the questions on the board P: To glow the bulb we use. P: connected in series. P: festivals and in the weddings we use the bulbs.	① What are the uses of filaments in the bulb? ② In which things we use the series? ③ In wedding and festivals which way it is connected	

period plan-15

Name of the student teacher :- S.N.S Sowmya

Roll no :- 11

class :- 7

Subject :- Science

unit :- Flow of current - Resists

topic :- Lets connect the bulbs parallelly

Supervision :-

Date :-

time :- 45min

Academic standards Achieved

61

1. Conceptual standards

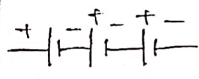
- Difference between the bulbs connected in series and connected in parallel
- what are the benefit to connect the bulbs in parallel way.
- knowing the reasons how does the bulb glow even the other one doesn't work.
- knowing how to connect the bulbs in parallel.

2. Questioning and Reasoning

- Questioning how to connect the bulbs parallelly
- How does the bulbs work even through one stops working
- As the bulbs count increases the brightness, decreases, denoting the reasons.

3. Drawing the picture and writing the labels.

- Draw a diagram which shows the connection of bulbs.
- preparing the circuit which makes the bulbs glow when connected in series.

S.No	Steps	Teacher Learning process	B.B.W	TL.M
I. 1.	Greetings	P: Good Morning teacher T: Good Morning students		
2.	Mind Mapping with questioning	T: How are we going to connect the batteries in series. P: By connecting the opposite charges T: If a bulb spoils in the series connection will the rest will work P: No it won't work T: what we can do for it P: we have to arrange in parallel way	 Connected in series Bulbs connected in series ↓ In one steps, working all will stop	Black Board
3.	Announcement of the topic	T: knowing how to connect the bulbs parallel	Connecting bulbs parallelly	Black Board
II. 1.	Reading the text book & identifying the keywords	T: students open pg no 76 and read the first paragraph T: Now underline the keywords P: Series connection, parallel connection, opened terminal, brightness, complete terminal.	Series Connection parallel connection Brightness Complete terminal	Text Book
2.	Group discussion	T: Students now Everyone for into group and discuss P: They will start discussing		

S.NO	Steps	Teacher Learning process	B.B.W	T.L.M
	3. Discussion/questions on the content	P: why is it good to connect parallelly when compared to connecting in series T: so that in parallel if one bulb does it work the rest will work. P: how the bulbs at home are connected T: Connected parallelly P: when does the brightness of the bulb will be more T: In series connection	parallel connection series connection *Bulbs parallelly	Black Board Text Book
III	1. Organisation of the Activity	Connecting the bulbs parallelly	Two different of opposite charges	Bulbs
	2. Discussion on Activity	P: How to connect the bulbs parallelly T: By connecting the two charges of the batteries to the wire parallelly P: How can the bulbs work the when one was not working T: As the each bulb is connected Separately P: where can we see this parallel connection T: The bulbs we use at home	Bulbs are connected Separately. The ways bulbs are Connected at home	Batteries Copper wires

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
IV	Discussion and Demonstration	T: What did you understand when the bulbs are arranged parallelly? P: That every bulb is given separate connection. T: How does the other bulbs, worked when one didn't work. P: As they connected separately. T: What is the relation when bulbs connected in series & in parallel connection. P: In series connection one stops working the doesn't work but in parallel it works.	All the bulbs are given independent connection. If one stops working the rest will work.	As the bulbs are arranged parallel. Relation between parallel and Series Connection
V	Conclusion and Evaluation	T: Students let's resume the lesson once again. P: parallel connection is better than series connection. P: The bulb at home are arranged in parallel. P: Fuse and MCB are connected in series. T: Now answer the question written on board. P: series connection. P: Bulb at home are arranged in series connection.	Q: The bulb in torch light is connected in which way? Q: Where can we see the bulbs connected parallelly? Q: In which series does the brightness of the bulb will be more?	

period plan - 16

(65)

Name of the student teacher 1- S.N.S Soudmya

Class 1- 7

Roll no 1- 11

Subject 1- Science

Unit 1- flow of current & safety

Topic 1- uses of the heat generated by the electricity

Supervision 1-

Date 1-

Time 1- 45min

Academic Standards Achieved:-

1. Conceptual understanding

- Learning what all electronic appliances will generate the heat.
- Knowing the reasons how the electric appliances will generate heat.
- feel the heat, light and the movement to take place what are things we are supposed to use.

2. Questioning and Reasoning

- Asking why the electric appliances heat up fast.
- Knowing why we use filaments in electric appliances.
- Questioning when the flow of current takes place why does the copper wires heated up.

3. Importance of the Survey.

- collecting the things which can generate light, things can generate the movement, the things which can generate the heat.

4. using in day to day life

- using different types of electric appliances in daily life for the regular use.

S.No	Steps	Teacher Learning process	B.B.W	T.L.M (67)
I 1.	Greetings	P: Good Morning teachers T: Good Morning students		
	Mind Mapping with questioning	T: what will happen in bulb before the filament light P: It gets heated up T: what are advantages when the filaments get heated up? P: light comes T: what is the advantages when the filaments in Electric cooker P: heat is generated	Electric Effects <pre> graph TD A[Electric Effects] --> B[Bulb] A --> C[Cooker] B --> D[Generates light] C --> E[Generates heat] </pre>	Black Board
3.	Announcement of the topic	T: today we will talk about the heat Effects generated by the Electricity.	Heat Effects generated by the Electricity	
II 1.	Reading the text book Identifying the key words,	T: Students take out pg 76 & read the paragraph. T: now underline the keywords P: Filament Electric cooker, Iron box oven	filament Electric cooker Iron box oven	Black Board Text book
2.	Group Discussion	T: students now form into groups and discuss the keywords. P: The students will start discussing		

S.No	Steps	Teacher learning process	B.B.W	T.L.M (68)
3.	Discussion/ questions on the content	P: Depends on what does the filaments in the electric allowances release heat? T: Length of the wire, matter and thickness. P: why does the thickness of filament will be less. T: so that it can able to generate heat fast and generates more brightness. P: which matter is used in the filament P: Does a cooker consists of a filament T: yes	Wire matter thickness In bulbs the thickness of the filaments are less filament in the cooker	Text Book Black Board
IV	1. Organisation of activity	Arrange a table using different types of electric allowances		
2.	Discussion of the activity	P: why does the electronic tea used? T: To boil the water or milk P: why do we need lift T: for the moment P: why do we use a tubelight T: for the light P: why do we use a nice cooker. T: for good the electric	"Table of heat generated by electric allowances."	tube light Cooker, Tape recorder

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
IV	Discussion and Demonstration	P: what material does the filament made of? T: Nichrom P: why do we use a filament in tape recorder? T: For the moment P: why do we use a oven? T: To heat up anything P: To work the filament what does we need? T: It should generate heat	Nichrom Tape recorder For the moment Generate heat	Bulb Tube light mineral
V	Conclusion and Evaluation	T: students lets revise the topic once again P: once the filaments heat up then it starts working P: Filament is made of metal called nichrom. T: Now answers to the questions. P: Electric tea Kettle, light, street light. P: It heats up fast and generates light.	1. what all things consists of filaments 2. why does the filament in the bulbs are very thin?	Black Board

period plan - 17

Name of the student teacher :- S.N.S Sownya

Roll no :- 11

class :- 7

Subject :- Science

Unit :- flow of current - Resistor

Topic :- C.F.L bulbs

Supervisor :-

Date

Time :- 45 min

Academic Standards Achieved:-

1. Conceptual understanding

- uses is reducing the usage of Electricity.
- Knowing how to save the current.
- Knowing the reasons how can we save current by using C.F.L bulbs
- Knowing the specifying of the vessels made of ISI mark.

2. Questioning and reasoning

- Questioning how does the C.F.L bulbs work to save the current
- Asking how to save the current and methods to save
- Questioning how many types of C.F.L bulbs do we have.

3. Knowing the concepts how to use it in daily life.

- Knowing how to use the C.F.L bulbs in the daily life.
- Saving the current
- To help the next generation to use the current.

S.No	Steps	Teacher Learning process	B. B. W	T. L. M
I	1. Greetings	P: Good Morning teachers T: Good Morning students		
	2. Mind Mapping with questioning	T: How do we calculate the current bill P: By calculating the units of the volts. T: How to save the Electricity bill P: By lessing down the usage of the current T: By using things which can consume current. T: Tubelight, C.F.L.	Tubelight, C.F.L.	Black Board
	3. Announcement of the topic	T: Today we will learn about the "Tubelight, C.F.L."		
II	1. Readings the text book & identifying the keywords	T: Students open pg 47 and read out the paragraph. T: Start underling the handwritings P: C.F.L, ISI, holder.	C.F.L ISI holder	Text book Black Board
	2. Group Discussion	T: form of groups and discuss the handwritings P: They formed into groups & started discussing	L. F. P	
	3. Discussion & Question on the board	P: C.F.L meaning T: compact fluorescent lamp P: Tubelight, C.F.L how do them save?	Tubelight	Text Book C.F.L Bulb

S.NO	Steps	Teacher Learning	B.B.W	T.L.M
III	1. Organisation of activity 2. Discussion on activity	T: tubelight and C.F.L use the less voltage they use less current. P: what is the use of the holders T: To hold the bulbs we use holders P: what is ISI mark Indian Standard Institute * make a difference between the normal bulbs and the C.F.L bulbs P: why and how do C.F.L bulbs these less amount of voltage when compared to normal bulbs T: As the voltage of tube lights and C.F.L bulbs are less compared to normal bulbs. T: As the voltage of tube lights and C.F.L bulb are less compared to normal bulbs. So they utilise less amount of electricity P: what is the full form of C.F.L T: compact fluorescent lamp P: what is the meaning of I.S.I T: I.S.I means Indian Standard Institute. Indian government have approved it as the best quality	Voltage holders ISI Normal bulbs C.F.L Bulbs Compact Fluorescent lamp (C.F.L) I.S.I Indian Standard Institute	Holders

S.NO	Steps	Teacher Learning process	B.B.W	T.L.M (74)
IN	Discussion and Demonstration	T: to fit the bulbs to the switch board what is the material we should use P: holders T: which thing at home consumes more current P: refrigerator T: why the govt is distributing C.F.L bulbs for free of cost P: To save the current.	Holders Refrigerator C.F.L Bulbs Save current	Holders C.F.L Bulbs
II	Conclusion of Evaluation	T: students Lets revise the points we have discussed. P: not to misutilise the electricity C.F.L bulbs are used P: ISI marked ones are the good quality ones. T: Now answer the following question P: Compact fluorescent lamp P: Indian Standard Institute P: Have to keep a bulb P: Reduce the usage of more electricity	1. what is C.F.L 2. what is ISI 3. use of holders. 4. use of C.F.L bulbs.	

period plan - 18

(75)

Name of the student teacher :- S.W.S Sowmya

Roll no :- 1-11

Class :- 7

Subject :- science

Name of the unit :- Flow of current - metals

Name of the topic :- Electric fuse, MCB

Name of the Supervisor :-

Date :-

Time :- 45 min

Academic Standards Achieved

1. Conceptual understanding

- Knowing the difference between fuse and MCB
- Knowing the kinds of MCB
- As the Electricity flow increases the fuse gets discharged, why is it happen
- Knowing how to repair the fuse.

2. Questioning and Reasoning

- How does the fuse gets connected
- Finding out the reasons what happen when the fuse gets discharged
- what is importance of ISI mark

3. Experimenting and practicality

- By taking out the wire in the fuse and finding the other one.

4. using in day to day life

- Knowing the reason of MCB and knowing how to repair the fuse when it doesn't

words

drawn by: [signature]

S.No	Steps	Teacher Learning process	B.B.W	T.Lm
I	1. Greeting	P: Good Morning teacher T: Good Morning students		
	2. Mind Mapping with questioning	T: To save half of the current what things have to be used P: switch, C.F.L bulb T: what should we use to save the electric appliances P: Fuse, M.C.B	Saving Electricity	Black Board
	3. Announcement of the topic	T: Knowing about the fuse and MCB	Fuse, M.C.B	
II	1. Reading the text book & identifying the keywords	T: Students take out pg 78 and read the paragraph T: underline the hard words P: Electric fuse, M.C.B, ISI, protection layer, mixed metal.		
	2. Group Discussion	T: Students form into groups and start discussing the hard words. P: Students started discussing	Electric Fuse M.C.B ISI	
	3. Discussion/question on the content	P: why does the electric appliance generates heat? T: Because of the wires and the other materials in the electric circuit	protection layer Mixed metal	

S.No	Steps	Teacher Learning process	B.B.W	T.L.m
II	1. Organisation of Activity	generate heat when the flow of electricity increases P: how can we protect the materials made of fuse T: Thickness of the fuse is very less P: what is the difference between M.C.B & fuse! T: MCB also works like a fuse but MCB stops automatically but the fuse cannot P: what to do make the fuse work T: have to change the wire in the fuse knowing how to change the wire in the fuse.	Fuse - M.C.B change the wire in the fuse changing the wire in the fuse	
	2. Discussion on Activity	P: what kind of wire should be used in a fuse T: where the wire is made of mixed material and thickness P: how does M.C.B works. T: when flow of the Electricity is more P: in which case the wire should be changed	thickness should be less M.C.B B.B.W	1.5.1

S.No	Steps	Teacher Learning process	B-B-W	T.Lm 29
IV	Discussion and Demonstration	T: fuse should be connected in series T: tell me one advantage of fuse P: we can protect ourself from current shock T: what are the uses of fuse P: to protect the flow of current & from shocks T: what type of electric appliances are we supposed to take P: ISI marked M.C.B bulbs etc P: what are the uses of M.C.B T: it will save the electricity T: let us revise the topics we have learned P: fuse helps us from current shocks P: MCB saves the electricity P: ISI marked have good quality T: now answer the following questions P: It should be less thick, material should be made of Iron P: mix over circuit battery	series connection fuse ISI, MCB 1. How is the wire in the fuse 2. what is M.C.B 3- use of M.C.B	
V	Conclusion and Evaluation			

period plan - 19

Name of the student teacher :- S.N.S Sowmya

Roll no :- 11

Subject :- Science

class :- 7th

Name of the unit :- Flow of current - Results

Name of the topic :- Electricity at home

Name of the Supervisor :-

Date :-

Time :- 45min

Academic standards Achieved

1. Conceptual understanding

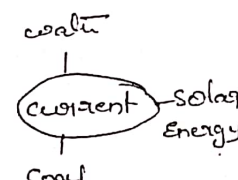
- Knowing from where the current is generating from.
- The instrument which can calculate the current.
- knowing the process to calculate the current.
- knowing the importance of flowcharts.

2. Questioning and Reasoning

- Knowing how to calculate the current.
- The things used to measure the Electricity.
- knowing the difference between normal meter and digital meters.

3. Using the concept in the real life

- By knowing the meter reading at home and knowing how to calculate the current bill.
- knowing how to save the Electricity and current in daily life.

S.No	Steps	Teacher Learning Steps	B.B.W	T.L.M
I 1.	Greetings	P: Good Morning Teacher T: Good Morning Students		
2.	Mind mapping with questioning	T: How do we get the current from P: from water, coal from solar energy. T: what is the thing used to get the readings of the current at home P: meter T: Today we will learn "Electricity at home"	 meter Reading Electricity at home	
3.	Announcement of the topic			
II 1.	Reading the text book and identify the key words	T: students open pg 48 and read the paragraph T: Now underline the hard words from the lesson P: Substation, Electronic meter, Digital meter, watts, units. T: students, read the words making groups	Sub station Electronic meter Digital meter voltage units kilo watt	Text book
2.	Group Discussion			Black Board
3.	Discussion & Questions on the content	P: what is an electronic meter T: to know the no. of units by us Electronic meter is used P: what is a Sub station	Electronic meter Sub station	

S.No	Steps	Teacher Learning process	B-B-W	T-L-m (8)
III	1. Organisation of the Activity 2. Discuss on last activity	T: from the place where the electricity is passed to homes is called a sub station P: what is a voltage T: The brightness of bulb can noticed It will be denoted with 'w' P: kilo watt means what. T: In a hour if we use electricity then its called as kilo watt. observing the current meter P: when the meter rotates like a wheel, what is it called as? T: It will record the current in units. As it rotates the number beside it also changes. P: For few meters why we can find that why. T: They are called as the digital meters P: How do we calculate the current bill T: In the kilo meter houses P: what should we do?	sub station voltage (w) kilo watt Bell Ordinary meter Digital meter kilo watt bell less voltage	Normal meter Digital meter C.F.L Bulb

S.NO	Steps	Teacher learning process	B.B.W	T.L.M
VI	discussion and demonstration	P: Difference between normal meter and digital meter. T: There will be a wheel in normal meter where digital meter doesn't have. T: from the Substation P: what does 'W' on the meter denotes. T: W means watts. It tell us the brightness of the bulb. T: As the brightness will be less.	Normal meter Digital meter Substation voltage (W) watts less voltage bulbs	Normal meter Digital meter CFL bulb
V	Conclusion & Evaluation	T: students. Let discuss the main points. P: The sub units will pass the electricity to homes P: W denotes watts on the bulb, P: As the watts increases the usage of the current also increases. T: now answer the following questions: written on the board. P: The one which consumes less watts.	1. what is a kilo watt bulb 2. The rate per unit is the same for all the places 3. what kind of a bulbs we should use while sleeping?	

period plan-20

85

Name of the student teacher :- S.N.S Sowmya

Roll no :- 11

class :- 7th

Subject :- Science

Name of the unit :- Flow of current - uses

Name of the topic :- knowing how to calculate the current

Name of the Supervisor :-

Date :-

Time :- 45min

Academic Standards Achieved:-

1. Conceptual understanding

- Reasons to know why the current bill is coming in big number.
- Knowing why does our country facing problems in the scarcity of electricity.
- Knowing how to reasonate the current bill.
- knowing about michel forward who made the dynamite.

2. Questioning and Reasoning

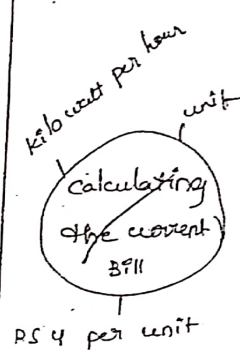
- Advantage of saving the electricity
- knowing how to calculate the current bills
- Questioning what are the new inventions made of michael forward.

3. Gathering the information regarding the matter.

- knowing more about the michell forward.

4. How to use it in our life:-

- knowing how do we use and calculate the Electricity bill.

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
I	1. Greeting	P: Good morning teacher T: Good Morning students		
	2. Mind Mapping with questioning	T: the rate for the unit to pay the electricity will be the same in every place? P: No T: How much do you pay for 1 unit in your place P: 4 rupees T: Do you know how to calculate the current bill which you receive every month at home? P: Don't know mam.		Black Board
	3. Announcing of the topic	T: knowing how to calculate the electricity bill		
II	1. Reading the paragraph in text book & identifying the keywords	T: students → open pg 79 and start reading the paragraph and underline keywords. T: until, kilo watt hour, Brightness of lights, watts, digital meter.	units kilo watt hour digital meter	Black Board Text book

S.No	Steps	Teacher Learning process	B.B.W	T.Lm
2.	Group Discussion	T: students → now everyone form into groups and discuss the handwritings. P: They form into groups and discuss		
3.	Discuss and question on the content	P: what is brightness of light T: with the capacity of watt the bulb generate light, that is called as brightness of light. P: what is watts T: The brightness of light capacity is watts P: what is a kilo watt T: The amount of current used in one hour is called the kilo watt hour. P: how many watts is equal to 1 kilo watt T: $1000W = 1KW$	Brightness of Light watts Digital meter $1KW = 1000W$	Analogue meter Digital meter

	Teacher Learning process	B.B.W	T.L.M (89)
1. Organisation of the Activity	* calculate the amount for the current used.	* calculating the amount	
2. Discussion on Activity.	P: what is the reading on January bill? T: 480 units. P: what is the reading on February bill? T: 580 units P: what is rate per unit? T: 3.05 rupees P: How much are we supposed to pay the bill? T: $500 \times 3.05 = 1525 \text{ RS/-}$	400 units 500 units 3.05 rupees 1525 RS	
IV Discussion and Demonstration	P: will all the electronic appliances use the same amount of current? T: It depends on the watts of a material. P: Is the rate per unit is same in all places? T: It is not same because	watts Depends on place, slab rate Current Bill 12 RS	

S.No	Steps	Teacher Learning process	B.B.W	T.L.M
IV	Conclusion and Evaluation	T: It depends on the place and its slab rate. P: How does the rate of the unit the points write. T: Students → we will write the points which we have discussed P: The current used will be calculated in units P: As there is security of Electricity in India many people in the villages are going so many problems. T: Now answer the questions written on the board. P: $4.50 \times 50 = 225 \text{ Rs.}$ P: As we all used to the Electric allowances we should have many problems. P: Solar system can.	1. If the Rate per unit 4.50, what is the bill for 50 units 2. what is there is no current 3. from water and what all things we can generate electricity.	

