

ACTIVITY NO. -15- COLOURS OF A RAINBOW

Subject	Science
Class	VII
Chapter/Unit	Light
Topic	The spectrum
Time	30 minutes
Nature of Activity	Individual

What will I learn (Learning Outcome)?

To infer that white light is made up of seven constituent colors.

Skills: Understanding, Analyzing and Applying

What I have to do?

To make a Newton's disc.

What do I require?

Thick white card paper, color pens, pencil

What do I need to know?

The splitting of white light into separate colors after passing through a prism is called dispersion. The band of colors obtained because of the dispersion of light is called a spectrum.

➤ Teacher's Activity

Teacher will

1. explain the concept of dispersion and the formation of a spectrum.
2. arrange the materials for the individual
3. give instructions regarding the activity.

How will I proceed?

➤ Student's Activity

1. Cut a circle out of thick white card paper.
2. Draw seven equal sectors on it.
3. Color them violet, indigo, blue, green, yellow, orange and red.
4. Pierce a small hole at the center of the disc and pass the pointed end of a pencil through it.
5. Rotate the card using the pencil.
6. Note the color of the disc.

What have I observed?

Tick the correct option	The seven colors are visible	White color is visible
When the disc is rotated		

What have I learnt?

When the disc is rotated, the colors _____ and the disc appears to be _____.

What am I curious to learn?

- Let us see the dispersion of sunlight by placing a triangular glass prism in sunlight and obtain a band of seven colors on a white sheet of paper (or on a white wall).

Let me evaluate myself

Q1. Name the device which is used to split white light into seven colors.

Ans. _____

Q2. Name the process which is involved in the formation of a rainbow.

Ans. _____

Q3. How can you say that white light (say, sunlight) consists of seven colors?

Ans. _____

Q4. What is a spectrum?

Ans. _____

Q5. White light consists of seven colors. Can we mix these seven colors to get white light?

Justify your answer.

Ans. _____
