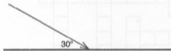


# REFLECTION

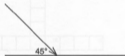
Name \_\_\_\_\_

Draw the expected path of the light rays as they reflect off the following plane mirrors.

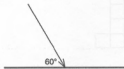
1.



2.



3.



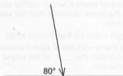
4.



5.



6.

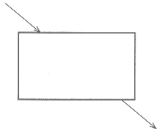


## REFRACTION

Name \_\_\_\_\_

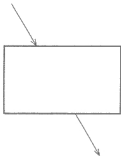
Draw the pathway of the light beam as it passes through each of the following substances. Using a protractor, measure the refracted angle.

1.

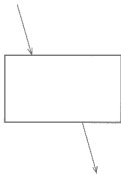


Which substance has the greatest  
Index of refraction? \_\_\_\_\_

2.



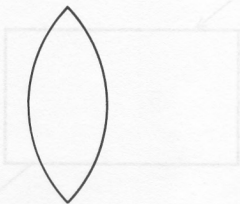
3.



# LIGHT RAYS AND CONVEX LENSES

Name \_\_\_\_\_

Draw the pathways of the light from the objects on the left through the convex lenses. Label the focal point and the inverted image.



# LIGHT RAYS AND CONCAVE LENSES

Name \_\_\_\_\_

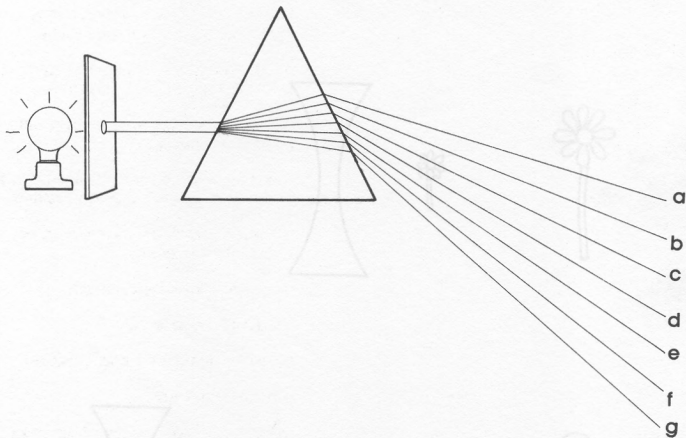
Draw the path of light through the concave lenses below. Label the image and focal point.



# WHITE LIGHT SPECTRUM

Name \_\_\_\_\_

Label the colors coming through this prism as the white light is reflected through it.



- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_
- d) \_\_\_\_\_
- e) \_\_\_\_\_
- f) \_\_\_\_\_
- g) \_\_\_\_\_

# LIGHT MATCHING

Name \_\_\_\_\_

Match the definition or corresponding phrase in Column II with the correct word in Column I.

## I

1. hertz \_\_\_\_\_
2. wave velocity \_\_\_\_\_
3. frequency \_\_\_\_\_
4. reflection \_\_\_\_\_
5. wavelength \_\_\_\_\_
6. refraction \_\_\_\_\_
7. crest \_\_\_\_\_
8. trough \_\_\_\_\_
9. photon \_\_\_\_\_
10. light \_\_\_\_\_
11. prism \_\_\_\_\_
12. index of refraction \_\_\_\_\_
13. angle of incidence \_\_\_\_\_
14. angle of reflection \_\_\_\_\_
15. visible light spectrum \_\_\_\_\_
16. normal \_\_\_\_\_

## II

- a) the angle at which a ray "bounces off" a surface
- b) bending of light waves when they pass through another substance
- c) an imaginary line drawn at a right angle to the surface of a barrier
- d) number of waves that pass a given point in one second
- e) tells how much a ray of light will bend as it travels through a given material
- f) translucent material that separates white light into colors
- g) frequency times wavelength
- h) lowest part of a wave
- i) type of electromagnetic radiation
- j) unit for frequency
- k) the bouncing of a wave off another object
- l) a continuous band of colors arranged according to wavelength or frequency
- m) distance between corresponding points on two waves
- n) particle of light
- o) highest point of a wave
- p) the angle at which a ray of light strikes a surface

## MAGNETIC FIELDS

Name \_\_\_\_\_

Draw the pattern of magnetic fields around these magnets

