**Science 8 Unit 3 Pack:**



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





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**![C:\Documents and Settings\teacher\Local Settings\Temporary Internet Files\Content.IE5\6Y4P5DLO\MPj04387760000[1].jpg]()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. |  |
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| 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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