

Name _____

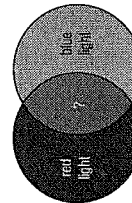
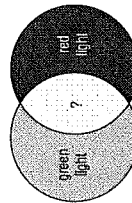
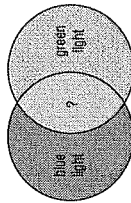
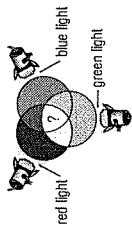
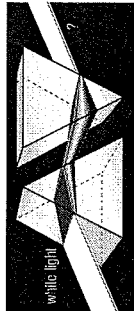
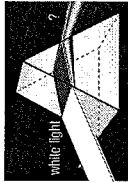
Date _____

Interpreting Illustrations
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. 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.

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Comprehension
Section 4.2

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?

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Name _____ Date _____

Cloze Activity
Section 4.2

Use with textbook pages 144–149.

Visible light

Vocabulary	
absorbed	refraction
amplitude	ROY G BIV
colour	spectrum
frequencies	visible light
prism	wave model of light
reflected	wavelengths
reflection	white light
refracted	

Use the terms in the vocabulary box to fill in the blanks. Use each term only once. You will not need to use every term.

- The _____ describes light travelling as a wave.
- _____ is light that you can see.
- The bending or changing direction of a wave as it passes from one material to another is called _____.
- White light is made up of waves having different _____ and _____.
- Sir Isaac Newton demonstrated that _____ is a property of visible light.
- A _____ refracts light into different colours.
- When passed through a second prism, the _____ light is combined to form white light once again.
- The seven colour categories of visible light are together known as the visible _____.
- You can remember the order of the seven colours of the rainbow by using this abbreviation: _____.
- A fire engine appears to be red because the colour red is _____.
- A black shirt appears black because all colours are _____.