



Group Number		Date	
Grade & Section		Teacher	
Subject/ Learning Area:		SCIENCE 7	

LEARNING ACTIVITY SHEET

The Characteristics of Light

Objectives:

At the end of the activity, you will be able to infer that:

1. light is composed of colors of different frequencies and wavelength;
2. the frequencies of the colors of light are inversely proportional to the wavelength; and
4. the arrangement of colors of light shows the hierarchy of the color's corresponding energy.

Activity:

Directions: Use the following data that corresponds to the frequency, wavelength and energy of the colors of light and the answer the guide questions.

Color Spectrum	Frequency (THz)	Wavelength (nm)	Energy (eV)
Red	422	700	1.77
Orange	484	620	2.00
Yellow	517	580	2.14
Green	566	530	2.34
Blue	638	470	2.64
Violet	744	400	2.95

tHz – Terahertz

nm – nanometer

eV – electron volt

Guide Questions:

1. Which color registered the highest frequency? shortest wavelength?

2. Which color registered the lowest frequency? longest wavelength?

3. What did you observe about the wavelengths and frequencies of the different colors of light?

4. Does the frequencies of the colors of light increase from Red to Violet?

5. What did you observe about the corresponding energies from Red to Violet?

6. How is frequency related to energy of colors of light?

Group members:

1.

2.

3.

4.

5.

6.

7.