

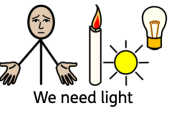

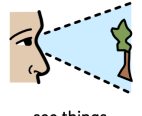


You know this  from before 

 We need light


 in order to

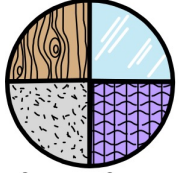
 see things.

 Darkness is

 the absence of

 light


 Light is reflected

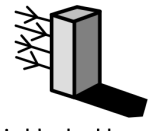
 from surfaces.

 Light from the sun



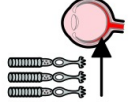
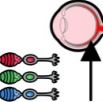







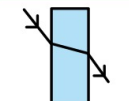
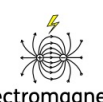




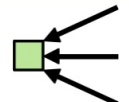
 can be dangerous

 and there are ways to protect our eyes.

 Shadows are formed when light

 is blocked by an opaque object.

Key Vocabulary





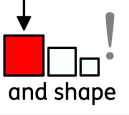




 reflection	 source	 rod cell
 cone cell	 optic nerve	 retina
 lens	 cornea	 opaque
 translucent	 transparent	 refraction
 electromagnetic spectrum	 visible light spectrum	 prism
 rainbow	 white light	 absorbed



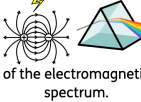
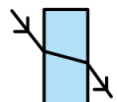


Light & Perception

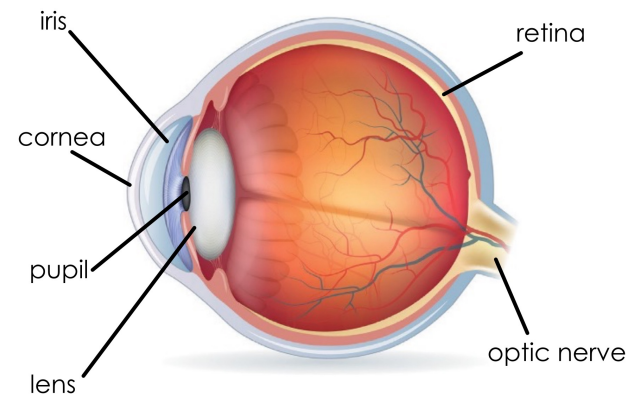


Light travels in straight lines.

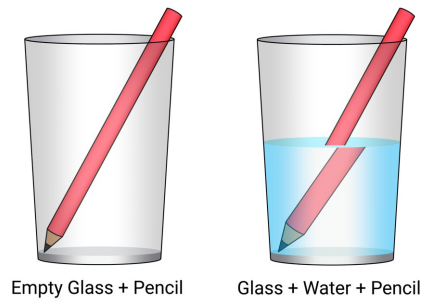



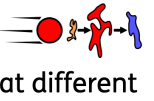
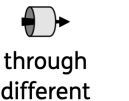
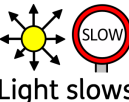


 A shadow	 is the absence	 of light
 The size	 and shape	 of a shadow
 is determined by the	 position of the light source	 in relation to the object.

 The rainbow	 is the visible part	 of the electromagnetic spectrum.
 Refraction	 happens when light travels	 through transparent materials.



Refraction of Light



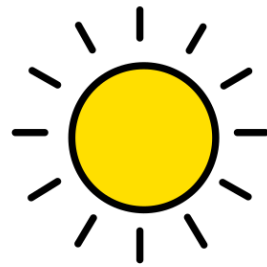
 Light travels	 at different speeds	 through different objects.
 Light slows down	 and changes direction	 in transparent materials.



You know this



from before



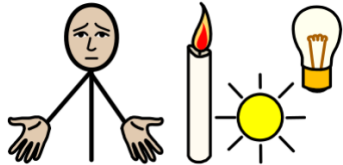
Light from the sun



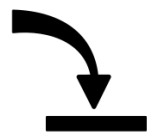
can be dangerous



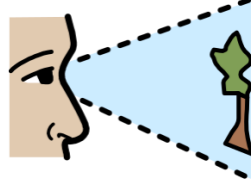
and there are ways to protect our eyes.



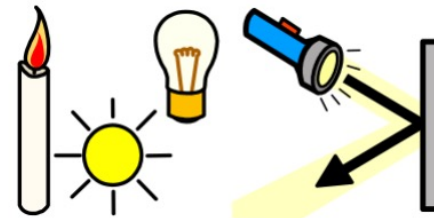
We need light



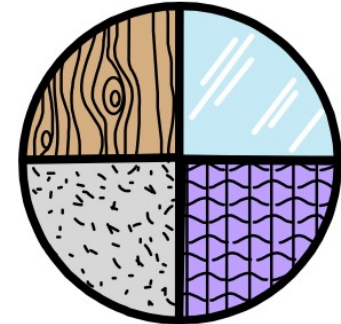
in order to



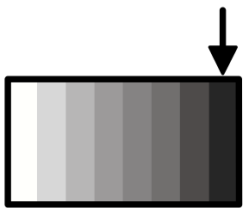
see things.



Light is reflected



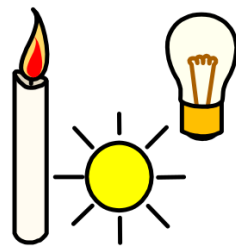
from surfaces.



Darkness is



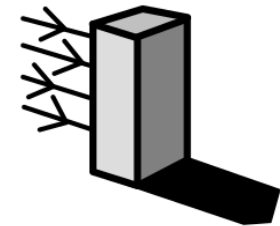
the absence of



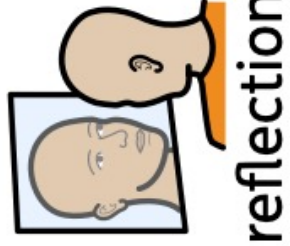
light



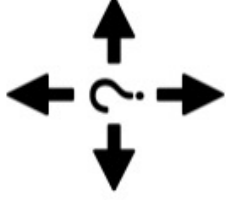
Shadows are formed when light



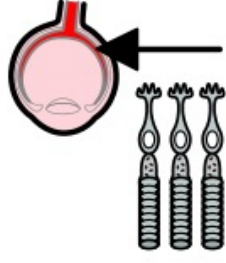
is blocked by an opaque object.



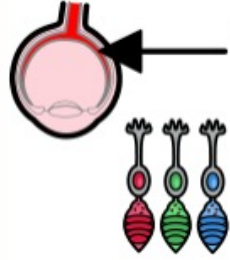
reflection



source



rod cell



cone cell



optic nerve



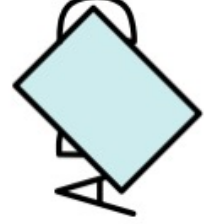
retina



lens



cornea



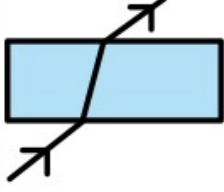
opaque



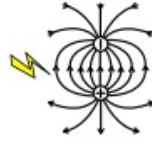
translucent



transparent



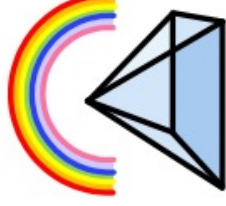
refraction



electromagnetic spectrum



visible light spectrum



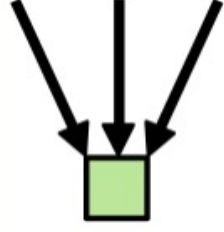
prism



rainbow

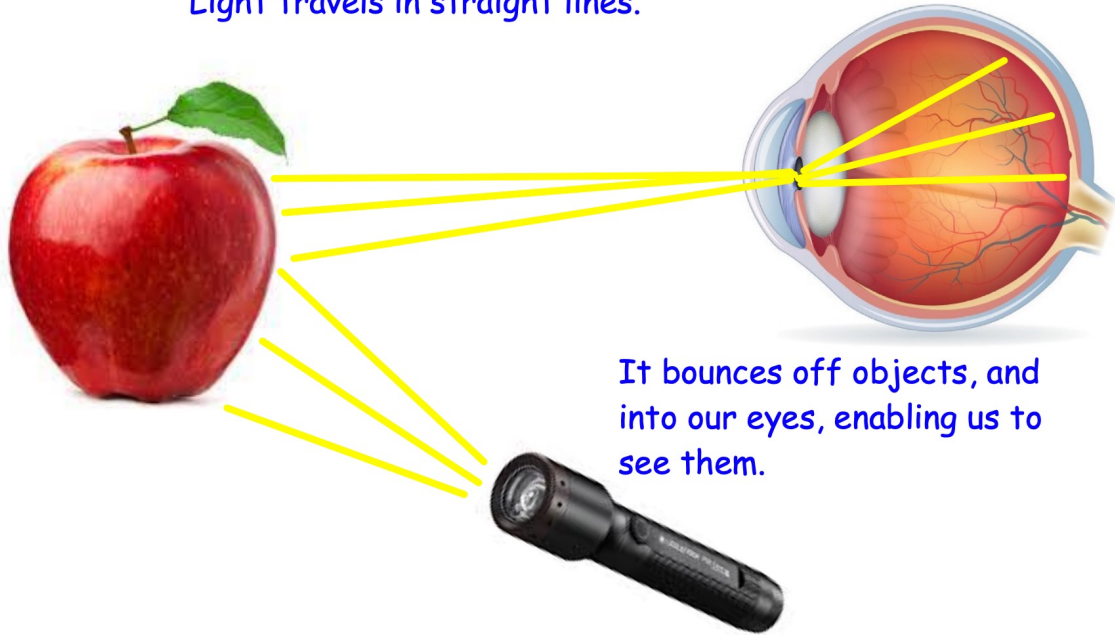


white light



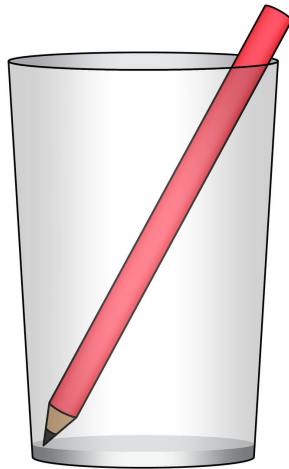
absorbed

Light travels in straight lines.

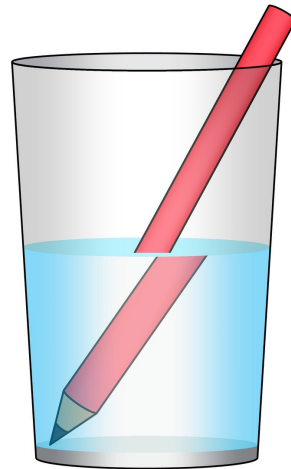


It bounces off objects, and into our eyes, enabling us to see them.

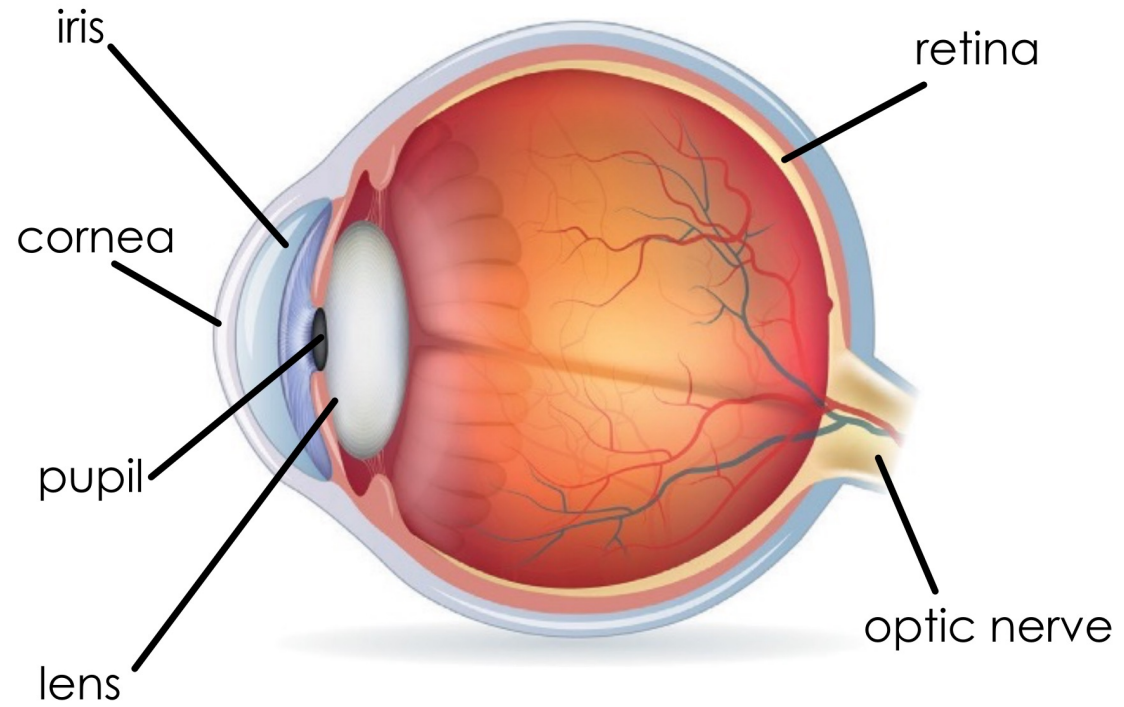
Refraction of Light

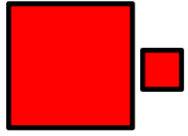


Empty Glass + Pencil

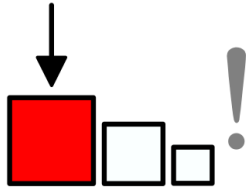


Glass + Water + Pencil

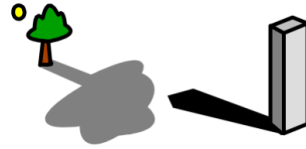




The size



and shape



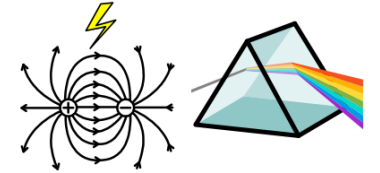
of a shadow



The rainbow



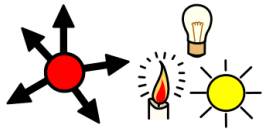
is the visible part



of the electromagnetic spectrum.



is determined by the



position of the light source



in relation to the object.



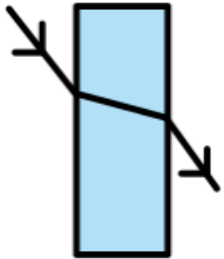
A shadow



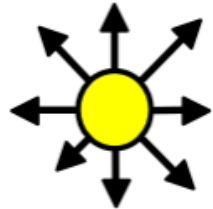
is the absence



of light



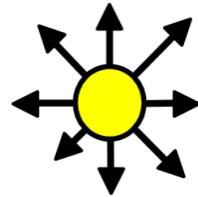
Refraction



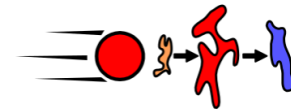
happens when light travels



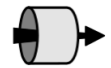
through transparent materials.



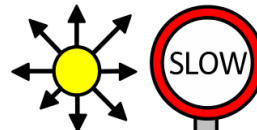
Light travels



at different speeds



through different objects.



Light slows down



and changes direction



in transparent materials.