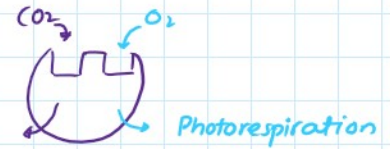


DARK REACTION → LIGHT INDEPENDANT REACTION

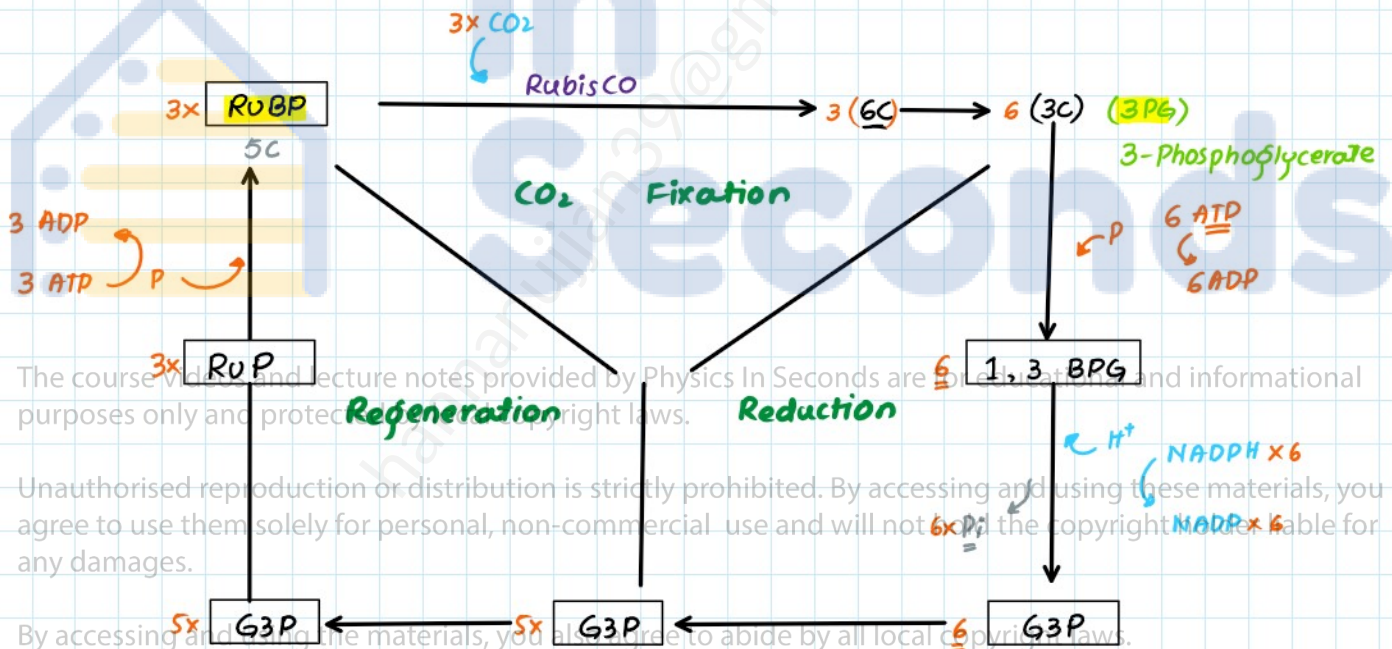
- Discovered by Calvin Matvin.
- Nobel prize → 1961
- Radioactive isotopes of C^{14} in CO_2 (1950)

RubisCO (most abundant protein)



STAGES :

- Carbon Fixation**
 - Precursor (RuBP)
 - Product (3PG)
 - No ATP & NADPH are used.
- Reduction**
 - Precursor → 3PG
 - Product → G3P / Triose / Glucose / Sugar
 - Maximum Energy utilization (6 ATP, 6 NADPH)
- Regeneration of RuBP**
 - Precursor → G3P
 - Product → RuBP
 - 3 ATP used



3
ATP

2
NADPH

1
 CO_2

- Triose
- Other sugars
- Other compounds