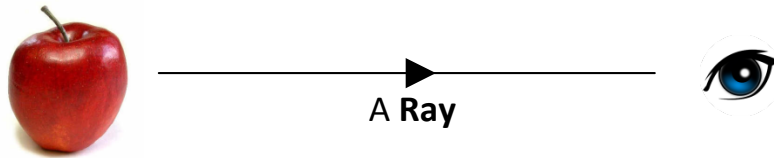


The Behaviour of Light

- 1) Light travels in straight lines (linear propagation) from an object to our eye.
- 2) A ray is the path taken by light energy.



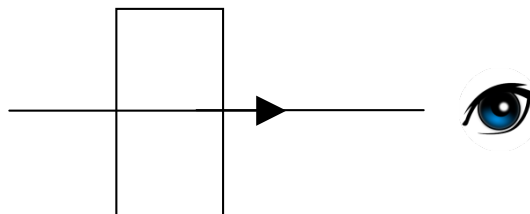
- 3) A **beam** of light consists of a stream of light rays. These may be:
 - a) Converging

b) Diverging

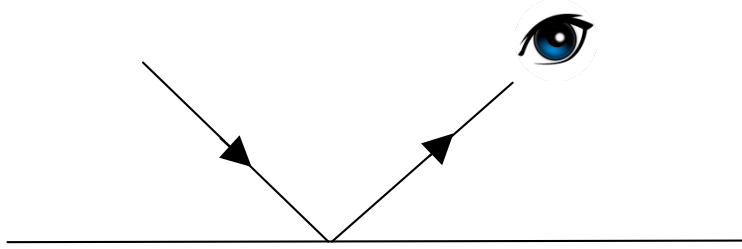
c) Parallel

- 4) When light strikes an object, three things can happen:

Transmission: This is the process in which light passes through an object and keeps traveling (*transparent* or *translucent* objects)

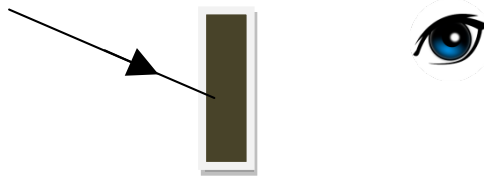


Reflection: This is the process of light “bouncing off” an object (e.g., a mirror, a piece of white paper).

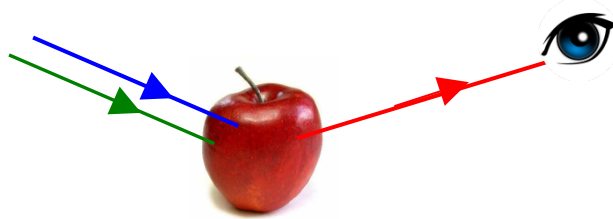


Absorption: This is the process in which light is retained by an object and converted to heat (thermal energy).

- Black objects absorb all wavelengths of light. (low albedo)
- White object reflect all wavelengths of light. (high albedo)



- Coloured objects selectively absorb some wavelengths and reflect others. (e.g., An apple absorbs green and blue light but reflects red).



The characters on this page are recognized by your eye since they do not reflect light back. This lack of light is recognized by the brain as the “colour” black.

Objects that reflect or absorb light are called **opaque**.