

Photosynthesis: a process that captures energy from sunlight to make sugar that stores chemical energy.

- energy for almost all organisms begins as sunlight

Photosynthesis occurs in plants, some protists
some prokaryotes (cell membrane)

Thylakoids contain the pigment chlorophyll

- Absorbs some of the energy from visible light

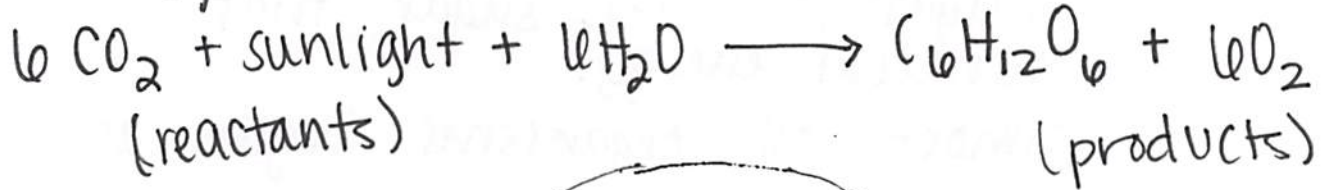
- absorb blue + red wavelengths
- reflect green wavelengths

Sunlight energy is transferred to chemical energy the cell can use in the form of ATP.

once a sugar has been made it can

- enter cellular respiration
- store glucose in the form of starch

Photosynthesis



Stage 1: Light dependent reactions (thylakoid)

① energy from sunlight is absorbed by chlorophyll. Water molecules are broken down & oxygen is released.



sunlight

② ATP is created & transfers energy to stage 2

energy



Stage 2: Light independent reactions (stroma)

③ Carbon dioxide is used to make sugars



④ six-carbon sugar is produced

