



**Srini Science Mind**  
Abdul Kalam Physical Science Group



**NEW**

**8<sup>th</sup> class**

**PHYSICAL SCIENCE**

**MODEL LESSON PLAN**



**M.SRINIVASA RAO, SA(PS) AGKMHS GUDIVADA PH: 9848143855**

# MODEL LESSON PLAN

CLASS: 08

SUBJECT: PS

Name of the Teacher: M.SRINIVASA RAO

Name of the School: A.G.K.M.H.School, Gudivada

Name of the Lesson/Unit	Topic	No.of Periods Required	Timeline for teaching		Any specific information
			From	To	
<b>Light</b> <b>(Chapter-7)</b>	What makes things visible – Laws of Reflection	4	xx/xx/xxxx	xx/xx/xxxx	
	Regular and Diffused Reflection	2	xx/xx/xxxx	xx/xx/xxxx	
	Reflected light can be reflected again – Multiple Images	2	xx/xx/xxxx	xx/xx/xxxx	
	Keleidoscope	1	xx/xx/xxxx	xx/xx/xxxx	
	Sunlight:White or Coloured - What is inside our eyes?	3	xx/xx/xxxx	xx/xx/xxxx	
	Care of the eyes	2	xx/xx/xxxx	xx/xx/xxxx	
	Visually Impaired Persons Can Read and Write	2	xx/xx/xxxx	xx/xx/xxxx	
	What is the Braille System	2	xx/xx/xxxx	xx/xx/xxxx	

## Prior Concept/Skills:

1. What are the sources of light?
2. Does light travel in all directions?
3. What are the properties of light?

## Learning Outcomes:

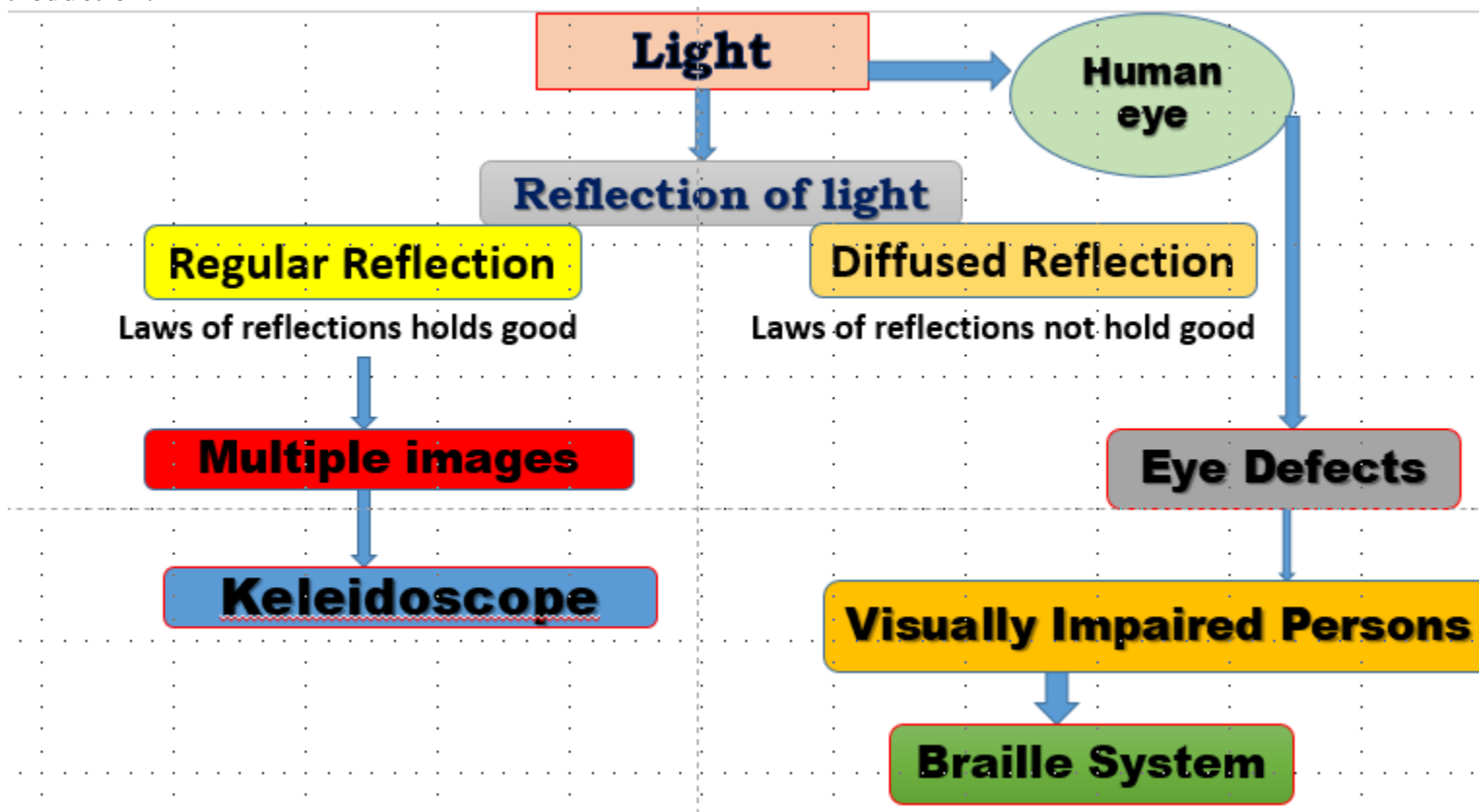
1. Draw the experimental setups verification of laws of reflection.
2. Applies learning of scientific concepts in day-to-day life of laws of reflections in multiplex halls/theatres.
3. Measures angles of incidence and reflection.
4. Differentiate reflection as regular and diffused reflection.
5. Applies learning of scientific concepts in day-to-day life of regular and diffused reflections.
6. Explains processes and phenomena of formation of multiple images
7. Exhibits creativity in designing, planning, making use of Kaleidoscope.
8. Constructs models using materials from surroundings and explains their working of kaleidoscope.
9. Relates processes and phenomenon with causes of working of human eye.
10. Draws labelled diagram of structure of the human eye
11. Draws the flow charts of how you can take care of eyes.
12. Classifies materials based on characteristics of real and virtual images.
13. Discusses and appreciates stories of scientific discoveries of Louis Braille and Helen A. Keller
14. Conducts simple investigations to seek answers to queries of How does the braille system work?

## No. of Periods

- 2
- 1
- 1
- 2
- 1
- 2
- 1
- 1
- 1
- 1
- 1
- 1
- 2
- 1

## TEACHING LEARNING PROCESS

### Induction/Introduction:



### Experience and Reflection:

1. Students will use the law of reflection of light when installing mirrors in building constructions.
2. Students will learn how to prevent eye problems in daily life and take appropriate precautions.
3. Students will learn how Braille system is used by visually impaired students.

Explicit Teaching/Teacher Modelling (I Do)	Group Work (We Do)	Independent Work (You Do)	Notes for:
1. Discussion and explain on Can you see an object in the dark?  2. Explain and conduct an activity on showing reflection of light	1. Group discussion on properties of Light.  2. Students draw the incident ray, reflected ray and normal.	1. Students will give reasons why they cannot see the object in the dark?  2. Students express the first law of reflection	1. Do all objects reflect light?  2. What causes light reflection?

<p>3. Conduct an activity on the first law of reflection with help of a mirror, drawing board, white sheet, scale and pencil.</p> <p>4. Conduct an activity on the second law of reflection with help of a mirror, drawing board, white sheet, scale, protector and pencil.</p> <p>5. Explain and conduct an activity on image formation in a plane mirror.</p> <p>6. Explain regular and diffused reflections.</p> <p>7. Discussion on reflected light can be reflected again.</p> <p>8. Explain and conduct an activity on multiple images formed by a plane mirror.</p> <p>9. Explain making and working of kaleidoscope.</p> <p>10. Conduct an activity on dispersion of Light.</p> <p>11. Explain structure and function of human eye.</p> <p>12. Demonstration on blind spot and perception of eye.</p> <p>13. Discussion and explain on eye defects and their suitable corrections.</p> <p>14. Explain how you can take care of your eyes.</p>	<p>3. Students describe the entire procedure.</p> <p>4. Students measures angle of incidents and angle of reflections.</p> <p>5. Why lateral inversion takes place in a plane mirror- Group discussion.</p> <p>6. Students give examples of regular and diffused reflections.</p> <p>7. Students visit nearest shopping mall and express their thoughts.</p> <p>8. Collect information of multiple images formed by a plane mirror.</p> <p>9. Students describe the making of kaleidoscope.</p> <p>10. Students will conduct an activity of dispersion of light.</p> <p>11. Discussion on the eye perceives object as moving.</p> <p>10. Students collect the information of eye defects and corrections.</p> <p>11. Debate on care of the eyes.</p>	<p>3. Students collect the materials for the verification of the first law of reflection.</p> <p>4. Solved the problems in own way.</p> <p>5. Students write the characteristics of the plane mirror.</p> <p>6. Define Regular and Diffused reflections.</p> <p>7. Students complete the homework.</p> <p>8. Students will make the kaleidoscope.</p> <p>9. What is the dispersion of light.</p> <p>10. Students draw the structure of the human eye.</p> <p>11. Students conduct an activity on a bird in case.</p> <p>12. Meet an eye specialist. Get your eye sight checked and discuss how to take care of your eyes</p>	<p>3. What are the effects of reflection of light?</p> <p>4. What is the formula of second law of reflection?</p> <p>5. What type of image is formed in a plane mirror?</p> <p>6. Can image be formed in diffused reflection?</p> <p>7. Which image is brightest in multiple reflection?</p> <p>8. How many images will be formed if two plane mirrors will be placed at <math>45^{\circ}</math>?</p> <p>9. On what principle kaleidoscope is based?</p> <p>10. How many colours in white light? What are they?</p> <p>11. What are the main parts of the Human eye?</p> <p>12. What is the main function of blind spot in eye?</p> <p>13. What are the main eye defects?</p> <p>14. What is the function of the retina?</p>
---	--	--	--

15. Discussion and explain how visually impaired persons can read and write. 16. Explain Braille system.	12. Students read the history of Louis Braille. 13. Collect the information of Braille system.	13. Students complete the homework 15. What is the Braille system?	15. How can visually impaired person to read and write?
---	---	---	---

<b>Check For Understanding Questions</b>		<b>TLM's (Digital + Print)</b>
<p><b>1. Factual:</b></p> <ol style="list-style-type: none"> <li>1. Where do you find reflection of light in your daily life?</li> <li>2. Which principle is used in a kaleidoscope?</li> <li>3. How many dots are used in Braille system?</li> </ol> <p><b>2. Open Ended/Critical Thinking:</b></p> <ol style="list-style-type: none"> <li>1. What happens to the size of the pupil of our eye in bright light?</li> <li>2. What happens when a ray of light falls perpendicularly on the surface of a plane mirror?</li> <li>3. How can you detect an eye problem?</li> </ol> <p><b>3. Student Practice Questions &amp; Activities:</b></p> <ol style="list-style-type: none"> <li>1. Describe an activity to show that the incident ray, the reflected ray and the normal at the point of incidence lie in the same plane.</li> <li>2. Explain how you can take care of your eyes</li> <li>3. Describe the construction of a kaleidoscope.</li> <li>4. Draw a labelled sketch of the human eye.</li> <li>5. What is the angle of incidence of a ray if the reflected ray is at an angle of <math>90^\circ</math> to the incident ray?</li> </ol>		<ol style="list-style-type: none"> <li>1. Used prepared Quiz paper.</li> <li>2. Utilized digital classroom.</li> <li>3. Provide video links QR codes, DIKSHA App</li> <li>4. You Tube video's link</li> </ol>
<p><b>Assessment:</b></p> <ol style="list-style-type: none"> <li>1. How does the braille system work?</li> <li>2. Describe an activity to show that the angle of incidence is always equal to the angle of reflection.</li> <li>3. Differentiate between regular and diffused reflection. Does diffused reflection mean the failure of the laws of reflection?</li> <li>4. What are the characteristics of image formed by plane mirror?</li> </ol>		

SIGNATURE OF THE TEACHER

SIGNATURE OF THE HEADMASTER

VISITING OFFICER WITH REMARKS