





Worksheet IT 22: Colors accuracy

Last experience on light study, this learning scenario allows students to observe and measure the variation of a color under various light conditions.

What will you learn?

- **Step 1**: Launch the application that allows you to detect a specific color by framing it with the camera of your smartphone
- Step 2: Illuminate a colored surface with a light, also colored, to observe the interaction between the two colors
- Step 3: Detect the starting color again to observe its changes

Color Meter

Starting the application that allows you to measure color through the camera will result in two pieces of information displayed: the name of the color, and

- ☐ The amount of color pigments in it
- ☐ Its hexadecimal code
- ☐ The license plate number of the car of the same color





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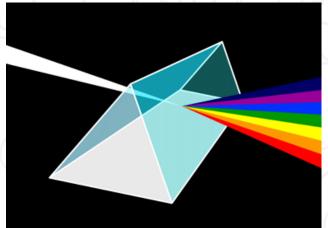




Interaction between colors

What happens when I light a colored surface with the display that shows a specific color?

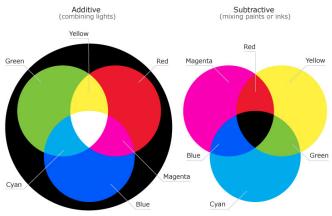
- The surface changes color according to the rules of additive synthesis
- □ The surface changes color according to the rule of subtractive synthesis
- ☐ The surface turns white



Obtained color

What do you notice by re-measuring the color of the surface subjected to these varied light conditions?

- ☐ That the new color obtained goes towards a lighter color than the starting one
- ☐ The new color obtained is darker than the original one
- ☐ The new color obtained is black



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