

## SCIENCE 8 – PROPERTIES OF VISIBLE LIGHT WORKSHEET

NAME: \_\_\_\_\_

Vocabulary				
Absorbed	Frequencies	Reflection	ROY G BIV	Wave model of light
Amplitude	Prism	Refracted	Spectrum	Wavelengths
Colour	Reflected	Refraction	Visible light	White light

*Use your notes from pages 4 – 8 and the terms in the vocabulary box to fill in the blanks for the following eleven questions. You will not need to use every term.*

- 1) The \_\_\_\_\_ describes light travelling as a wave.
- 2) \_\_\_\_\_ is light that you can see.
- 3) The bending of a wave as it passes from one material to another is called \_\_\_\_\_
- 4) White light is made up of waves having different \_\_\_\_\_  
& \_\_\_\_\_
- 5) Sir Isaac Newton demonstrated that \_\_\_\_\_ is a property of visible light.
- 6) A \_\_\_\_\_ refracts light into different colours.
- 7) When passed through a second prism, the \_\_\_\_\_  
is combined to form white light once again.
- 8) The seven colour categories of visible light are together known as the visible \_\_\_\_\_
- 9) You can remember the order of the seven colours of the rainbow by using this abbreviation:  
\_\_\_\_\_
- 10) A fire engine appears to be red because the colour red is \_\_\_\_\_
- 11) A black shirt appears black because all colours are \_\_\_\_\_
- 12) When white light is refracted through a prism, different colours emerge. Where do the different colours come from?  
\_\_\_\_\_  
\_\_\_\_\_
- 13) Explain why all colours refract at different angles.  
\_\_\_\_\_  
\_\_\_\_\_

14) When does light refract or bend?

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15) Which colour in the visible spectrum has the longest wavelength?

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16) Which colour in the visible spectrum has the shortest wavelength?

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17) Explain how you can cause light separated by a prism to combine.

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18) Which has a higher frequency, yellow light or blue light?

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19) Why does a violet dress appear to be violet in sunlight?

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20) Look at the diagrams below. State the colour(s) of light indicated by “?”.

