gpb.org/physics-motion

## Work each of the following problems. SHOW ALL WORK.

1. Which color is seen when the following two colors of light are combined?
a. red light + green light $=$ $\qquad$
b. red light + cyan light $=$ $\qquad$
c. green light + magenta light $=$ white
d. green light + blue light $=$ $\qquad$
e. red light + blue light $=$ $\qquad$
2. Which color is seen when the following colors of light are shown on the corresponding colors of paper?
a. red light on blue paper: $\qquad$ black (blue pigment reflects only blue)
b. blue light on cyan paper: $\qquad$
c. green light on yellow paper: $\qquad$ green (yellow pigment reflects red and green)
d. magenta light on red paper: $\qquad$ red (magenta light is made of blue and red, and red pigment reflects only red)
e. magenta light on green paper: $\qquad$ black (green pigment reflects only green)
f. blue light on yellow paper: $\qquad$ black (yellow pigment reflects only red and green)
g. cyan light on magenta paper: $\qquad$ blue (cyan light is made of green and blue, and magenta pigment reflects red and blue)
h. yellow light on cyan paper: $\qquad$ green (yellow light is made of red and green, and cyan pigment reflects blue and green)
i. magenta light on yellow paper: red (magenta light is made of blue and red, and yellow pigment reflects green and red)
j. cyan light on green paper: $\qquad$ green (cyan light is made of blue and green, and green pigment reflects only green)
