

OPTICS →

L → LUSTURE → $\sim \pi \pi \alpha_0$

I → Insightfulness →

G → GLITTERING

H → HEAT

T → Thermal property

→ NATURE OF LIGHT →

1 NEWTON'S CORPUSCLES Theory →

Light composed by ^{particle,} tiny particles →

Known as Corpuscles. These corpuscles are identical

In a specific colour and collision between

them is perfectly elastic

→ Nature of light

- ① particle ② wave ③ Dual

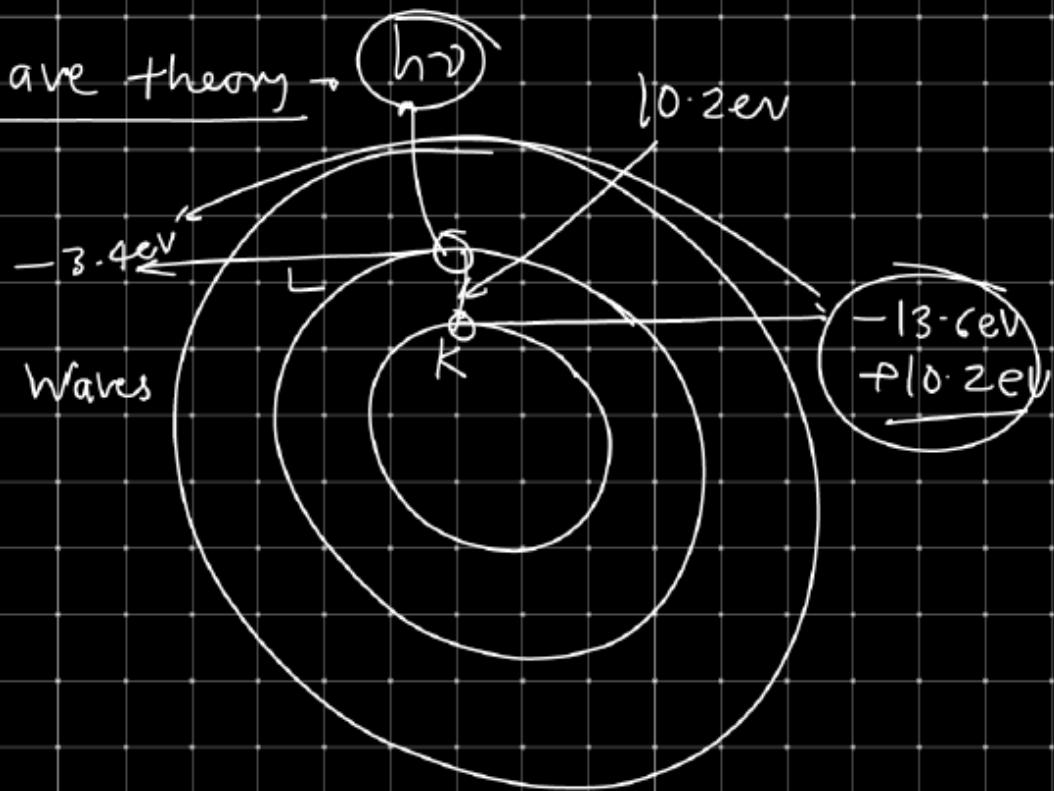
Planck Quantum theory → light composed by
photons → (particles)

$$E = h\nu$$

→ Huygen's wave theory → $h\nu$

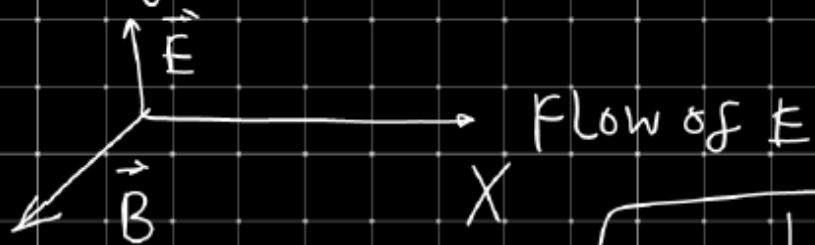
light travels
in the form of waves

→ MAXWELL'S



→ MAXWELL'S → Light is an electromagnetic wave

Composed by E and B both



→ Dual Nature →

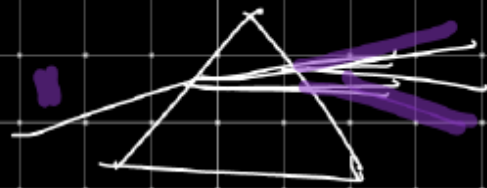
light associated with
particle and wave both
hence it having dual

$$\underline{E = h\nu = mc^2}$$

$$\Rightarrow \frac{hc}{\lambda} = mc^2$$

$$\lambda = \frac{h}{mc}$$

→ phenomenon's found from light →

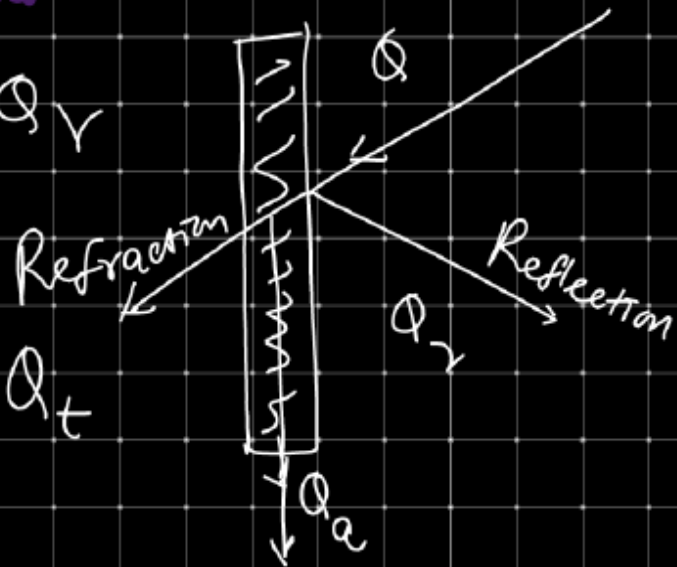


$$Q = Q_a + Q_t + Q_r$$

→ Reflection, Refraction,

Diffraction, polarisation Q_t

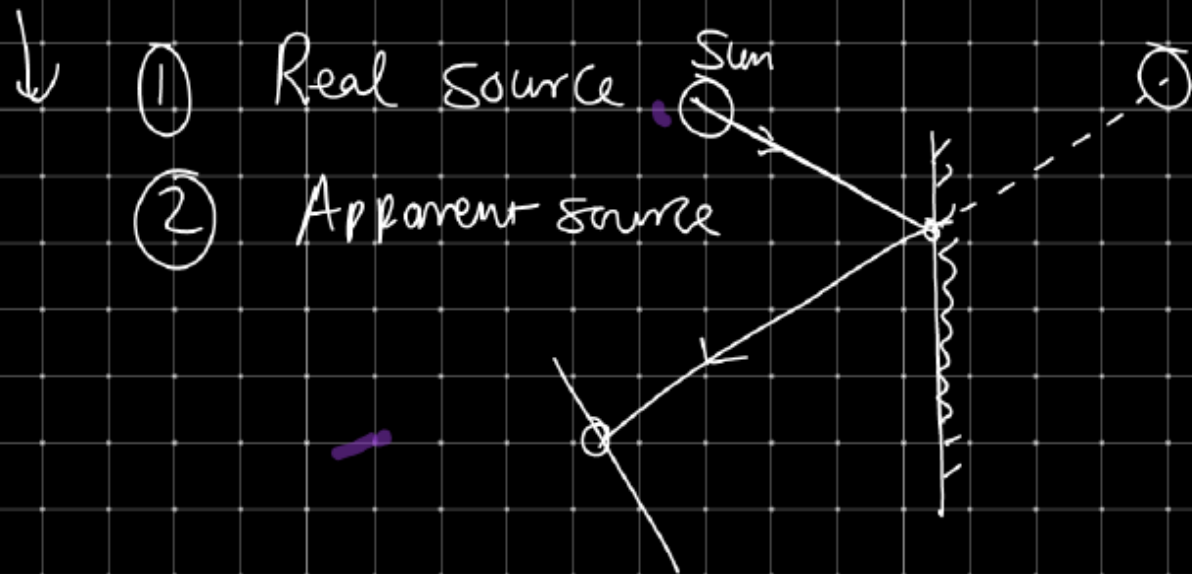
→ Dispersion




→ Light source →

SUN → LUMINOUS SOURCE

MOON → Non luminous source

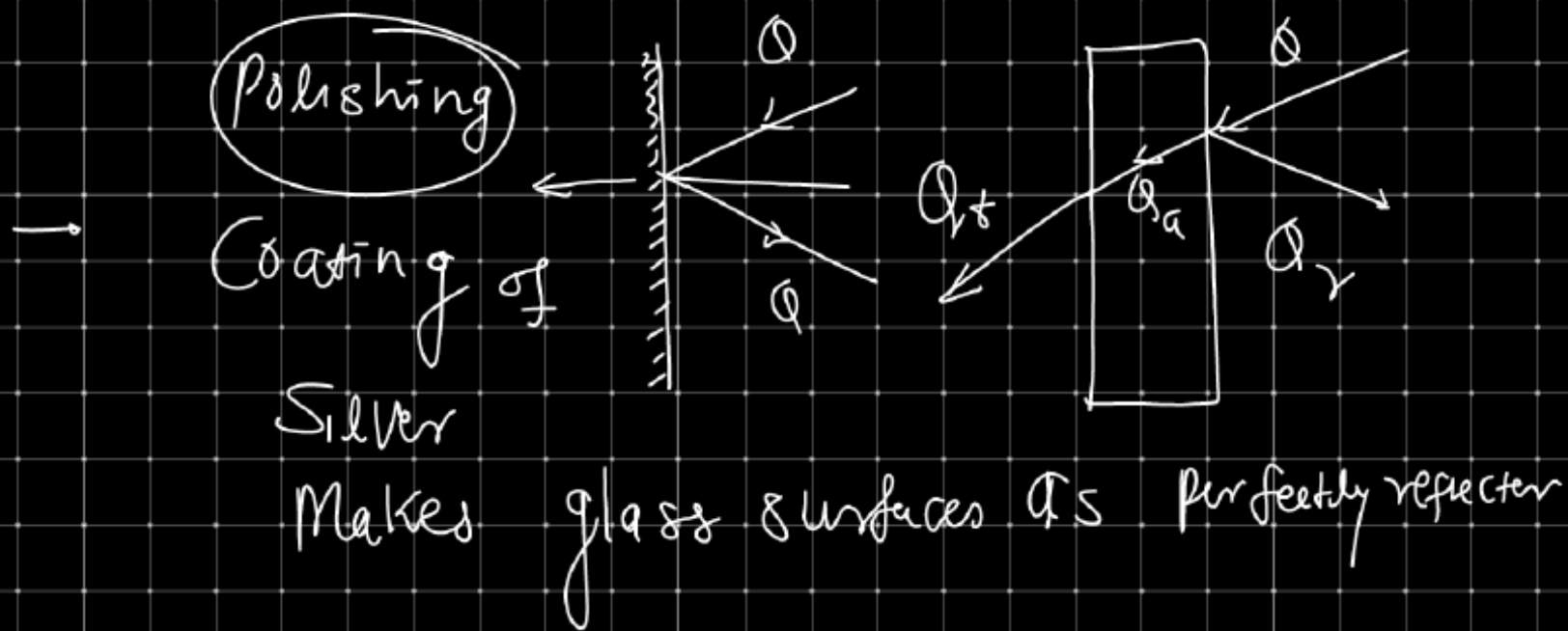


P. RAY → path of light → straight line

BEAM OF LIGHT → 

→ Bunch of Rays  path of light

REFLECTION →



→ IMAGE FORMATION BY PLAIN MIRROR →

Only the objects having
Self light makes Image

But Non Dark objects can not
make Image



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