

Answer Key for 4.2: Properties of Visible Light

Reading Check 1: Refraction is the bending of a wave (of light)

Reading Check 2: A red ball looks black in the dark because there is no light. Therefore no light is reflected off the ball.

Colour your World:

1. Rainbow
2. White
3. White
4. Cyan
5. Yellow
6. Magenta

Facts about visible light:

1. The colours emerge from white light being refracted because white light contains many different wavelengths (colours) of light.
2. The colours refract at different angles because they have different wavelengths
3. Light refracts or bends when it travels through a medium (i.e. water, glass)
4. Red
5. Violet
6. By placing another prism beside the first prism
7. Blue
8. Because the violet wavelength is being reflected and all the others are absorbed
9. Red, Green, and Blue

Visible Light:

1. Wave model of light
2. Visible light
3. Refraction
4. Wavelengths and Frequencies
5. Colour
6. Prism
7. Refracted
8. Spectrum
9. ROY G BIV
10. Reflected
11. Absorbed

Properties of Visible Light:

1. G
2. C
3. E
4. F
5. B
6. A
7. D
8. D
9. B
10. C
11. D
12. B