

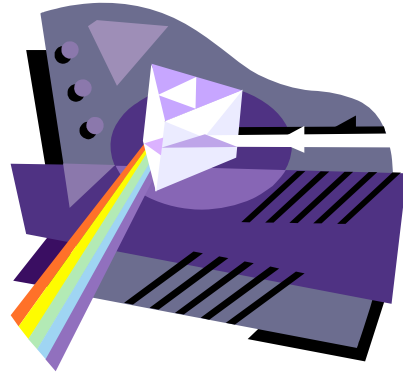
# Summary of *Module 5* Activities

## **The Nature of Waves: 45 minutes**

Students will explore waves using a long spring. They will learn the definitions of crest, trough, frequency and wavelength. Students will also explore the relationships between these quantities.

## **Scaling the EM Spectrum: 40 minutes**

Students will learn about some of the different types of electromagnetic radiation from visible light to radio waves. The class will construct a scale model of a portion of the EM spectrum and observe how small light waves are compared to infrared, microwave, and radio waves.



## **Fun With the Sun: 40 minutes**

The Sun is a major source of ultraviolet radiation. These experiments and demonstrations using UV sensitive beads will let students explore the Sun's UV light and learn how to protect themselves from its harmful effects.

## **Redder than Red: 40 minutes**

Infrared light has many applications in everyday life. Students will see a series of demonstrations in which infrared light is detected.

## **Essence of Luminescence: 1 hour**

Many objects glow when exposed to visible or ultraviolet light. Students will explore the various forms of luminescence including phosphorescence, triboluminescence, and chemoluminescence.

