### **Models of light**

### **Wave Model**

- Used to explain different types of light -Electromagnetic Spectrum
- Used to explain colour different colours = different energies

## Ray Model of Light

- A ray is an arrow
- Light travels in a straight line
- Light behaves in very predictable ways.
- We can use a ray to explain what happens when how light interacts with matter

# **Opaque**

### translucent

transparent

Reflection smooth surface

# Reflection rough surface

refraction

### **Shadows**

Umbra - Dark region, no light at allPenumbra - Some of the light blocked but not allPoint Source - all rays of light leave a specific spot

Large Source - rays of light leave from different areas

Object - An opaque non luminous structure

Ex. Point Source	Ex. Large source

#### **Models of light**

#### **Wave Model**

- Used to explain different types of light Electromagnetic Spectrum
- Used to explain colour different colours = different energies

#### Ray Model of Light

- A ray is an arrow
- Light travels in a straight line
- Light behaves in very predictable ways.
- We can use a **ray** to explain what happens when how light interacts with matter

Opaque translucent transparent

Reflection smooth surface Reflection rough surface refraction

#### **Shadows**

Umbra - Dark region, no light at all
Penumbra - Some of the light blocked but not all
Point Source - all rays of light leave a specific spot
Large Source - rays of light leave from different areas
Object - An opaque non luminous structure

Ex. Point Source	Ex. Large source