CONCEPTUAL PHYSICS PRACTICE PAGE

Chapter 27 Color **Color Addition**

The sketch to the right shows the shadow of an instructor in front of a white screen in a dark room. The light source is red, so the screen looks red and the shadow looks black. Color the sketch with colored markers or label the colors with pen or pencil.

A green lamp is added and makes a second shadow. The shadow cast by the red light is no longer black, but is illuminated by green light, so it is green. Color or mark it green. The shadow cast by the green lamp is not black because it is illuminated with the red light. Label its color. Do the same for the background, which receives a mixture of red and green light.

A blue lamp is added and three shadows appear. Color or label the appropriate colors of the shadows and the background.

The lamps are placed closer together so the shadows overlap. Label the colors of all screen areas.



