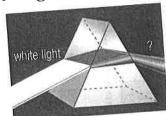
Section 4.2

Use with textbook pages 144–149.

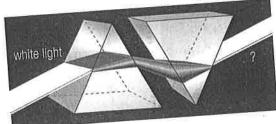
## Colour your world

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

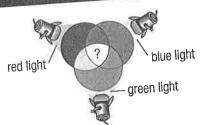
1.



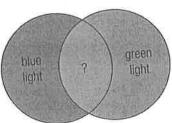
2.



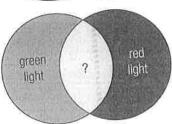
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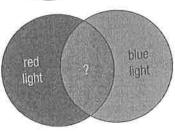
4.



5.



6.



Use with textbook pages 144-149.

## Facts about visible light

Answer the questions below.  1. When white light is refracted through a prism, different colours emerge. Where do the different colours come from?
2. Explain why all colours refract at different angles.
3. When does light refract or bend?
4. Which colour in the visible spectrum has the longest wavelength?
5. Which colour in the visible spectrum has the shortest wavelength?
6. Explain how you can cause light separated by a prism to combine.
7. Which has a higher frequency, yellow light or blue light?
8. Why does a violet dress appear to be violet in sunlight?
9. List three colours that can combine to produce all the colours of the rainbow.