

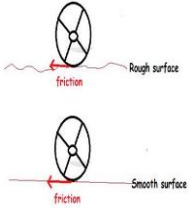
**Vidya Pratishthan's
Dr.Cyrus Poonawalla School (CBSE) Baramati**

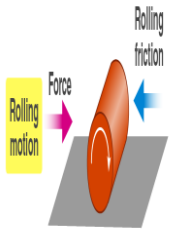
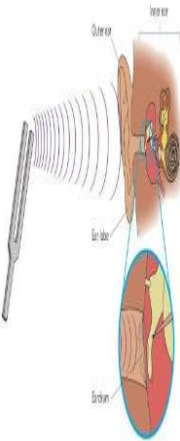
Sub-Science (Physics)

Annual Planning 2024-2025

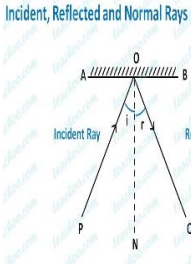
Std- VIII

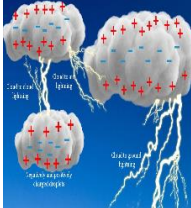
SR. No	Content/ Topic	Month	Learning Objectives	Expected Learning Outcomes	Activity/Practical	Teaching aid	21 st Century Skill/ Assessment
1.	<p style="color: red;">Force and Pressure</p> <p>Force - push or a pull</p> <p>Effect of force</p> <p>Contact and non-Contact forces</p>	April	<p>Classify common actions involving motion of object as push or pull in order to define the term force.</p> <p>To predict the changes when force is applied to a body.</p>	<p>Classify common actions as push or pull</p> <p>Analyze motion of an object when force is applied in the same and opposite direction in order to conclude that forces in same direction add while forces in opposite directions subtract.</p> <p>Able to differentiate between contact and non-contact forces.</p>	<p>Draw diagram to show different effect of force</p> <p>Activity 11.2 of NCERT Science textbook Activity 11.2 of NCERT Science textbook.</p> <p>Differentiate between friction and fluid friction.</p>	<p>ICR</p> <p>Activity</p>	Self-Assessment

2.	<p>Pressure</p> <p>Pressure exerted by liquids and gases</p> <p>Atmospheric pressure</p> <p>Friction</p> <p>Force of friction</p> <p>Factors affecting friction</p> <p>Friction necessary evil</p>	<p>June</p> <p>July</p>	<p>To define contact forces and define non-contact forces.</p> <p>To derive the formula pressure for given force applied on a given area</p> <p>To drive the formula pressure for given force applied in area.</p> <p>Discover the direction of pressure applied by liquid when put in a container.</p> <p>Discover the direction of pressure applied by liquid when put in a container.</p> <p>Discover the direction of pressure applied by liquid when put in a container.</p> <p>Discover the factors that cause friction.</p> <p>To provide advantages and disadvantages of friction in order to justify friction as necessary evil.</p>	<p>Calculate pressure for given force applied on a given area</p> <p>Calculate pressure for given force applied on a given area</p> <p>Students will be able to -</p> <p>Describe friction. State various examples of friction.</p> <p>Students will be able to -</p> <p>Describe ways to reduce friction Explore factors affecting friction such as nature of surfaces.</p> <p>Students will be able to -</p>	<p>Differentiate between friction and fluid friction.</p>	 <p>Carom game</p>	<p>Solving Problem</p>
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	<p>Reducing Friction</p> <p>Increasing Friction</p> <p>Types of friction</p> <p>Fluid friction</p>		<p>To identify factors causing friction in order to come up with formulate strategies to reduce or increase friction</p> <p>Differentiate between rolling friction and sliding friction.</p> <p>To explain drag caused by air (friction caused by fluids).</p>	<p>Explain different types of friction.</p>			
<p>3.</p>	<p>Sound</p>	<p>August</p>	<p>List examples of body moving in to and fro motion in order to explain vibration List commonly known musical instrument and identify parts that vibrate in order to explain that vibration produces sound List and identify functions of parts of human body that produces sound in order to explain the process of sound production Provide examples where sound travels from one point to another in order to</p>	<p>Explain process of propagation of sound; Explains processes and phenomena in order to relate to science behind the phenomena/processes and develop scientific thinking skills: Constructs models using materials from surroundings and explains their working in order to demonstrate scientific knowledge and understanding of how it works.</p>	<p>Record the observations during the activity, experiments, surveys, field trips, etc.</p>	<p>ICR</p> 	<p>Problem Solving</p>

4.	Light	January	<p>establish that sound needs a medium to propagate Describe the structure and function of an eardrum in order to explain how humans hear sound Recall the audible range of sound for humans in order to explain why certain sounds cannot be heard by humans Noise pollution List the harmful effects of noise pollution in order to mitigate it.</p> <p>Identify and calculate the angles of incidence and reflection of a ray of light to illustrate the laws of reflection in real life. Conclude the law of reflection and represent it by drawing a ray diagram identifying incident ray, reflected ray and the normal Illustrate with a line diagram how images invert when reflecting from a mirror in order to see the</p>	Distinguish between reflection from a rough and a smooth reflecting surface in order to differentiate between diffused and regular reflection	Activity formation of multiple images experiment.		Self-assessment
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		<p>applications of the laws of reflection. Describe various parts of human eye and identify their functions in order to explain how humans see object in presence of light Compare and contrast between blind spot and field of view in order to explain how humans see object in the presence of light Care of eyes. describe the braille system in order to explain how people with visual impairment manage to read and write</p> <p>Recall examples of visible sparks in order to explain the phenomenon of lightning. Analyze if two charged objects attract or repel each other in order to establish that similar charge repel each other while opposite charge attract each other Examine the working of electroscope to detect if</p>	<p>Establish that light can reflect multiple time with a set of mirrors by constructing a kaleidoscope.</p>		<p>ICR</p> 	
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5.	Some Natural Phenomenon		<p>an object is charged or not in order to apply the concept of similar charge objects repel each other</p> <p>Investigate the process of earthing in order to assess the process of transferring charge from a charged object to earth in order to explain the advantages of earthing of electric circuits in households.</p> <p>Examine the sequence of lightening occurring in clouds in order to explain the process of electric discharge in nature.</p> <p>Lightning safety Predict how lightning travels from the cloud to the ground in order to describe the measures that must be taken during lightning</p>	<p>Justify the phenomenon of earthquake in order to explain that the ground beneath us is not static Illustrate with a diagram the movement of earth in order to explain how earthquakes cause.</p>	Activity	<p>ICR</p> 	Self Assesment
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