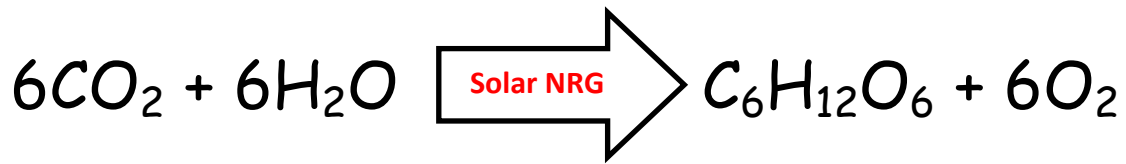


PHOTOSYNTHESIS



IMPORTANT DEFINITIONS

IMPORTANT COMPOUNDS

LIGHT DEPENDENT REACTIONS

LIGHT INDEPENDENT REACTIONS

PRODUCTS OF EACH PHASE

Chloroplast - Construction Site

Grana - Light Reactions

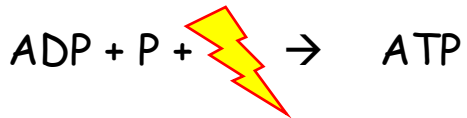
Stroma - Light Independent Reactions (Calvin Cycle)

Photosystems - Electron Transport Chains

Chlorophyll - Catalyst

Photolysis - splitting of water

Phosphorilation - creates ATP



IMPORTANT DEFINITIONS

REACTANTS

H_2O

CO_2

CARRIER MOLECULES

$ADP + P = ATP$

$NADP + H^+ = NADPH$

$(RuBisCO + CO_2) \times 3 = PGA$

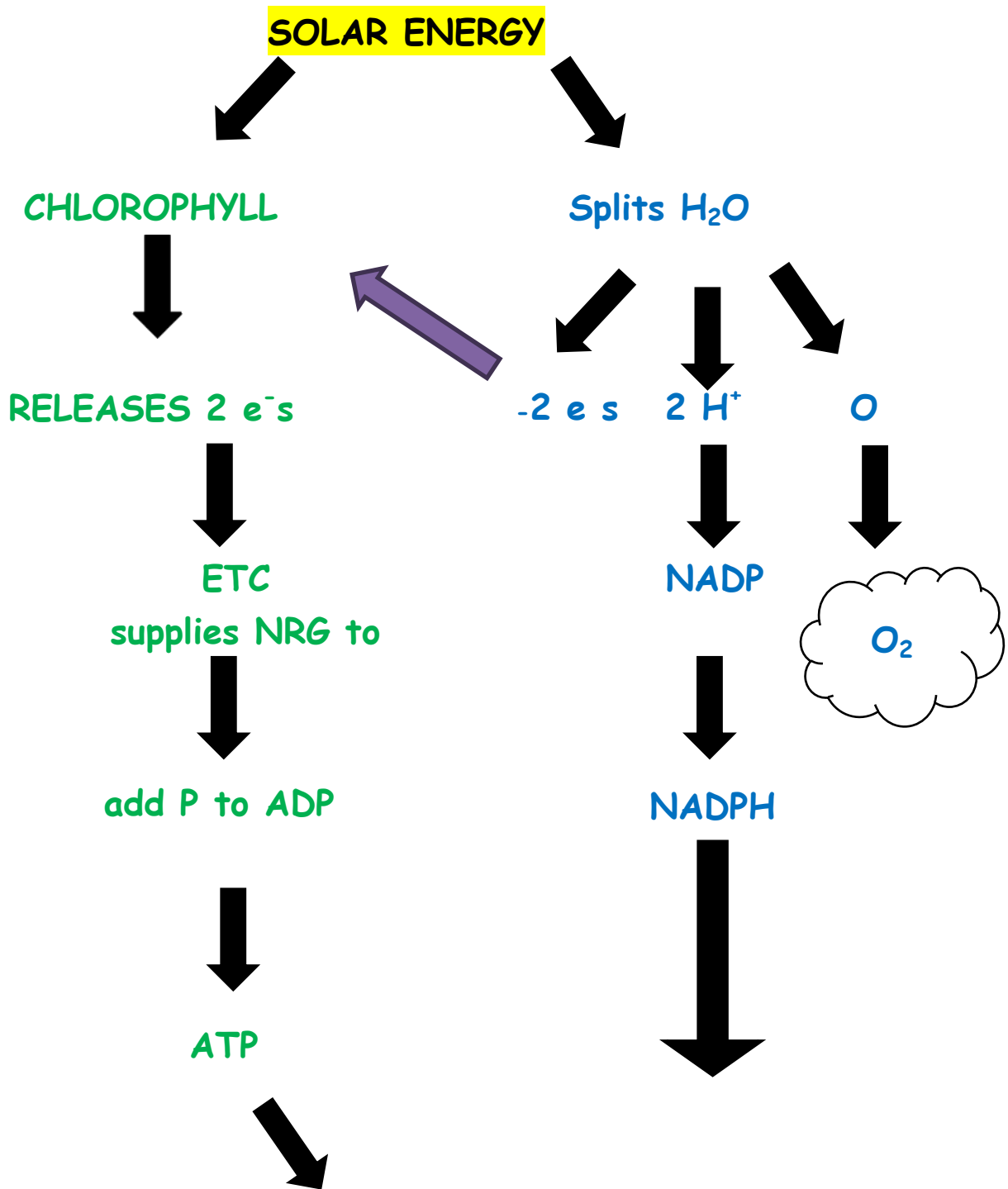
PRODUCTS

O_2

$PGAL \times 2 \rightarrow C_6H_{12}O_6$

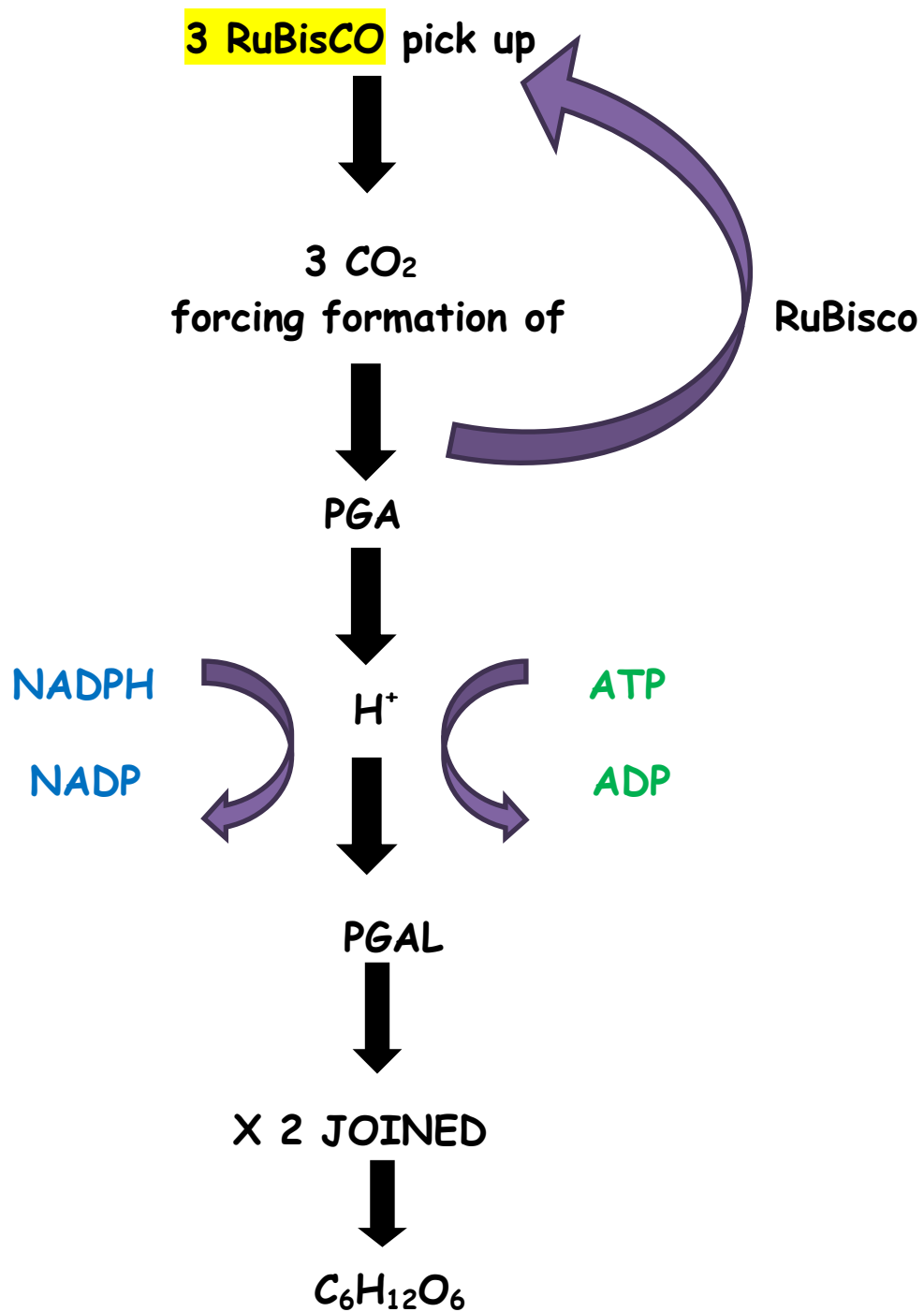
IMPORTANT COMPOUNDS

PRODUCES ATP AND SPLITS H₂O



LIGHT INDEPENDENT REACTIONS

CREATES CARBOHYDRATES



LIGHT DEPENDENT REACTIONS

NADPH }
ATP } to Calvin Cycle

O_2 released as a bi-product

LIGHT INDEPENDENT REACTIONS (CALVIN CYCLE)

PGAL X 2 = $C_6H_{12}O_6$ stored or broken down

PRODUCTS OF EACH PHASE