

**Annual Syllabus**  
**Session: 2022-2023**  
**Class-VIII (LEVEL-1)**  
**Subject: SCIENCE**

Chapter No. and Name	Content and its mapping with previous classes	Learning Outcomes	Suggested Activities
<b>FOOD</b>	<p><b>Class VI</b></p> <p><b><u>CH-9: Living organisms and their surroundings</u></b></p> <ul style="list-style-type: none"> <li>• Characteristics of the living beings.</li> </ul> <p><b>ClassVII</b></p> <p><b><u>Ch-1: Nutrition in Plants</u></b></p> <ul style="list-style-type: none"> <li>• Saprotrophs.</li> <li>• How nutrients are replenished in the soil.</li> </ul> <p><b>ClassVIII</b></p> <p><b><u>Ch-2 Microorganisms : Friends And Foe:</u></b></p> <ul style="list-style-type: none"> <li>❖ Microorganisms</li> <li>❖ Major groups of microorganisms and their living place</li> <li>❖ Microorganisms and us</li> <li>❖ Harmful Microorganisms</li> <li>❖ Food Preservation</li> <li>❖ Nitrogen Fixation</li> <li>❖ Nitrogen cycle</li> </ul>	<ul style="list-style-type: none"> <li>• Identify different types of microorganisms (both unicellular and multicellular)</li> <li>• Classify useful and harmful microorganisms.</li> <li>• Explore the role of micro organisms in life.</li> <li>• Asks questions and lead to investigations like how do vegetables or food items get spoiled.</li> <li>• Investigate various diseases caused by microorganisms.</li> <li>• Apply learning of scientific concepts in daily life (what helps in making curd ? how does food go bad ?etc.)</li> <li>• Investigate the use of salt and sugar in preserving pickles and jams.</li> </ul>	<ol style="list-style-type: none"> <li>1. To observe drops of pond water, curd, bread mould, under microscope.</li> <li>2. Observe the permanent slides of Microorganisms.</li> <li>3. An experiment to collect the gas (evolved from the fermentation in wheat flour -Increased volume of wheat flour by yeast)- in a balloon and pass it through lime water.</li> <li>4. Pull out a gram/bean plant from the field and to study its root nodules.</li> </ol> <p><i>VI-Refer to worksheet no.25-27.</i></p> <p><i>VII-Refer to worksheet no.12-13.</i></p> <p><i>VIII:- Refer to worksheet no. 02-13, 23-24</i></p>
<b>MATERIAL</b>	<p><b>CLASS-VI</b></p> <p><b><u>CH-2: Components of food</u></b>            Test for starch, protein and Fat. (process)</p> <p><b>CLASS-VII</b></p> <p><b><u>Ch- 5:Acids, Bases and Salts</u></b></p>	<ul style="list-style-type: none"> <li>• Identify and classify materials as metal and non-metals on the basis of their properties.</li> <li>• Write word equation for chemical reactions eg. Reactions of metals and Nonmetals with air ,water , acids and bases .</li> <li>• Apply learning of scientific concepts in day to day</li> </ul>	<ol style="list-style-type: none"> <li>1. To study the physical properties of metals and non-metals(NCERT Table 4.1 &amp; 4.2)</li> <li>2. To study the nature of oxides of metals and non-metals.</li> <li>3. To study displacement reaction.</li> </ol>

	<ul style="list-style-type: none"> <li>❖ Acids and Bases</li> <li>❖ Natural Indicators around us</li> </ul> <p>Neutralisation</p> <p><b><u>CLASS-VIII</u></b></p> <p><b><u>CH-4 Materials : Metals and Non-Metals</u></b></p> <ul style="list-style-type: none"> <li>❖ Physical properties of metals and non-metals</li> <li>❖ Chemical properties of metals and non-metals</li> <li>❖ Reaction with oxygen, water acids and bases</li> <li>❖ Displacement reaction</li> <li>❖ Uses of metals and non-metals.</li> </ul>	<p>life using appropriate metals and non-metals for various purposes.</p> <ul style="list-style-type: none"> <li>• To explore the answer of various questions-like why the ringing bells are not made up of wood.</li> <li>• Differentiate between metals and non metals on the bases of observations of their physical and chemical properties,</li> </ul>	<p>4. Reaction of metals and non-metals with acids .</p> <p><i>VI- Refer to worksheet no.3-5</i></p> <p><i>VII- Refer to worksheet n.14-17.</i></p> <p><i>VIII:-Refer to worksheet no.14-22</i></p>
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➤ **The above content must be completed by 30<sup>th</sup> September 2022.**

➤ **Revision of syllabus for Mid Term Examination.**

**Note: (Specify, if needed) The above said syllabus is for assessment purpose only and remaining topics/chapters may be taught as Subject Learning Enrichment.**

### MID TERM EXAMINATION

Chapter Name	Content and its mapping with previous classes	Learning Outcomes	Suggested Activities
<p style="text-align: center;"><b>HOW THINGS WORK</b></p>	<p><b><u>CLASS-VI</u></b></p> <p><b><u>*CH – 11: Light Shadows and Reflection</u></b></p> <ul style="list-style-type: none"> <li>• Transparent, opaque and translucent objects</li> <li>• What exactly are shadows?</li> <li>• A pinhole camera.</li> </ul> <p>Mirrors and reflections</p> <p><b><u>CLASS-VII</u></b></p> <p><b><u>* Ch-15: Light</u></b></p> <ul style="list-style-type: none"> <li>❖ Light travels along a straight line</li> <li>❖ Reflection of light.</li> <li>❖ Right or left, playing with spherical mirrors.</li> <li>❖ Images formed by lenses.</li> <li>❖ Sunlight white or coloured.</li> </ul>	<ul style="list-style-type: none"> <li>• To differentiate between regular and irregular reflection.</li> <li>• To identify the characteristics of the image formed by a plane mirror.</li> <li>• Conduct simple investigations to verify the laws of reflection.</li> <li>• Explain the process of the formation of multiple images, by experimentation.</li> </ul>	<ol style="list-style-type: none"> <li>1.To verify laws of reflection of light with the help of a ray of light and a mirror.</li> <li>2.To identify the reflected image with the help of a plane glass and a lighted candle.</li> <li>3.To observe an object through a straight and bent pipe.</li> <li>4.To observe the formation of multiple images by mirrors with each other at different angles.</li> <li>5.To study the structure of eye with the help of a chart/model.</li> <li>6.To make your own Kaleidoscope.</li> </ol>

	<p><b><u>CLASS-VIII</u></b>  <b><u>CH-16 Light</u></b></p> <ul style="list-style-type: none"> <li>❖ What makes things visible</li> <li>❖ Laws of reflection,</li> <li>❖ Regular and diffused reflection multiple reflection</li> <li>❖ Reflected light can be reflected again.</li> <li>❖ Multiple Images</li> <li>❖ Sunlight-,white or coloured,</li> <li>❖ What is inside Our Eyes?</li> <li>❖ (human eye-structure and function)</li> <li>❖ Care of the Eyes</li> <li>❖ Visually challenged persons can read and write.</li> <li>❖ What is the Braille system?</li> </ul>	<ul style="list-style-type: none"> <li>• Explain with the help of self drawn labeled diagram the structure of eye.</li> </ul>	<p>VI:-<i>Refer to worksheet no.16-19.</i>  VII:-<i>Refer to worksheet no.26-31</i>  VIII:-<i>Refer to worksheet no.25-33</i></p>
<p>➤ <b>The whole syllabus must be completed by 31 January, 2023.</b>  ➤ <b>Revision of syllabus for Annual Examination.</b>  ➤ <b>Annual syllabus will be based on whole annual syllabus.</b></p> <p><b>Note: The above said syllabus is for assessment purpose only and remaining topics/chapters may be taught as Subject Learning Enrichment.</b></p>			
<p><b>ANNUAL EXAMINATION</b></p>			