The Nature of Light

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CONCEPT 1 The Nature of Light

Student Behavioral Objectives

The student will:

- perform calculations involving the relationship between the wavelength and frequency of electromagnetic radiation, $v = \lambda f$.
- perform calculations involving the relationship between the energy and the frequency of electromagnetic radiation, $E = hf$.
- state the velocity of electromagnetic radiation in a vacuum.
- name at least three different areas of the electromagnetic spectrum.
- when given two comparative colors or areas in the electromagnetic spectrum, identify which area has the higher wavelength, the higher frequency, and the higher energy.

Timing, Standards, Activities

TABLE 1.1: Timing and California Standards

Lesson	Number of 60 min periods	CA Standards
The Nature of Light	1.5	1h, 1j

Activities for Lesson 1

Laboratory Activities

1. None

Demonstrations

1. None

Worksheets

1. None

Extra Readings

1. What is the Electromagnetic Spectrum?

Answers for The Nature of Light (L1) Review Questions

- **Sample answers to these questions are available upon request. Please send an email to teachers-requests@ck12.org to request sample answers.**