SNC 2DI Date:_____

What Happens When Light Hits an Object?

The Ray Model of Light

- _____
  _____
- _____
  _____

Light Ray

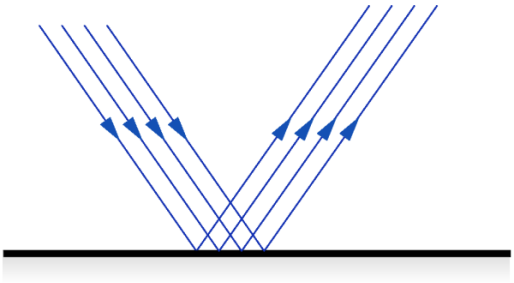
Light Beam

The reason we see an object is because the object can do the following with light:

- _____
- _____
- _____

Reflection

- _____
  _____



Absorption

- Absorption is the process in which light energy remains in an _____ and is converted into _____
- Objects appear the _____ they are because they absorb all colours of the spectrum _____ the one our eyes see (it is reflected)
- The black 'E' below appears black because it absorbs all of the light that hits it (no light hits your eyes)

Transmission

- Transmission is the process in which light travels through an object and continues travelling
- Different objects transmit different amounts of light
- There are 3 ways to describe transmission:
  - _____
  - _____
  - _____

Transparent

- If light is transmitted directly through an object without any change in direction, the object is _____
- i.e. _____

Translucent

- If light can penetrate an object but it is scattered in many directions, the object is _____
- i.e. _____

Opaque

- If an object absorbs or reflects light only and no light penetrates it, the object is _____
- i.e. _____