Light and Sight
Lesson Notes

Learning Outcomes
- In what way is light reflection important to sight?
- What is meant by "line of sight" and how is the concept used to determine an image location?

Without Light ... No Sight
Human vision is based on a simple foundational truth:

> *To see anything, light from the thing must reach your eye.*
> *Without the light, there is no sight.*

Luminous Objects
- Objects that give off their own light.
- We can see luminous objects because light from the object (the source) comes directly to our eyes.
- Examples: light bulbs, computer screens, the Sun

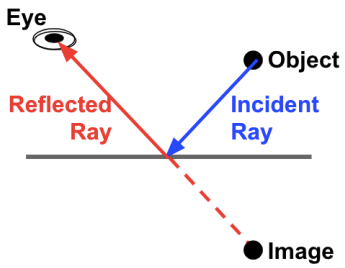
Illuminated Objects
- Objects upon which light shines.
- We can see illuminated objects because light from a source shines on the object and the object reflects that light to our eyes.
- Examples: sheet of paper, clothes, people, the Moon

The Line of SIght
A Simple Truth:
To see anything, you must sight along a line at the thing. And when you do, light from that thing will travel along a line to your eye.

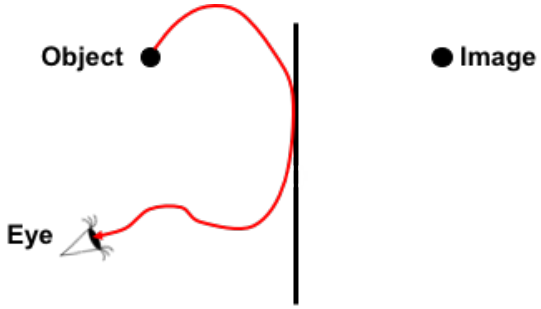
A Simple Extension:
To see an image of an object in a mirror, you must sight along a line at the image. And when you do, light will travel along your line of sight to your eye.

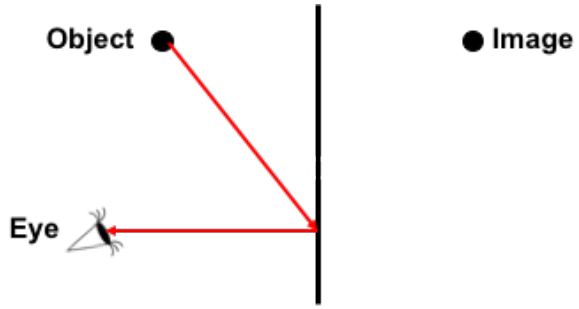
A Simple Corollary:
The image of an object as viewed in the mirror lies along your line of sight along which you are looking.

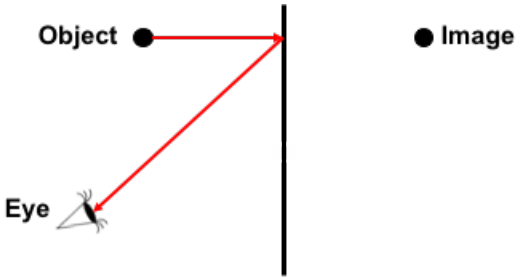
Sighting at an Image
- To view an image in the mirror, you must sight along a line at the image.
- Light travels from the mirror along the line of sight to your eye. We call this light the **reflected ray**.
- The light that reflects of the mirror originated at the object location. This light traveled from the object to the mirror. We call this the **incident ray**.

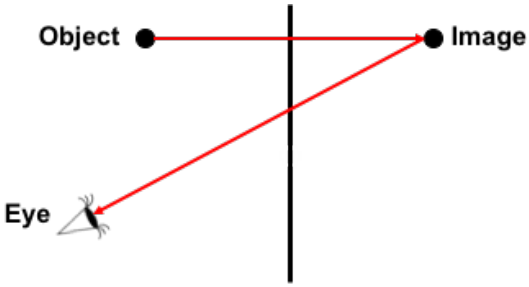


What's Wrong with These?









The Correct Path