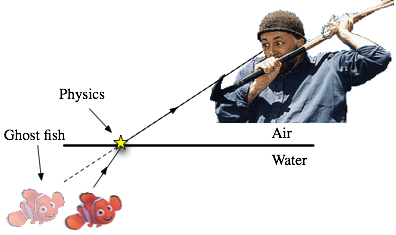
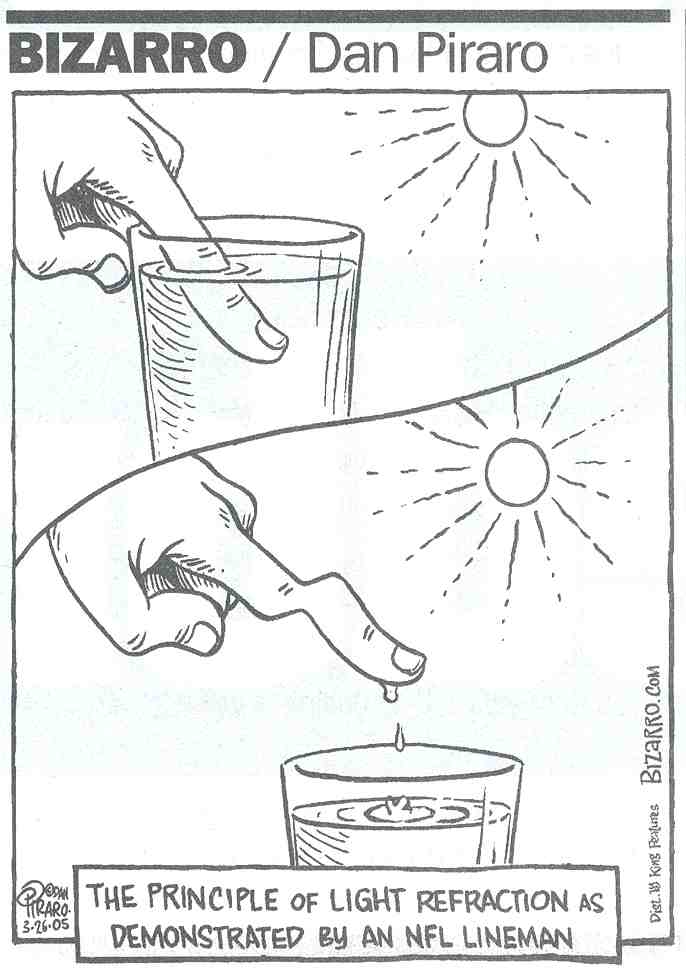
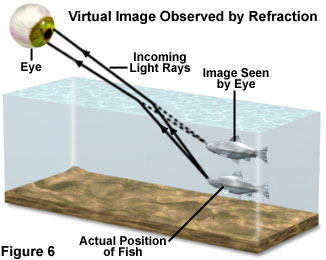
**Science 8 Unit 3 Pack:**

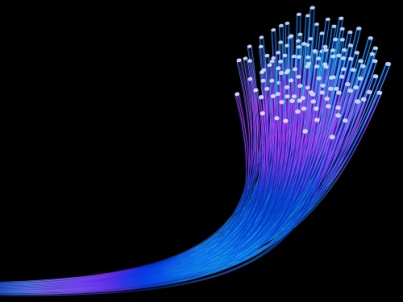


**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**





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**In this unit you will know the following content:**

1. **types of electromagnetic radiation:** the electromagnetic spectrum consists of radio, microwave, infrared, light, UV, X-ray, and gamma rays
2. **effects of electromagnetic radiation**: positive effects include cancer treatments; negative effects include sunburns
3. **properties** of light
   1. acts like both a wave and a particle
   2. wavelength, amplitude, frequency
4. **behaviours of light:** 
   1. reflection, refraction, absorption, transmission, scattering
   2. images formed by lenses and mirrors
   3. effects of translucent, transparent, and opaque objects
5. **ways of sensinglight:** human vision, optical instruments, cameras

**3.1: Electromagnetic Radiation**

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| --- | --- | --- | --- | --- |
| **Term** | **Definition** | | | **3 examples** |
| **Electromagnetic Spectrum** |  | | |  |
| **Term** | **Definition** | | **3 Uses** | **3 Technologies that use this wavelength** |
| **Radio waves** |  | |  |  |
| **Microwaves** |  | |  |  |
| **Infrared** |  | |  |  |
| **Visible light** |  | |  |  |
| **Ultraviolet** |  | |  |  |
| **X-Ray** |  | |  |  |
| **Gamma Ray** |  | |  |  |
| What are two NATURAL sources of electromagnetic radiation? Explain how the radiation is produced for each. | |  | | |
|  | | |
| What are two MAN-MADE sources of electromagnetic radiation?Explain how the radiation is produced for each. | |  | | |
|  | | |

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| --- | --- |
| For each of the types of electromagnetic spectrum,  a) describe a specific situation in which they can be dangerous.  b) Describe ways in which these wavelengths can be safely dealt. |  |
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