Properties of Visible Light

Focus:

1. To be able to describe the wave model of light
2. To be able to compare and contrast refraction and reflection
3. To be able to rationalize how colours are produced
* Light is a type of wave that travels through empty \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and transfers energy from place to place, such as Sun to Earth.
* Visible light is made up of waves of different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, each with their own wavelengths and frequencies.
* When light passes from one \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to another, the wave will bend or refract.
* Different wavelengths of light will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by different amounts. A prism refracts white light, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the colours. A second prism can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the colours to form white light.
* The range of colours or frequencies of light is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ spectrum

(ROY G BIV)

* Reflection occurs when a light wave strikes an object and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ off.
* An object appears red because it reflects red light and absorbs \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The three additive primary colours of light are red, green, and blue. These 3 colours make all the colours of the rainbow and are combined to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ light.