

Feb/March	April	May	June
<p><b>CROP PRODUCTION AND MANAGEMENT</b> <b>LEARNING OUTCOMES</b> Students will be able to: *Discuss the terminology related to the crop production. *Identify the different tools and seed specimens.-Familiarize with steps involved in crop production. *Cultivate a small area by following the proper sequence of crop production. <b>Activity:</b>*Search work:Students will search about the methods of various types of crop production (Library/Integration with any scientist,if they know).Then Students will be asked to give a brief write up of the same. *Smart board (video demonstration of various tools) students will be asked to identify the and compare the various tools during the ancient and modern age,they also will be asked to draw them. *Outdoor Activity Students will be given a small area in the school campus where they will be asked to grow the crops, by following the proper sequencing required for the crop production. <b>Assessment :</b> Pen – paper test, <b>Concept map , HOTs , reasoning questions, Report and Value Based Questions Drawing various tools. (Integration with Art and IT)</b></p> <p><b>MICROORGANISM FRIEND AND FOE</b> <b>LEARNING OUTCOMES</b> Students will be able to: *- Observe the slides of various types of microorganisms under the microscope. -Categorize the micro-organism, differentiate their uses and impact. -Compare the ways of food preservation (old and modern). <b>Activity:</b> *Lab Activity- Showing the various slides: Students will be shown various slides of the microorganisms, they will be asked to draw the observed slides and write a few lines about their observations. <b>Home activities:</b> *Search work-Recent outbreak of disease due to Coronavirus. What is it? *Investigation – To find various preservative methods which were used earlier by the people and also compare them with the modern preservative methods. Students will talk to their parents or</p>	<p><b>Cell - Structure And Functions</b> <b>LEARNING OUTCOMES</b> <b>Students will be able to:</b> - Recall specific concepts, terms in cells. - Differentiate between animal and plant cells and their cell organelles. <b>Activity:</b> Observation Activity -Identify the parts of a Microscope. Observe the slides. Teacher will demonstrate a method to make temporary slides using an onion peel and cheek cell . students will try to recall and draw a microscope, label its parts. Students will try to write a procedure to make a temporary slide and also draw the slides shown. After they draw the slides they will be asked to observe their drawings carefully. This can give a conclusion that in both the slides the shape is different. *Model Making –Making the models of a plant cell or an animal cell. Students will be asked to make a model of an animal or a plant cell, with the waste material found in their home or maybe they use some threads, stones etc. <b>Assessment:</b> Pen – paper test, <b>Concept map, Observations of the observed slides, apparatus HOTs, Model, Flow chart, reasoning questions, and Value Based Questions. (Integration with Art)</b></p> <p><b>*COAL AND PETROLEUM(COLLABORATED WITH SOCIAL SCIENCE)</b> <b>LEARNING OUTCOMES</b> Students will be able to: *Discuss the formation of coal and petroleum. *Explain petroleum refining. *List the products of coal and petroleum. *Discuss consequences of over extraction of coal and petroleum. *Understand the conservation of fossil fuels. Tabulate daily practices which can help in conservation of fossil fuels. <b>Activities:</b> * <b>Video demonstration , Showing</b></p>	<p><b>*COMBUSTION AND FLAME</b> <b>LEARNING OUTCOMES</b> Students will be able to: *Explain different terms.(Calorific value, Fuel efficiency etc.) and enlist characteristics of a good fuel. Differentiate between rapid and spontaneous combustion *Outline different zones of a candle flame, and explain the reason for the use of the outermost zone of flame for melting metals by goldsmiths. <b>Activity:</b> *Lab-Activities Conduct simple experiments to find out the conditions necessary for combustion. (eg- try burning a stone, try burning a paper, try burning a wet paper etc..) ) *Burn a candle and identify the various zones of a candle, and colour of various zones. <b>Assessment:</b> Pen – paper test, <b>Observing and drawing the observed things, labeling the diagrams. Concept map , HOTs , reasoning questions, and Value Based Questions</b></p> <p><b>MATERIALS: METALS AND NON METALS</b> <b>LEARNING OUTCOMES</b> <b>Students will be able to:</b> Differentiate between metals, non-metals and alloys. -Practical utility of metals and non-metals. -Writing formulae, Equations, Balancing of equations. <b>Activities:</b> *Students will be asked to observe objects such as, gold ring, silver ring, copper wire or utensil, fresh iron nail etc.They will be given some criteria : such as: Appearance ( shiny or dull), hard or soft,conductivity ( by using the electric circuit made by themetc.Students will collect</p>	<p><b>*FORCE AND PRESSURE, FRICTION ( Both these chapters were collaborated )</b> <b>LEARNING OUTCOMES</b> Students will be able to: * Explain the terms like force, pressure, atmospheric pressure, friction and drag.* Explain the effects of force. *Differentiate between contact and non-contact forces. *Identify the types of Force and Friction and differentiate between them. *Tabulate methods of increasing and reducing friction. *Relating pressure with area and analyzing it for fluids. *Comprehend frictional force and factors affecting them. *Relating Force, Friction and Pressure in day to day life. <b>Activity:</b> *<b>Class-activities</b> Recapitulation of the previous knowledge. Students will be asked to push a table and pull it....they will be able to recall force, after this students will perform few small-small activities to show the effects of force, they will show crushing the paper, moving a book on the table, pick up a book, rub a scale on their hair and then will take few bits of paper, move the rubbed scale over these bits of paper, what happens, the bits of paper will stick to scale. Now students will be asked to roll a ball on the smooth floor and will</p>

<p>grandparents to know about the preservatives used in the earlier days and nowadays. They will analyze the change in preservation method</p> <p>Checking the preservatives used in the packed food items and to check the expiry date. Students made a table of various items they had in their home showing their expiry date, Manufacture date and the preservatives added to them.</p> <p><b>Assessment: Pen – paper test, Observing and drawing the diagrams. Tabular information, Sequencing pattern of the crop production, Concept map , HOTs , Quiz , reasoning questions. Value Based Question.</b></p> <p><b>Synthetic Fibres And Plastic</b></p> <p><b>LEARNING OUTCOMES</b> Students will be able to:</p> <ul style="list-style-type: none"> <li>*Analyze the difference between Synthetic &amp; Natural fibres.</li> <li>*Differentiate thermoplastic and thermosetting.</li> <li>*Make efforts to protect our environment.</li> </ul> <p><b>Activity:</b> *Students will be asked to take two buckets or baskets what so ever they had at home and label one as natural and the other synthetic, they will asked to find out various things, sort these things as natural and synthetic.</p> <p>A video of a few common thermosetting and thermoplastic will be shown to the students and then during the class it will be discussed.</p> <p>*Students will identify various common objects at home, such as non stick pans, switches, comb, plastic bottles, chairs etc. Now they will be asked if these things get damaged in your house and you have to give them to a junk dealer, why will he refuse to take a few of them. Which of them he would refuse to take and why?</p> <p>Students will be asked to write a few ways how they can protect the environment. (Integration with IT and English)</p> <p><b>Assessment : Pen – paper test, Concept map , HOTs , reasoning questions and Value Based Questions .</b></p>	<p><b>movie-A documentary film on the extraction.</b></p> <p><b>Assessment: Pen – paper test, Writing a paragraph on the extraction of coal and petroleum. Debate on the impact of extraction on the environment. Group discussion on the health problems faced by the people working in the coal mines. Concept map , HOTs , reasoning questions, and Value Based Questions (Integration with English and IT)</b></p> <p><b>CONSERVATION OF PLANTS AND ANIMALS .</b> LEARNING OUTCOMES Students will be able to:</p> <ul style="list-style-type: none"> <li>*Discuss various uses of forests.</li> <li>-Interpret consequences of deforestation on soil.</li> <li>-Show the need for Conservation of forests and wildlife.</li> </ul> <p><b>Activity:</b> *Powerpoint presentation: students choose any one topic of their own interest from the chapter and will make a ppt. *Students will mark the wildlife centuries, and parks on the world map, this map work will be submitted to the social science teacher.</p> <p><b>Assessment : Pen – paper test, Concept map , HOTs Writing skill-(Write an essay on Conservation of animals), Map work, reasoning questions, and Value Based Questions (Integration with Art, Social Sciences and</b></p>	<p>the information and then there will be a class discussion on physical properties. They will be enlisting the first 20 elements of the periodic table. Teacher will talk about the valency. Atomic no. of these elements and will teach how to calculate the valency through magic numbers.<b>electronic configurations will be introduced.</b></p> <p>*Video demonstration will be showing the Chemical properties... Students will try to write a few chemical equations. They will keep an iron nail outside in the moisture and observe it, after a few days they will see the change in it...they will try to write an equation for this process....and will name the process.</p> <p>*Students will be asked to tell the steel which you use at home is WHAT?...A METAL, A NON METAL OR SOMETHING ELSE....? They will try to find out and alloy will be introduced.</p> <p><b>*Assessment : Pen – paper test, Observations of the things collected, electronic configurations, Chemical Equations, HOTs , reasoning questions, Quiz and Value Based Questions.</b></p>	<p>be asked why it stopped itself after some time, So with these few small activities students will be introduced with the type of forces and their importance...</p> <p>*Students will be asked to open the door of their class and will be asked to observe if the hinges of the door are making noise or not, if yes, Why? How can it be corrected...this activity will introduce them with how to increase or reduce the friction.</p> <p>Teacher cut any fruit with the blunt side and sharp side of the knife This activity will introduce them to the term pressure, and how pressure is related to force and area....Students will also be solving a few numerical Problems on pressure, after the teacher demonstrates.</p> <p>*So by making the students only perform such activities the concepts of the chapter will be taught, and later students will be asked to identify various such events from day to day life which includes his terms...</p> <p><b>*Assessment: Pen – paper test, Observations, Numericals Concept map , HOTs , reasoning questions, and Value Based Questions (Integration with mathematics)</b></p>
<p><b>*Diksha app is taken into consideration.</b></p>			

July/August	September	October	November
<p>*REPRODUCTION IN ANIMALS &amp; REACHING THE AGE OF ADOLESCENCE</p> <p><b>LEARNING OUTCOMES:</b> <b>Students will be able to:</b></p> <p>*Discuss The Changes occurring during adolescence</p> <p>*Locate the glands in the body</p> <p>*Interpret the functions of glands/hormones present in the body.</p> <p>*Distinguish male/female reproductive parts.</p> <p>*Discuss the sex determination in human.</p> <p>*Differentiate Oviparous and Viviparous animals</p> <p><b>Activities:</b></p> <p>*Group Discussion on changes during adolescent age. How to maintain health and Hygiene during the Adolescent age.</p> <p>Students will be asked to prepare a diet chart for themselves.</p> <p>*Case Study: Students will be given various Situations related to adolescence and will be asked to give their ways of handling.</p> <p>Later it will be an open session discussion.</p> <p>*Video demonstrations showing the reproductive organs in Male and Female. Discussion on fertilization and sex determination, Oviparous and Viviparous animals.</p> <p><b>Assessment :</b> Pen – paper test, poem writing, Diagrams, Diet chart, Concept map , HOTS , reasoning questions, Quiz, Flow chart and Value Based Questions*</p>	<p>*CHEMICAL EFFECTS OF CURRENT</p> <p><b>LEARNING OUTCOMES</b> <b>Students will be able to:</b></p> <p>*To explain the terms anode, cathode, electrolyte</p> <p>*Examining the process of electrolysis and its applications.</p> <p>*Interpret chemical effects of current in case of electroplating.</p> <p>*List the uses/ importance of electroplating in our day to day life.</p> <p><b>Activity:</b> Activities: Teacher will demonstrate an electrolysis of water( using two iron nails, wrap ends of the nails to two copper wires, the other end of the copper wire will be connected to the battery. Take water in a glass and add a pinch of salt into it, dip the ends of the nails into the water, and observe, this process shows the electrolysis of water. Teacher will ask them to talk to their parents about the electric rod, which was used to heat up water in the earlier days or maybe some people still use it, this is an effect of electrolysis. A video showing the electroplating will be shown to the students, after that a discussion will be held on it, students will analyse the importance of electroplating process and will try to find out various thing around them which are electroplated....they will make a list of these things and discuss the reason for electroplating them.</p> <p><b>Assessment :</b> Pen – paper test, Concept map , Observations of the activity performed, HOTS , reasoning questions, and Value Based Questions</p>	<p>*LIGHT</p> <p><b>LEARNING OUTCOMES</b> <b>Students will be able to:</b></p> <p>*-Recall reflection and laws of reflection.</p> <p>-Observe the characteristics in a plane mirror.</p> <p>-Comprehend multiple reflections, dispersion and working of Human Eye.</p> <p><b>*Activities:</b> Students will perform various activities along with the teacher like: reflection, proving the laws of reflection, number of images formed when the two mirrors are placed at various angles and analyse the phenomena of multiple reflection. They will make a Kaleidoscope.</p> <p>*Students will stand in front of the plane mirror in their house and will try to find out the characteristics of their own image formed by the plane mirror, they will pen down them (recalling their previous knowledge) then there will be a discussion on it.</p> <p>*Students will be asked to take a plane mirror of a small size, place it in a bowl and fill this bowl with water. Set up this bowl near the window where the sunlight can fall on the bowl, adjust it so that the light falling on the bowl reflects back on the wall near to it, place a white plane paper on that point on the wall, observe it, it will show the process of dispersion</p> <p>*Teacher will demonstrate the phenomenon of dispersion with the help of prism.</p> <p>*Students will be shown a video on it, this video will also show the defects of vision, WHY ? HOW can they be corrected?....if any of them are wearing spectacles they will be asked to talk to their doctors and find out which defect is it, which lens is there in their spectacles, later they will share in the class. Student will be asked to create a flowchart showing how they can take care of their eyes.</p> <p><b>Assessment :</b> Pen – paper test, Observations, Ray diagrams, Flowcharts, Concept map , HOTS , reasoning questions, and Value Based Questions</p>	<p>*POLLUTION OF AIR AND WATER</p> <p><b>LEARNING OUTCOMES</b> <b>Students will be able to:</b></p> <p>*- Classify the types of pollution.</p> <p>- Identify the causes of pollution.</p> <p>- Analyze the impact of acid rain and green house effect.</p> <p>-Enlist the causes and effects of Global warming.</p> <p><b>Activities:</b> *Students will make a Report on Types of Pollution created in their locality and measures that can be adopted to minimize it. Student will take this project only within their neighboring area only, if they need to visit around they will follow the proper precautions as prescribed per COVID-19.. Students will make a collaborated project in groups. Students will also find out the places or monuments which are affected due to pollution, what type of pollution is responsible for the corrosion.</p> <p><b>Assessment :</b> Pen – paper test, Concept map , Report, HOTS , Quiz, reasoning questions, Value Based Questions.</p>
	<p><b>SOUND</b></p> <p><b>LEARNING OUTCOMES:</b></p> <p><b>Students will be able to:</b></p> <p>*To identify the types of sounds around us.</p> <p>*To understand the terms pitch, frequency, loudness and amplitude in relation to sound.</p> <p>*To demonstrate the production and propagation of sound through a medium.</p> <p><b>Activities:</b></p> <p>*Students will be shown the bell jar activity, then</p>	<p>*SOME NATURAL PHENOMENA</p> <p><b>LEARNING OUTCOMES</b> <b>Students will be able to:</b></p> <p>*-Discuss Lightning and its after effects.</p> <p>-Enlist life saving tips during earthquake.</p> <p><b>Activities:</b> *Video demonstration: Students will be shown a video on some natural occurring phenomena , will have discussion in class.</p> <p>*Students will do internet Research work about the earthquake prone areas. will make a list of area prone to earthquake. Students will be asked to DESIGN A LAYOUT of a house which can be earthquake resistant.</p> <p><b>Assessment :</b> Pen – paper test, Concept map</p>	<p>*STARS AND THE SOLAR SYSTEM</p> <p><b>LEARNING OUTCOMES:</b> <b>Students will be able to:</b></p> <p>*Observe and classify various celestial objects..</p> <p>*To identify members of solar system other than planets.</p> <p><b>Activity:</b> *Power point presentation</p> <p><b>Assessment:</b> Pen – paper test, Concept map , PPT, HOTS , Report , reasoning questions, and Value Based Questions</p>

	<p>they will be asked to identify why the sound was not heard in the bell jar experiment, and how can you hear through the toy telephone. Students will be asked to make some models of musical instruments and also be asked to play them. Students will be asked to find out the history of some musical instruments of H.P. and other states of their choice.</p> <p><b>Assessment:</b>  <b>Pen – paper test, Making tables showing the vibrating part of the musical instrument. Concept map , HOTS , reasoning questions, and Value Based Questions</b></p>	<p><b>,model layout, HOTS , Research work, reasoning questions, and Value Based Questions</b></p>	
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\*Diksha App is taken into consideration