Name $\qquad$ Period $\qquad$

## RGB Light Show Worksheet - 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 to match what you see.

A green lamp is added and makes a second shadow. The shadow cast by the red lamp is not longer black, but is illuminated by green light. So, it is green. Color it green. The shadow cast by the green lamp is not black because it is illuminated by the red lamp. Indicate 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. Indicate the appropriate colors of the shadows and the background.

The instructor moves closer to the screen so the shadows overlap. Indicate the colors of all screen areas.


RED
GREEN


The REAL Primary Colors
Now, indicate the colors of all screen areas using the new light bulb orders shown on this page.

Setup \#2


Setup \#3


BLUE


