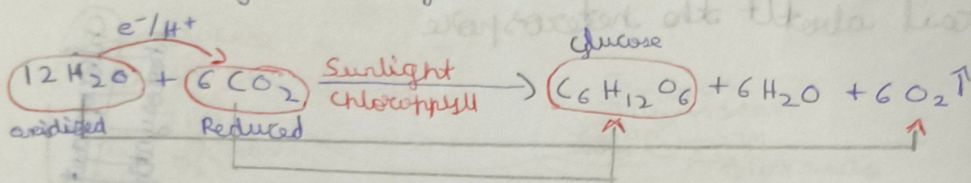
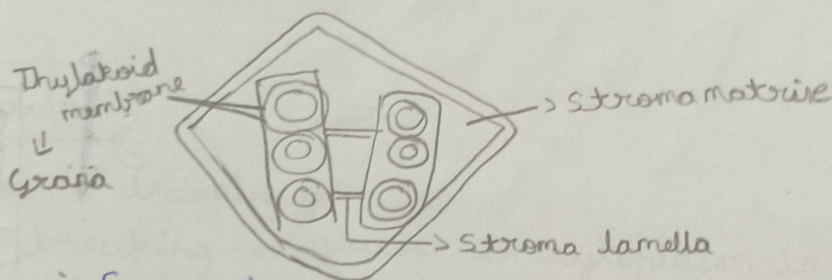


Photosynthesis in Higher Plants

- Plants trap sunlight which is a physical process.
- Light energy is converted into glucose / organic compound which is a chemical process.
- They provide food and oxygen (Plants)
- Plants store food in form of starch
- Green areas are needed for photosynthesis
- Half-leaf experiment is called Mohl's half leaf experiment
- Joseph Priestly discovered oxygen.
- Jan Ingenhousz said that O_2 is released from green parts of plants during photosynthesis.

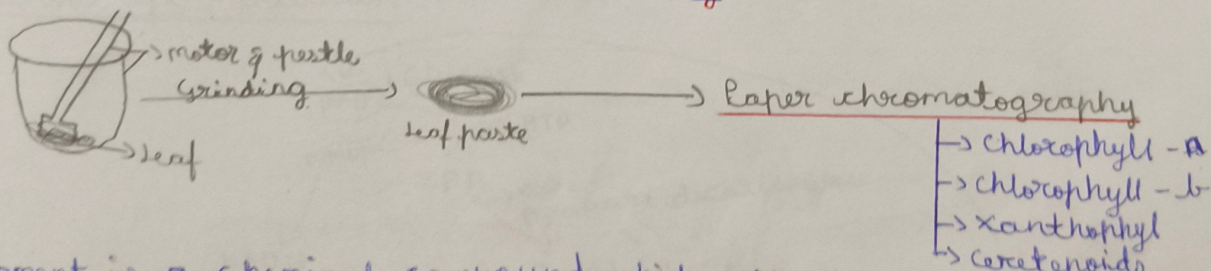


Chloroplast

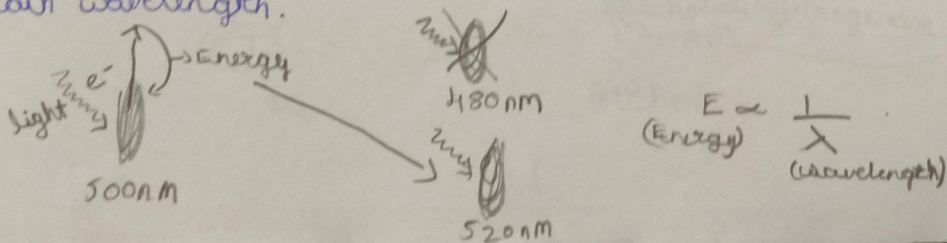


- Shape is (R-SOLID)
- Stroma matrix, stroma lamella and thylakoids together are called membranous system.
- 1. Membranous System
- 2. Division of labour within chloroplast
 - Thylakoid membrane of grana $\Rightarrow$ Light reaction $\Rightarrow$ ATP/NADPH (light dependent)
 - Stroma matrix $\Rightarrow$ Dark reaction $\Rightarrow$ light independent (carbon reaction) $\Rightarrow$ $CO_2 \rightarrow$ glucose

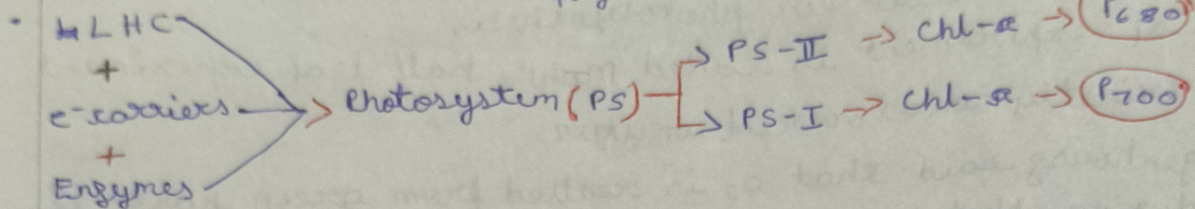
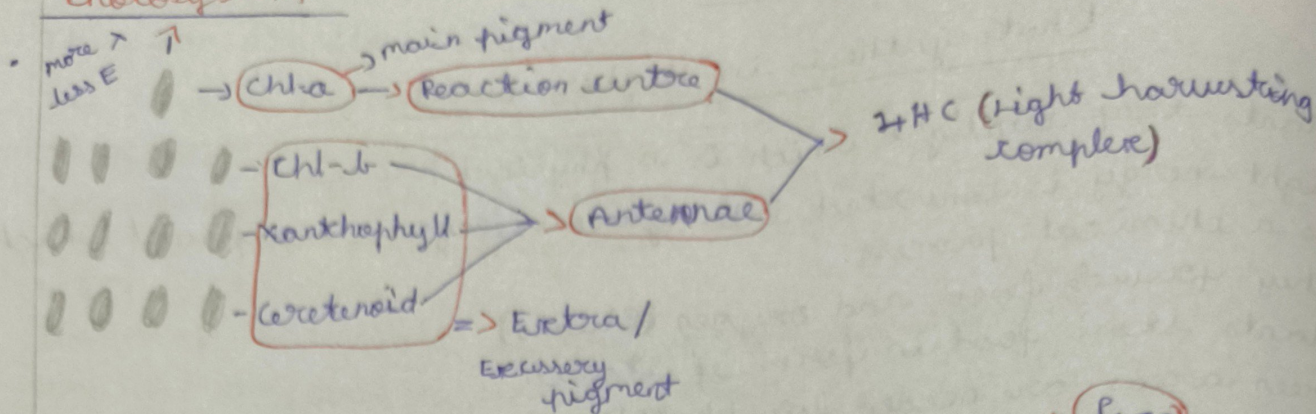
Pigments involved in chromatography



- Pigment is a chemical compound which will absorb the light energy at certain wavelength.



Photosystem



Smr Questions

Smr Explain in detail about the heterospore germination

Chloroplast
Photosynthesis

ADP + P

Photosynthesis

1. Hypocotyl
2. Hypocotyl
3. Hypocotyl
4. Hypocotyl

to produce triploid cells which are then used to produce a triploid