



CORAMANDAL COLLEGE OF EDUCATION

Medikonduru - 522 438, Guntur Dist.

Affiliated to Acharya Nagarjuna University

20 - 20

Semester :

SCHOOL INTERNSHIP RECORD - PEDAGOGY - II

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Subject : School internship record, pedagogy-II (Physical science)

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CERTIFICATE

This is to certify that Mr. / Mrs. / Kum Saabhagya Jena Class No. _____ Regd. No. Y25ED69036 of College of Education visited our Institution and conducted the required activities / collected the required data regarding to Interuship record - Physical science Practicum as a part of B.Ed. Course work stipulated by the Government of Andhra Pradesh and approved by Acharya Nagarjuna University.

Signature of the Concerned Teacher

Name :

Signature of the Head of the Institution

Name :

Seal :

This is to certify that Mr. / Mrs. / Kum Saabhagya Jena Class No. _____ Regd. No. Y25ED69036 has completed the required activities regarding to Interuship record - Physical science Practicum towards fulfillment of B.Ed., Course work stipulated by the Government of Andhra Pradesh and approved by Acharya Nagarjuna University.

This record

Lecturer in-charge

INDEX

LESSON / PERIOD PLAN			Initials of the officer who supervises the lesson / period with date
Sl. No.		PAGE NUMBER	
1	Motion and types of motions	1 - 7	
2	Concave mirror	8 - 12	
3	Confirmation of presence of food components	13 - 16	
4	Changing the colour	17 - 20	
5	Animal fibre	21 - 24	
6	Time and speed	25 - 29	
7	Heat and temperature	30 - 33	
8	Air	34 - 37	
9	Measurement of rainfall	38 - 40	
10	Heat - a form of energy	41 - 44	
11	Magnet	45 - 48	
12	Make your own magnet	49 - 51	
13	Forms of water	52 - 54	
14	Water cycle	55 - 57	
15	Transparency	58 - 60	
16	Solubles and insolubles	61 - 63	
17	Crystallisation	64 - 66	
18	Simple electric circuit	67 - 69	
19	Sublimation	70 - 72	
20	Chromatography	73 - 76	

Micro Teaching Lesson Plan - I

Preliminary Information :-

Name of the student teacher : Saubhagya Jena

Subject : Physical Science

Class : VII

Unit : Motion and time

Topic : Motion and types of motion.

Time :: 45 min.

Ans :

Understanding the content : Students will be able to understanding the concept of motion and its types etc with few examples.

Steps / Content	Teaching and learning activities	B.B.W	T.L.M
	<u>Teacher</u> : Good morning students how are you all ? <u>Students</u> : Good morning sir. <u>Teacher</u> : Children imagine you are travelling by a car. If you look outside the window of your car you will notice that you are in motion in relation of light posts houses shops. trees etc.		

Steps / Content	Teaching and learning activities	B. B. W	T. L. M
Concept: Motion is caused by the unbalanced force acting on an object at rest. * Announcement of the topic * Demonstration and discussion * Reading	* Now what is this changing of position called? Students: - - - - - Moving of an object Teacher: Well almost up there what is the term we use there? Students: - - - - - * Children, Today we are going to learn the concept of motion. * Definition: Motion is caused by the unbalanced force acting on an object at rest.	Name of the topic Motion Definition: Motion is caused by the unbalanced force acting on an object at rest.	

Steps/Content	Teaching and Learning activities	B.B.W	T.L.M
* <u>Keywords</u> * <u>Activities</u> for understanding the concept.	* Here we have few hard words now we are going to discuss about them. 1. Translatory motion 2. Rectilinear motion 3. Curvilinear motion 4. Rotatory motion 5. Oscillatory or vibrational motion 6. Periodic motion. <u>Translatory motion</u> :- An object is permanently displaced from its original position. E.g - A vehicle moving on a straight road.	1. Translatory motion 2. Rectilinear motion 3. Curvilinear motion 4. Rotation of motion 5. Oscillatory motion 6. Periodic motion.	* Showing the video of translatory motion in smart board with explanation.

Steps / Content	Teaching and learning activities	B.B.W	T.L.M
* Discussion on the topic.	<u>Rotatory motion</u>: The motion of hands of a clock and rotating blades of a windmill or a ceiling fan. * Teacher will be asking students few questions about the topic and can estimate how much students have understood.	<u>Rotatory motion</u>: The motion of an object is said to be rotatory if the motion of all particles of the object is along a circular path with respect to an imaginary line called the axis of rotation.	* Showing the video of rotatory motion on smart board with explanation. * Black board.

Steps / Content	Teaching and learning activities	B.B.W	T.L.M
* Example questions.	<u>Example</u> : A girl runs along a circular track of radius 5m. Starting from point A. What will be the distance travelled by her and speed a) If she comes back to the initial position in 300s and b) If she stops halfway at B in 40s ?	<u>Solution</u> : a) Since the girl comes back to the original position her distance would be the circumference of the circle which is $2\pi r = 2 \times 3.14 \times 5 = 31.4\text{m}$ Speed = Distance travelled / time taken $= 31.4 / 300 = 0.1046\text{ m/s}$ b) If the girl stops halfway through her distance would be half	

Steps / Content	Teaching and learning activities	B.B.W	T.L.M.
* Conclusion	* Students today we have seen the meaning of motion types of motion and few questions were solved with students and also students were asked few questions of the end of the class.	the circumference which is equal to $(2\pi r) / 2 = 3.14 \times 5 = 15.7 \text{ m}$, Speed = Distance travelled / time taken $= 15.7 / 400$ $= 0.39 \text{ m/s}$	

Macro Teaching Lesson Plan - II

Preliminary Information:

Name of the student teacher: Saubhagya Jena

Subject : Physical science

Class : VII

Unit : Reflection of light.

Topic : Concave mirror

Time : 45 min.

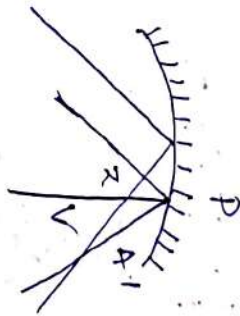
Aim : Understanding the content :

∴ Students will be able to understand the the concept of concave mirror and the rules of drawing images formed by a concave mirror.

Steps / Contents	Teachings and learning activities	B.B.W	T.L.M
* Introduction * Objectives of pre-concepts	<u>Teacher</u> : Good morning students. <u>Students</u> : Good morning sir. <u>Teacher</u> : What kind of mirrors do you think a dentist would require to examine teeth ? Why is this type of mirror used. <u>Students</u> : - - - - -		

Steps / Content	Teaching and learning activities	B.B.W	T.L.M
* Announcement of the topic * Demonstration of the topic * Reading * Keywords * Activities for understanding the concept.	Today we are going to learn the concept of <u>concave mirror</u>. <u>Definition</u>: Rays travelling to the principal axis, after reflection meet or converge at a point on the principal axis. This point is called the principal focus of a concave mirror. * Concave * Converging * Reflection * Incident ray * Parallel axis * Corresponding * Rules of drawing images formed by a concave mirror. Children now we are going to discuss.	<u>Name of the topic</u> Concave mirror <u>Definition</u>: Same — * Concave * Converging * Reflection * Incident ray * Parallel axis * Corresponding	

Steps / Content	Teaching and Learning Activities	B.B.W	T.C.M
* Announcement of the topic.	* Today we are going to learn the concept of <u>concave mirror</u>.		
* Demonstration of the topic	Few rules to draw the image by a concave mirror. <u>Rule-1</u>: A ray of light travelling parallel to the principal axis passes through the principal focus after reflection.		
* Reading	<u>Rule-2</u>: A ray of light passing through the focus travels parallel to the principal axis after reflection.		
* Keywords.	<u>Rule-3</u>: A ray of light passing through the centre of curvature travels back along its original path after reflection.		
* Activities for understanding the concept.	<u>Rule-4</u>: A ray of light incident at the pole is reflected at the same angle with the principal axis.		

Steps / Content	Teaching and learning activities	B.B.W	T.L.M
① Discussion on the topic * Few examples or questions.	* Teacher will ask students few questions to estimate how much they have understood. <u>Ex</u>: When the object is placed far off or at infinity the image will be formed at the focus (F). The nature of the image will be real, inverted and diminished. Students today we have seen the meaning and rules and few examples of concave mirror and were asked few questions at the end of the class.		
* Conclusion			

More teaching lesson plan - III

Preliminary Information:

Name of the student - teacher - Saubhagya Jena

Subject : Physical science

Class : VII

Unit : Food components

Topic : Confirmation of presence
of food components.

Time : 45 min.

Theme: Understanding the content: Students will be able to understand the concept of confirmation of presence of food components.

Steps / Content .	Teaching and learning activities	B.B.W	T.L.M
* Introduction * Objectives of pre-concepts * Announcement of the topic	Good morning Students . Children * Suppose you do not get food for lunch how do you feel ? Why should we take food ? what are the components in it . * What will you do (or) feel if you do not get anything for more than a day . * Today we are going to learn about food components and many more .	* Name of the topic : Food components & confirmation of presence of food components .	

Steps / Content	Teaching and learning activities	B.B.W	T.L.M
* Demonstration & discussion * Reading * Keywords * Activities for understanding the concept.	Our food consists of carbohydrates, proteins, fat, Vitamins and minerals. Besides these water and fibres are also present. * Carbohydrates * Fibres * Balanced diet * Protein * Fats * Constipation Collect different types of food materials like milk, a potato, little quantity of oil, ghee, Take a sample of each food in a test tube (or) a plate and test what are the quantity of fats, fibres carbohydrates.	* Carbohydrates * Fibres * Balanced diet * Proteins * Fats * Constipation	

Steps / Content	Teaching and learning activities	B.B.O	T.L.M
Discussion on the topic. * Few examples (or) experiments.	Teacher will be asking few questions to students to estimate how much they have understood. <u>Experiment</u>: Test for starch. <u>Observe</u>: the change in colour what do you find? <u>Experiment</u>: Test for fats	* Take a small quantity of each sample rub it gently on a piece of paper If the paper turns brown. Students the substance contains fats.	

Conclusion:

Today students we have seen the confirmation of presence of food components in different food items.

Master Teaching Lesson Plan - IV

Preliminary Information:

Name of the student teacher : Saubhagya Jena

Subject : Physical science

Class : VII

Unit : Acids and bases

Topic : Changing the colour

Time : 45 min.

Aim :- Understanding the content : Students will be able to understand the concept of changing the colour with few experiments.

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
Introduction * Objectives of pre - concepts *	Good morning students. * In our daily life we use a lots of material. Even our food has a lot of variety different items also have different taste. In preparing and storing food we take a lot of care.	* Name of the topic = colour change	
Announcement of the topic.	* Today we are going to learn how colour changes in food items.		

Stoep / Content	Teaching and learning activities	B.B.W	T.L.M
Activities for understanding the concept.	Take some turmeric powder add a bit of water to it and prepare turmeric paste. Rub the turmeric paste on a white paper. Draw a flower on that paper with a pencil colour the flower with soap water using a brush. * Teacher will be asking students few question about the topic. <u>Experiments</u>: Preparation of fine water	The colour of the paper change.	Take half a beaker full of water. Add about 5gm. of lime that we apply to betel leaves. Stir the beaker well and let it stand overnight filter it
* Discussion on the topic Few examples (or) experiments.			

Steps / Content.	Teaching and learning activities	B. B. W	T. L. M
<u>Conclusion</u> :	Students today we have learned the concept of how acids changes the colour.	The solution should be transparent. The that turn blue litmus to red are are acidic in nature The substances that are soapy to touch and turn red litmus to blue are basic in nature.	

Macro teaching lesson Plan - V

Preliminary Information :

Name of the student teacher : Saubhagya Jena

Subject : Physical Science

Class : VII

Unit : Animal fibre

Topic : Animal fibre

Time : 45 min.

Aim: Understanding the content: Students will be able to understand the concept of animal fibre.

Steps / Content.	Teaching planning activities	B. B. W	T. L. M
* Introduction. * Objectives of pre-concepts.	Good morning students. * What fibres do animals give us. Is the way of obtaining them similar to plants which part of animal is useful to make fibres. * Today we are going to discuss about animal fibre. * We get fibre from plants and animals. All caterpillars will help to make	* Name of the topic → Animal fibre.	
* Announcement of the topic. * Demonstration and discussion * Reading			

Steps / Content	Teaching and learning activities	B.B.W	T.L.M
* Keywords. * Activities for understanding the concept. * Discussion of the topic.	Dress which we wear * Animal fibre * Silk worm * Cocoon * Mulberry * Bombyx mori Visit near by sericulture industry to gather more information about silk. * Discussing about the visit to sericulture industry with students to know how much they have understood.	* Animal fibre * Silk worm * Cocoon * Mulberry * Sericulture * Bombyx mori	

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
Conclusions :	* Today we have discussed about silkworm and about silk and also about animal fibre etc. by visiting to nearby sericulture industry.		

Macro Teaching Lesson Plan - VI

Preliminary Information:-

Name of the student teacher - Saubhagya Jena

Subject - Physical Science

Class - VII

Unit - Motion and time.

Topic - Time and speed

Time - 45 min.

Attm: Understanding the content: Students will be able to understand the concept of time and speed.

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M.
* Introduction. * Objectives of pre concept. * Announcement of the topic. * Demonstration and discussion. * <u>Reacting</u>.	Good morning students. * We have learned about motion, Now we are going to learn new topic. * We will discuss about speed and time. * We can define speed of an object as the distance travelled by it in a unit of time.	* Name of the topic = Speed and time.	

Steps / Content.	Teaching and learning activities	B. B. W	T. L. M
* Keywords * Activities for understanding the concept.	* Motion * Rest. * Translatory motion. * Rotatory motion. * Axis of rotation. * Oscillatory motion. * Speed. * Average speed. <u>Time</u> 0 min. 10 min 20 min 30 min 40 min <u>Reading of distance covered.</u> 0 km. 15 km. 25 km. 38 km. 60 km.	* Motion. * Rest. * Translatory motion * Rotatory motion. * Axis of rotation * Oscillatory motion. * Speed. * Average speed.	

Steps / Content.	Teaching and learning activities	B. B. W	T. L. M.
Discussion on the topic. * Few examples or Questions.	* Teacher will be asking students few questions about the topic and can estimate how much students have understood. <u>Examples:</u> The speed of a bus is 72 km/hr where as the speed of a car is 12.5 m/s Which vehicle moves faster.	<u>Solutions:-</u> Speed of a bus $= 72 \text{ km/h}$. Speed of car $= 12.5 \text{ m/s}$. $12 \text{ km/h} = \frac{5}{18} \text{ m/s}$.	

Conclusion;

Students today we have seen the meaning of speed and time and few questions were solved with students in classroom.

Thus the speed of car is
 $\Rightarrow 13.5 \times 18/5$
 $= 45 \text{ km/h}$
Hence the bus moves faster than the car.

Macro Teaching Lesson plan - VII

Preliminary Information :-

Name of the student teacher - Saubhagya Jena

Subject - Physical Science

Class - VII

Unit - Temperature and its measurement.

Topic - Heat of temperature.

Time - 45 min.

Aim: Understanding the content: Students will be able to understand the concept of temperature and heat.

Steps / Content.	Teaching and learning activities	B.B.W	T-L-M.
* Introduction. * Objectives of pre concept. * Announcement of the topic. * Demonstration and discussion. * Reading. * Keywords.	Good morning Students. * We have learned about different changes that take place in different seasons in the previous classes. Now what do we all such situation? * We are going to discuss about temperature and heat. * <u>Temperature</u>: Temperature is a measure of the degree of hotness or coldness of an object. * Heat energy. * Temperature.	<u>Name of the topic</u> Heat of temperature * Temperature It is a measure of the degree of hotness or coldness of an object. * Heat energy. * Temperature	

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M.
* Activities for understanding the concept.	* Thermometer. * Fahrenheit scale * Celsius scale * Expansion. * If you stand close to fire you feel warm. When a warm object is placed close to a cooler object, heat energy moves from the warmer object to the cooler one until both objects attain the same temperature. Often we think that heat and temperature are same things but this is wrong. Temperature is a measure of the heat energy in a body and which indicates the ability.	* Thermometer. * Fahrenheit scale * Celsius scale * Expansion. * Clinical thermometer	

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M.
Few experiments or examples	<u>Experiment</u> : To find the temperature of your palm. <u>Experiment</u> : Take some water in a beaker measure the temperature. * Students today we have learned the concept of temperature and heat with few experiments.	For this place the bulb of a thermometer in contact with the palm for 2mins. and see the mercury rise when mercury stops rising and its level become steady note the position of your palm. * If oil start boiling while getting converted into steam. Mercury level starts raising and reaches a point beyond. Which if does not rise. Hence observe the temperature.	
<u>Conclusions</u> :			

Macro Teaching Lesson plan - VIII
Preliminary Information;

Name of the student teacher - Saubhagya Jena

Subject : Physical Science

Class : VII

Unit : Air, Winds and cyclone

Topic : Air.

Time : 45 min

Aim : Understanding the content : Students will be able to understand the concept of air with few experiments or examples.

Steps / Content	Teaching and learning activities	B.B.W	T-L-M
* Introduction * Objectives of pre concept. * Announcement of the topic. * Demonstration and discussion. * Reading.	Good morning Student. * When we ride on a bicycle in direction of the wind. It is easy to ride the bicycle but when we go opposite to the direction of the wind. It is very hard and we may tire easily. * We are going to learn about air. * The air around us rarely still. It moves continuously from one direction to another. The moment.	* Name of the topic = Air	

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
* Keywords * Activities for understanding the concept.	is in many direction. This is what we call winds. So we know that wind is moving air. * Wind. * Expansion. * Cyclone * Low pressure * High pressure. * Sometimes the wind is cold and sometimes it is pleasant and nice. It can blow clouds and sometimes raises dust. It is sometimes gentle but can be really strong too and blow away things.	* Wind * Expansion * Anemometer * Low pressure * High pressure.	

Steps / Content-	Teaching and learning activities	B.B.W.	T.L.M
* Discussion on the topic. * Few experiment (or) examples. * Conclusion.	* Teacher will be asked few questions about the topic to estimate how much students have understood. * Fill a bucket with water, take a bottle with a narrow mouth and increase it in the bucket till it fills with water. * Today we have learnt about air and also few examples which happen around us.	Did something come out of the bottle when water entered it? <u>Solution</u> : Yes water bubbles with sound. * How do you know whether something come out or not. <u>Solution</u> : By seeing the bubbles which comes out.	

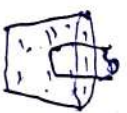


Fig-1

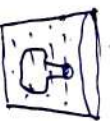


Fig-2.

Macro Teaching Lesson plan - IX

Preliminary Information :-

Name of the student teacher - Saubhagya Jena

Subject - Physical science

Class - VII

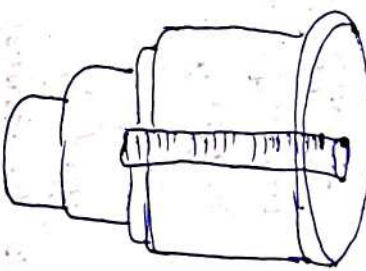
Unit - Weather and climate

Topic - Measurement of
rainfall.

Time - 45 min.

Aim : Understanding the content : Student will be knowing the concept of weather and climate and also measuring rainfall.

Step / Content.	Teaching and learning activities	B.B.W	T.L.M
* Introduction. * Objectives of pre concept. * Announcement of the topic. * Demonstration and discussing. * Reading * Keywords.	Good morning Stu students. * Children we have learned about weather and its conditions. * Today we are going to learn about measuring of rainfall and its uses. * Meteorologist measures the rainfall using a rain gauge. * Weather * Forecast * Climate * Humidity.	Name of the topic Measuring of rainfall: * Weather * Forecast * Climate * Humidity	

Steps / Content:	Teaching and learning activities	B.B.W	T.L.M
Few examples or Experiments	<u>Ex :-</u> Take a 10cm wide beaker and insert a funnel of the same width. Keep the apparatus in an open place when it is raining. The rain water would be collected through the funnel into the beaker. After the rain is over measure the amount of water collected in the beaker. If the depth of water is 1cm then that the magnitude of rainfall is 1cm.		
* Conclusion:	Students today we have seen how to measure the rainfall. And also seen one experiment.		

Macro Teaching Lesson Plan - X

Preliminary Information :

Name of the student teacher - Saubhagya Jena

Subject - Physical Science

Unit - Temperature and its measurement.

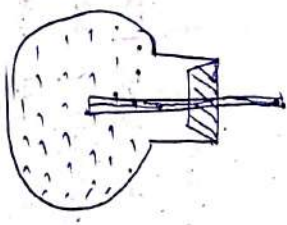
Topic - Heat - a form of energy

Time - 45 min

Aim: Understanding the content : Students will understand the concept of heat with few experiments (on examples)

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
* Introduction * Objectives of pre-concepts. * Announcement of the topic. * Demonstration and discussion → Reading	Good morning students. * We feel hot when we sit in sunlight (or) near fire. We feel cold when we put a piece of ice on our palm. Have you ever thought why it is so? * Today we are going to discuss about heat. <u>Definition</u>: The energy which makes an object appear hot (or) cold is called <u>heat</u>.	* None of the topic - heat. * The energy which makes an object appear hot (or) cold is called <u>heat</u>.	

Steps / Content.	Teaching and learning activities.	B.B.W	T.L.M.
* Key Words. * Activities for understanding the concept. * Discussion on the topic * Few examples (or) Experiments.	* Heat energy * Temperature * Thermometer * Celsius scale * Clinical thermometer * When rice is being cooked you observe the plate on the rice bowl jumps. * Teacher will ask students few questions to estimate how much did they have understood. - Ex: Take a flat bottom glass and fill it with coloured water fix a cork having a capillary tube	* Heat energy * Temperature * Thermometer * Celsius scale * Clinical thermometer * Expansion. Have you observe water boiling in a vessel with a lid? What do you notice?	

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
<u>Conclusion</u> :	in the mouth of flask such that level of water is as shown in fig. Place the flask in a metal trough. Pour boiling hot water into the trough and carefully observe the level of coloured water. We can observe the level of that mercury will expand while heating. <u>Examples (or) experiments.</u> Students today we have seen the concept of heat with few (examples or experiments)		

Macro Teaching Lesson Plan - XI

Preliminary Information

Name of the student teacher : Soubhagya Tena

Subject : Physical science

Class : XI

Unit : Playing with magnets

Topic : Magnet

Time : 45 min

Time :- Understanding the concept : Students will be able to understand the concept of magnet.

Steps / Content.	Teaching and learning activities	B. B. W	T. L. M
* Introduction * Objectives of pre concept.	Good morning students. * You would have seen a pin holder in your school office, in this some pins are attached to the top (or) cap what is the material used there? * We are going to discuss about magnets today. * Magnets are the materials which can stick (or) hold iron materials.	* Name of the topic - magnets.	
* Demonstration and discussion → Reading			

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
Keywords.	* Magnet. * Magnetic materials. * Magnetic compass. * Like poles * Unlike poles * Repulsion * Magnetic Induction. * Non-magnetic materials. * Spread some iron filling uniformly on a sheet of paper. Place a bar magnet below the sheet.	* We will observe that the uniformly spread iron filling concentrate at two points of the paper sheet. At some distance you will find some scattered.	

Steps / Content.	Teaching and learning activities	B. B. W	T. C. M
<u>Conclusions.</u>	Students today we have learned the concept of magnets with few activities.	Iron filings between these two prints. This change in the spread of iron filings on the sheet of paper is due to the magnet present below it.	

Macro Teaching Lesson plan - XII

Preliminary Information :

Name of the student teacher - Saubhagya Jena

Class - VI

Subject - Physical science

Unit - Playing with magnet.

Topic - Make your own magnet.

Time - 45 min.

Aim: Understanding the content: Students will be able to make their own magnets after this topic.

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
* Introduction * Objectives of pre-concept. * Announcement of the topic. * Demonstration and discussion. * Reading	* Good morning students. * We have already learned about magnets. * Today we are going to learn how to make our own magnets. * Magnets are the materials which can stick (or) hold iron materials.	* Name of the topic: Make your own magnet.	

Steps / Content	Teaching and Learning activities	B.B.W	T.L.M
* Keywords	* Magnets. * Magnetic material * Non magnetic materials. * Like poles. * Unlike poles. * Attraction. * Repulsion. * Magnetic Induction. Take an iron nail and place it on a table. Make sure that the nail neither attraction filing. Take bar magnet and place one of its pole near one edge of the nail. Without lifting the bar magnet move it along the length of the iron nail till you reach the other end. Then lift the bar magnet. be acting as a magnet. Students today we have learned how to make magnet by our own.	* Magnets * Magnetic materials. * Like poles. * Unlike poles. * Attraction. * Repulsion. * Magnetic Induction.	
* Activities for understanding the concept.			
* Conclusion			

Macro Teaching Lesson Plan - XIII

Preliminary Information:

Name of the student teacher - Saubhagya Jena

Subject - Physical Science

Class - VI

Unit - Rain, Where does it
come from

Topic - Forms of water

Time - 45 min

Aim : Understanding the content : Students will understand different forms of water.

Steps / Content	Teaching and learning activities	B.B.W	T.L.M
* Introduction * Objectives of pre-concept * Announcement of the topic * Demonstration and discussion * Keywords	* Good morning students. * Why do we get rains? * Where do the rains come from? * Do all the clouds formed in the sky cause rain? * We are going to learn different forms of water. * Evaporation * Condensation * Water cycle * Cloud * Water vapour * Atmosphere * Stream * Dew * Breeze	* Name of the topic * Different forms of water * Evaporation * Condensation * Water cycle * Cloud * Water vapour * Atmosphere * Stream * Dew * Breeze	

Steps / Content.	Teaching and learning activities	B. B. W	T. L. M.
Activities (or) examples to understand the concept.	* Solid form * Liquid form. * Gaseous form.	We call solid form of water ice. Snow occurs naturally. * If we heat ice it will change into water. Water in liquid form is present in oceans, seas, lakes, river and even underground.	* We know that when ice is heated it converts into water and if water is heated it turns into water vapour is cooled we get back water. If water is cooled further we will get ice.
Conclusions:	Students we have learned about different forms of water with few examples.		

Macro Teaching Lesson plan - XIV

Preliminary Information :

Name of student teacher - Saubhagya Tena

Subject - Physical science

Class - VI

Unit - Rain, where does it
come from.

Topic - Water cycle

Time - 45 min.

Aim: Understanding the content: Student will understand the concept of water cycle.

Steps / Contents	Teaching and learning activities	B. B. W	T. L. M
* Introduction * Objectives of pre concept. * Announcement of the topic. * Demonstration and discussion. * Keywords.	Good morning students. * We have already learned about different forms of water. * We will discuss about water cycle. * Evaporation * Condensation * Water cycle cloud. * Water vapour * Atmosphere * Stream * Dew * Breeze	Name of the topic: Water cycle. → Evaporation → Condensation. → Water cycle cloud → Water vapour → Atmosphere → Stream → Dew → Breeze.	

Steps / Contents.	Teaching and learning activities	B.B.W	T.L.M
* Activities (and examples for understanding the concept).	When it rains ponds lakes etc. are filled with water. Water from rain fall runs down as small streams join together and make bigger streams. As it is very hot during summer large quantity of water evaporates from seas, lakes, rivers etc and converts into water vapour. This goes up into the air to form clouds. again cool and produce rain. The circulation of water into water vapour by evaporation is known as water cycle. * Students today we have learned about water cycle.		
<u>Conclusions</u> :			

Macro Teaching Lesson plan - XV

Preliminary Information :

Name of the student teacher - Saubhagya Jena

Subject - Physical science

Class - VI

Unit - Material and things -

Topic - Transparency

Time - 45 min.

Aim: Understanding the content: Students will be able to understand the concept of transparency.

Steps / Content.	Teaching and learning activities	B.B.U	T.L.M
* Introduction * Objectives of the pre concept. * Announcement of the topic. * Demonstration and discussion * Keywords.	* Good morning student. * We will learn about different objects which are made up of different materials. * Today we are going to learn about transparency. → Material → Object → Metal → Transparent → Opaque → Translucent → Solid → Insoluble	Name of the topic → Transparency → Material → Object → Metal → Transparent → Opaque → Translucent → Solid → Insoluble	

Steps / Content.	Teaching and learning activities	B. B. W	T. L. M
* Activities (or) examples for understanding the concept.	As we able to see through a paper. * Today we have learned about transparency	Take a sheet of white paper and try to see the lighted bulb through it. Now put a few drops of oil on that sheet and again try to see the bulb through it. → You notice that in first case you can't see the bulb but in second case you are able to see the bulbs. The material through which we can see objects but not very clearly are said to be <u>translucent</u>.	
Conclusion :	Students today we have learned about transparency with one activity done by you.		

Macro Teaching Lesson plan - XVI

Preliminary Information :

Name of the student teacher - Saubhagya Jena

Subject - Physical science

Class - VI

Unit - Materials and Things

Topic - Soluble and insoluble

Time - 45 min.

Aim : Understanding the content : Students will be able to differentiate between solubles and insoluble.

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
	Good morning students. * We have learned about objects made of different materials. * Today we are going to learn about soluble and insoluble. * → Material → Object → Metal → Transparent → Opaque → Translucent → Solid → Insoluble → Soluble	→ Material → Object → Metal → Transparent → Opaque → Translucent → Solid → Insoluble → Soluble	

Steps / Content.	Teaching and learning activities	B. B. W	T. L. M
* Activities (or) examples for understanding the concept.	Soluble (or) Insoluble in water Today we have learned about soluble and insoluble with few examples (or) activities done :	Take five beakers with water. Take small quantities of sugar salt, sand and saw dust. Add each material to separate beakers and stir. Observe the changes. When we observe that certain materials dissolve when mixed with water when we mix sugar, salt and chalk powder are said to be soluble in water as these will dissolve in water as these will sand saw dust are said to be. Insoluble in water as these will not dissolve in water.	
* Conclusion			

Master teaching lesson plan - XVII

Preliminary Information:

Name of the student teacher - Saubhagya Tena

Subject - Physical science

Class - VI

Unit - Separation of substances

Topic - Crystallisation

Time - 45 min.

Aim : Understanding the concept ; Students we will learn about crystallisation.

Steps / Content.	Teaching and learning activities	B.B.B.W	T.L.M
Introduction * Objectives of pre concept. * Announcement of the topic. * Demonstration of discussion. * Keywords.	Good morning students. * Do you know how water changes into crystals. * We are going to learn about crystallisation. → Mixture → Separation → Hand picking → Winnowing → Segmentation → Filtration → Crystallisation → Distillation → Sublimation → Chromatography	Name of the topic: Crystallisation. → Mixture → Separation → Hand picking → Winnowing → Segmentation → Filtration → Crystallisation → Distillation → Sublimation → Chromatography	

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
Activities for understanding the concept.	Water is generally evaporation in sunlight. We use this property while extracting salt from sea water. Sea water is captured in wind pans and is exposed to air and sunlight. Then water evaporates and the salt is left behind in the pan. * Student today we have learned about crystallisation with few examples and activities.	* Heat some salt water in a beaker over a flame. Stir the salt with a glass rod. Continue heating till all the water in the beaker has evaporated. You will find salt crystals and water in the dish.	
Conclusion			

Macro Teaching lesson plan - XVIII

Preliminary Information:

Name of the student teacher - Saubhagya Jena

Subject - Physical science

Class - VI

Unit - Simple electric circuit

Topic - Simple electric circuit

Time - 45 min.

Aim: Understanding the content: Students will understand the concept of simple electric circuits.

Steps / Contents	Teaching and learning activities	B.B.W	T.L.M
Introduction * Objectives of pre-concept. * Announcement of the topic. * Demonstration and discussion * Keywords.	Good morning students. * Niharika look back the torch and opened it and realised her mistake. She changed the position of the cells and handed over the working torch light to her father. * We will discuss about Simple electric circuit. → Electricity → Cell → Bulb → Fused bulb → Terminal → Filament → Switch → Circuit → Conductor → Insulator → Tungstone.	Name of the topic Simple electric circuit. → Electricity → Cell → Bulb → Fused bulb → Terminal → Filament → Switch → Circuit → Conductor → Insulator → Tungstone.	

Steps / Content	Teaching and learning activities	B.B.W	T.L.N
Examples for understanding the concept.	Electric wires are often covered with plastic. First remove about 2cm of the plastic covering from both ends of each wire. Now two wire to the cell with a cell tape (or) cell holder. We can use a cell holder to hold the cells and wires together tightly. Today we have learned about simple electric circuits.	* Take 4 wires of diff. colour say green, blue, red and yellow each about 15 cm long.	

Macro Teaching lesson plan - XIX

Preliminary Information:

Name of the student teacher - Saubhagya Jena

Subject - Physical science

Class - VI

Unit - Separation of substance

Topic - Sublimation

Time - 45 min.

Aim: Understanding the content: Students will learn about sublimation

Steps / Content.

Teaching and learning activities

B.B.W

T.L.M.

* Introduction

Good morning students.

* Objectives of

pre-concept

Do you know what we call to separate the components of a mixture.

* We will discuss about sublimation.

Name of the topics:
Sublimation

* Mixture

→ Separation

→ Hand picking

→ Winnowing

→ Sublimation

→ Decantation

→ Crystallisation

→ Distillation

→ Sublimation

→ Chromatography

* Mixture
* Separation

→ Hand picking

→ Winnowing

→ Sublimation

→ Decantation

→ Crystallisation

→ Distillation

→ Sublimation

→ Chromatography

* Announcement of the topic.

* Demonstration and discussion.

* Keywords.

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
Examples for understanding the content.	* In order to separate the components of a mixture we make use of their difference in colour, shape, size, weight, * Teacher will be asking few questions to estimate how much they have understood. * Sublimation of camphor. Take a mixture of camphor and poured salt in a china dish and cover it with a funnel with cotton. Place the dish on a stand and heat it with a burner. What you observe. * Today we have learned about sublimation with few examples and activities.	When camphor is heated it transform to gaseous form without changing in liquid. The gaseous camphor changes directly into a solid without going to the liquid state. The process in which a substance changes directly from solid in gaseous form and vice versa is called sublimation.	

Conclusion ;

Macro Teaching Lesson Plan - XX
Preliminary Information

Name of the student teacher : Saubhagya Jena

Subject : Physical science

Class : VI

Unit : Separation of
substances

Topic : Chromatography

Time : 45 min

Aim: Understanding the content: Students will be able to understand the concept of chromatography.

Steps / Content.	Teaching and learning activities	B. B. W	T. L. M
* Introduction * Objectives of pre-concept * Announcement of the topic. * Demonstration and discussion. * Keywords.	Good morning students. * Can you separate colours from a mixture of colours. * Today we are going to learn about chromatography. → Mixture → Separation → Hand picking → Winnowing → Sedimentation → Decantation.	Name of the topic Chromatography. → Mixture → Separation → Hand picking → Winnowing → Sedimentation. → Decantation.	

Steps / Content.	Teaching and learning activities	B.B.W	T.L.M
Activities (or) understanding the concept.	Separation of substance is a very important scientific activity and is also important in our daily life. We are using different types of separation techniques for various purpose to get desirable quantities of materials. → Sieving → Filtration → Crystallisation → Distillation → Sublimation → Chromatography	→ Sieving → Filtration → Crystallisation → Distillation → Sublimation → Chromatography	

Steps / Content.	Teaching and Learning activities	B.B.W	T.L.M
Discussion on the topic.	Today teacher will ask few questions regarding the explained topic in classroom. * A chalk with different colours. Remove the chalk before the water reaches the top. Now you can see different colour on the chalk. * Today we have learned the concept of chromatography with few examples and activities.	* Take a white stick of white chalk. Around the curved surface of the chalk put an ink mark with blue (or) black ink. Now pour some water in a plate and keep the piece of chalk in the water ensure that the water in the plate is very little and does not touch the ink.	
Few examples.			
Conclusions.			