Light Absorption and Reflection

SPH4U

The _____ **colours** of light (the colours the cones of our retinas respond to) are

_____, _____, and _____.

The _____ **colours** of light are _____ primary colours:

blue + red = _____

blue + green = _____

green + red = _____

_____ light is a combination of _____ colours

(or the _____).

Most objects _____ light but _____ it.

Sketch: Incident pulse Reflected pulse

Note that a wave reflected at a _____.

A wave reflected at a _____.

Some light _____ may be _____ by the _____ of the object.

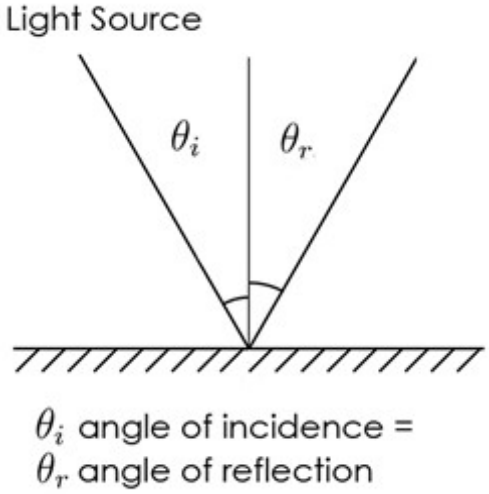
Different chemical substances will absorb different colours.

Example:

An object illuminated with white light that absorbs all colours of light will appear _____.

An object illuminated with white light that absorbs blue light will appear _____.

Light is reflected from a surface such that the angle of incidence equals the angle of reflection:



Note that these angles are _____:

the line _____.

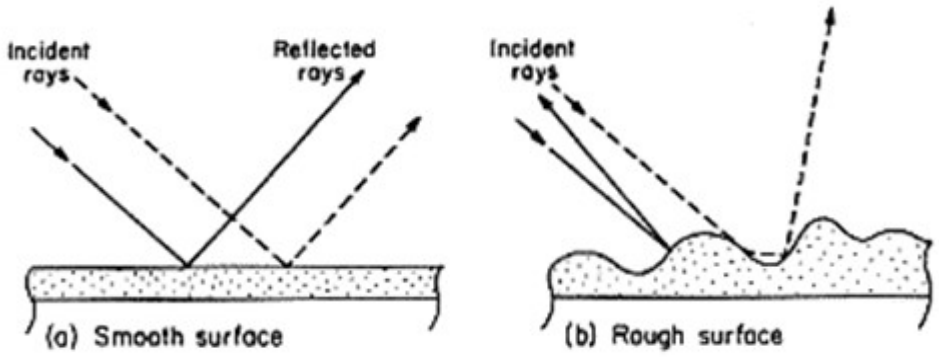
If the surface reflecting the light is _____, parallel incident rays will have parallel

reflections (and may _____).

This is _____ or _____ **reflection**.

If the surface reflecting the light is _____, the rays reflect in seemingly random directions.

This is _____ **reflection**.



Side note: some materials will _____ light and _____ the light at

a _____ (_____).

We call these materials _____.