

School Name:	Tiss						
Name of the Teacher:	Sajjad						
Subject:	General Science						
Class:	8th						
Pre Knowledge required : "Students should have heard the word light and would be familiar with its basic applications in our daily life."							
<b>Learning Objective of the lesson:</b>							
<ul style="list-style-type: none"> <li>Students will explore the scientific concept of light and the phenomenon by which it travels in a straight line even through a zig-zag paths. They will also explore the importance of light in our daily life.</li> <li>Students will distinguish between transparent, translucent, and opaque materials.</li> <li>Students will understand and apply the laws of reflection.</li> <li>Students will identify and describe incident ray, reflected ray, normal, angle of incidence, and angle of reflection. Understand reflection, refraction, and shadows.</li> <li>Students will distinguish between real and virtual images, especially in a plane mirror.</li> <li>Students will be able to implement their own idea's into creativity and innovation.</li> </ul>							
Chapter Name:	Reflection of Light						
Sub-Topic	Specific objectives	Activities students will do	Which 21st century skills to be developed in students through the activity?	What will students create/project using ICT	ICT Application students will use to create the project	Levels of Bloom's Taxonomy students can reach through the activity	Theory of Learning teacher will use in this lesson
		1. Students will do a pre-quiz on light using leap portal by using their respective student ID and Password. <a href="http://backup.leap21stcentury.org:5173/">http://backup.leap21stcentury.org:5173/</a>			Leap portal		
Light	<ul style="list-style-type: none"> <li>Students will explore the scientific concept of light and the phenomenon by which it travels in a straight line even through a zig-zag paths. They will also explore the importance of light in our daily life.</li> </ul>	2. They will participate in a group discussion on importance of light in our daily life and behaviour of light. They will make a list of the uses of light in our daily life in different places, they will search about the behaviour of light on the internet and will note down in bullet points.	Critical Thinking communication	Students will perform an experiment in a dark room by placing a object in front of the a candle, torch light or a flash light.	Basic technology like flash light,	Understand	
	<ul style="list-style-type: none"> <li>Students will be able distinguish between transparent, translucent, and opaque materials.</li> </ul>	Students will create a list by identifying different objects in their surroundings check whether the object is transparent, translucent or opaque.	Critical Thinking	Students will make a table with columns 'transparent', 'Translucent', and 'opaque'.	Google slide	Apply	
	<ul style="list-style-type: none"> <li>Students will understand and apply the laws of reflection.</li> </ul>	Students will use a laserlight or a torch light and mirror to observe the phenomenon of reflection. One student can volunteer holding a mirror steadily and one student can flash light on the mirror from different angles to check the changes in reflection.		Students will record a video of the activity and put in the slide and give proper annotations where laws of reflections were found	Google slide	evaluation	
	<ul style="list-style-type: none"> <li>Students will be able identify and describe incident ray, reflected ray, normal, angle of incidence, and angle of reflection. Understand reflection, refraction, and shadows.</li> </ul>	Students will search on the internet about incident ray and reflected ray. They will experience and measure the angle of incidence and angle of reflection.		Students can use mentioned website to see the simulation. <a href="https://simporg.org/reflection/reflection.htm">https://simporg.org/reflection/reflection.htm</a>  And screen record the video of the simulation with explanation audio and put in the slide		evaluation	
	<ul style="list-style-type: none"> <li>Students will be able distinguish between real and virtual images, especially in a plane mirror.</li> </ul>	Students will use a mirror to observe and compare real and virtual images by placing different objects in front of the mirror.	Critical thinking	Student will use the shapes to draw diagram of the real and virtual image.	Google slide	Create	
	<ul style="list-style-type: none"> <li>Students will be able to implement their own idea's into creativity and innovation.</li> </ul>	Students will make one artefact based on the phenomenon, reflection of light. For example: Periscope, klaideoscope	Creativity	Student will record a tutorial video of the activity and put in the slide. Along with the explanation of its working principle.		Create	
		5. Students will present their project with their individual group and do the post quiz on the given topic.					

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