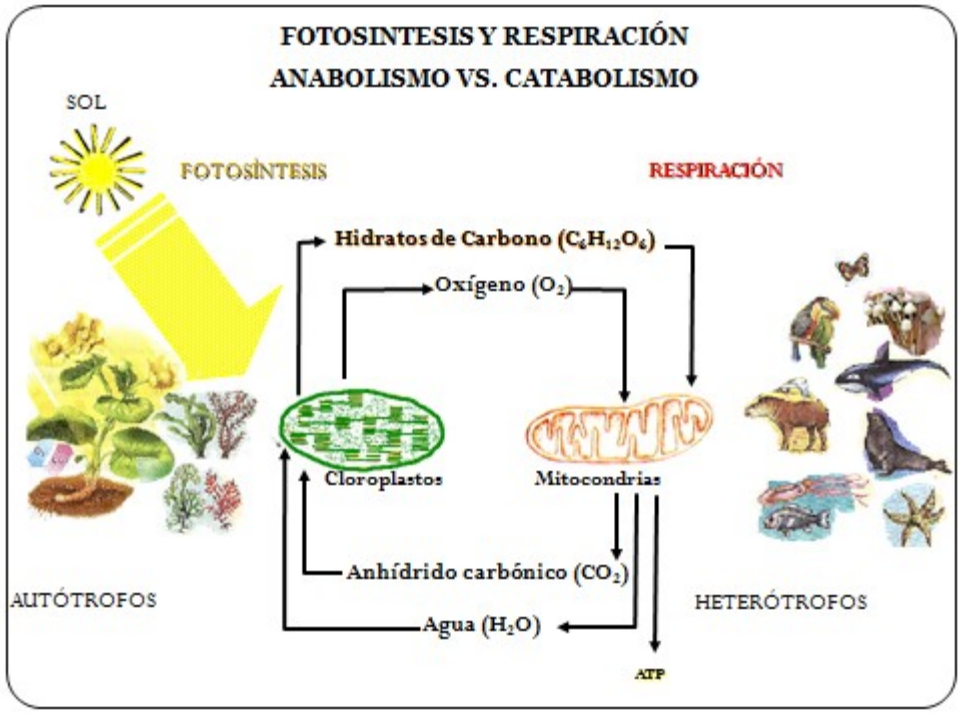
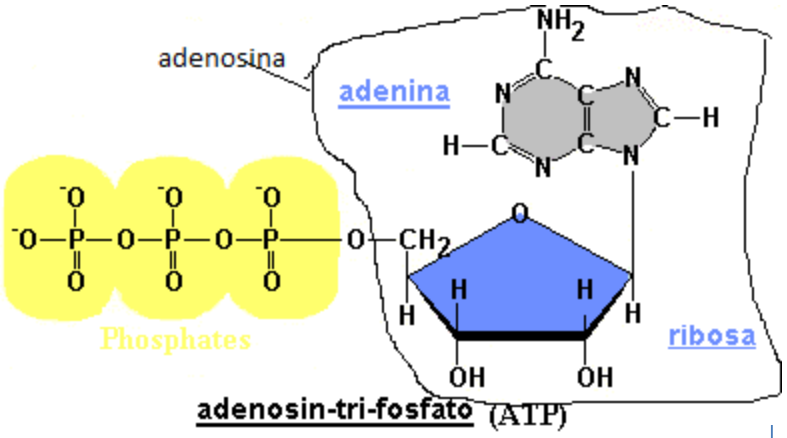
FOTOSINTESIS RESPIRACIO



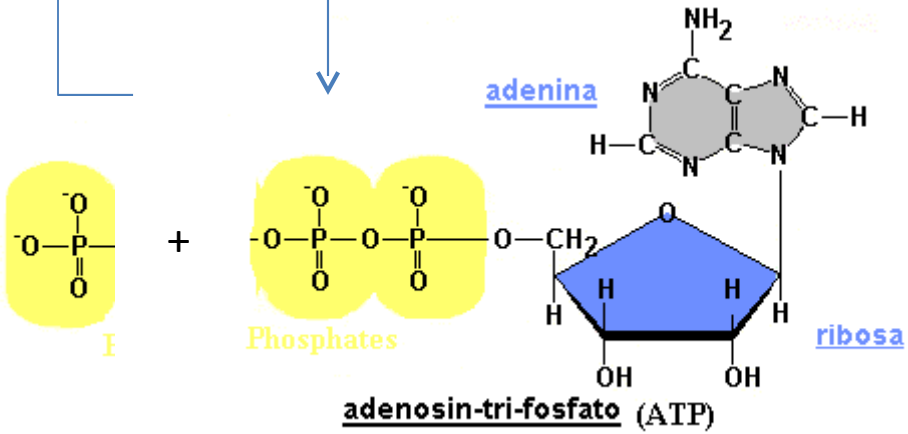
Haga n

ATP ADP

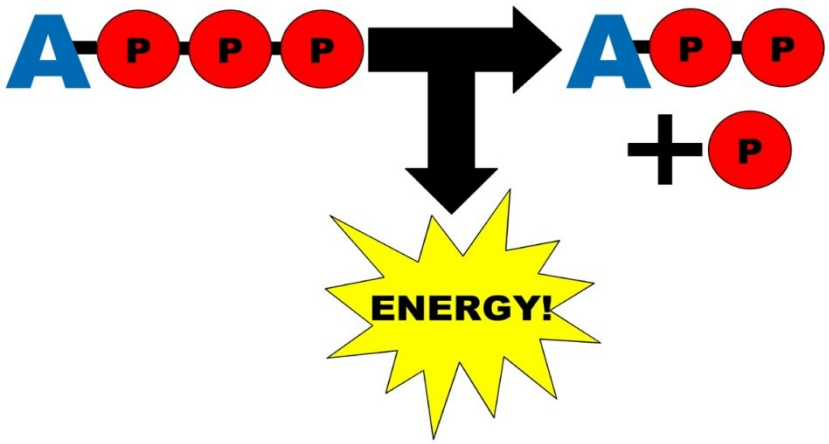


Energía disponible para trabjo
De la célula o biosíntesis de molecu
las orgánicas

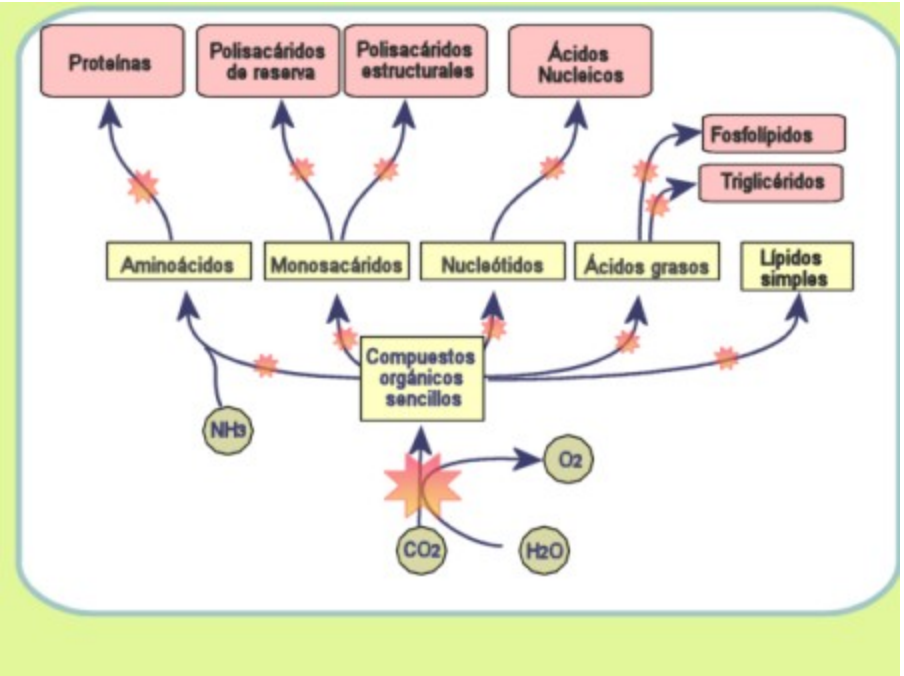
Energía de la luz
Del sol o nutrientes

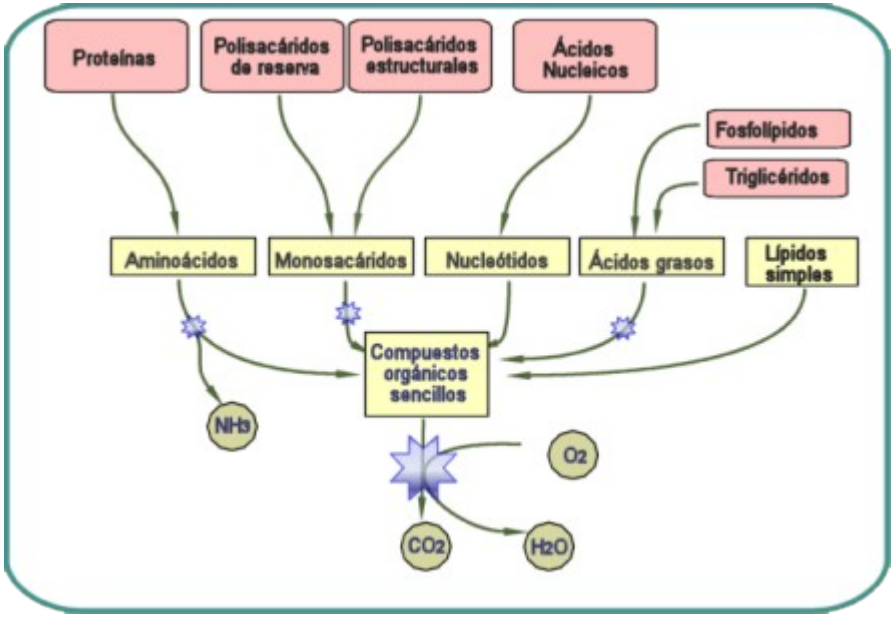


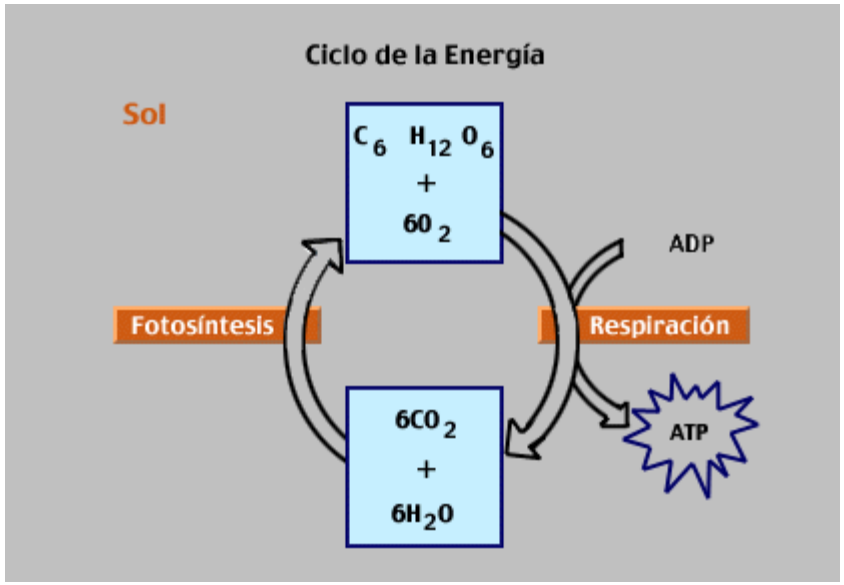
Energia ATP



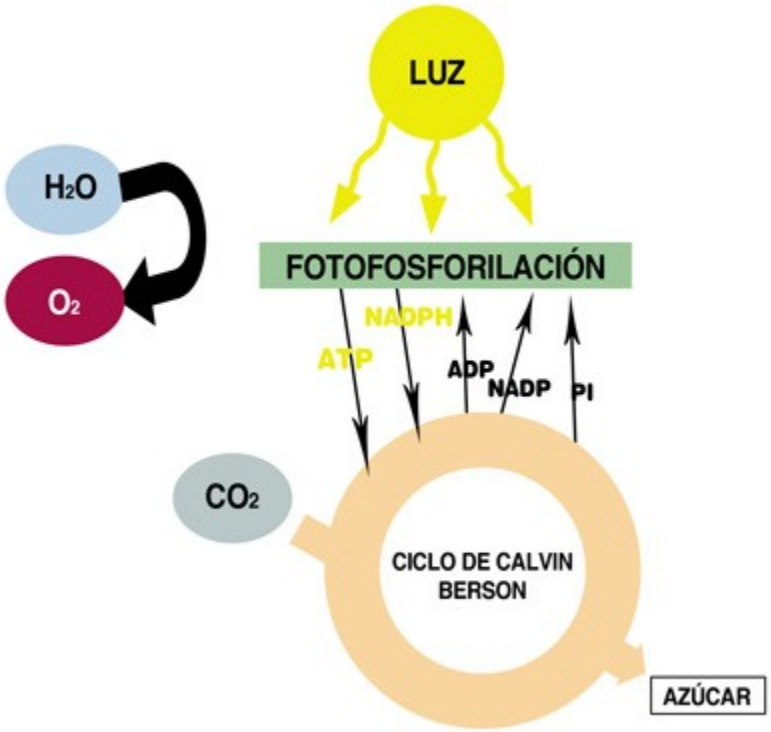
ANABOLISMO CATABOLISMO



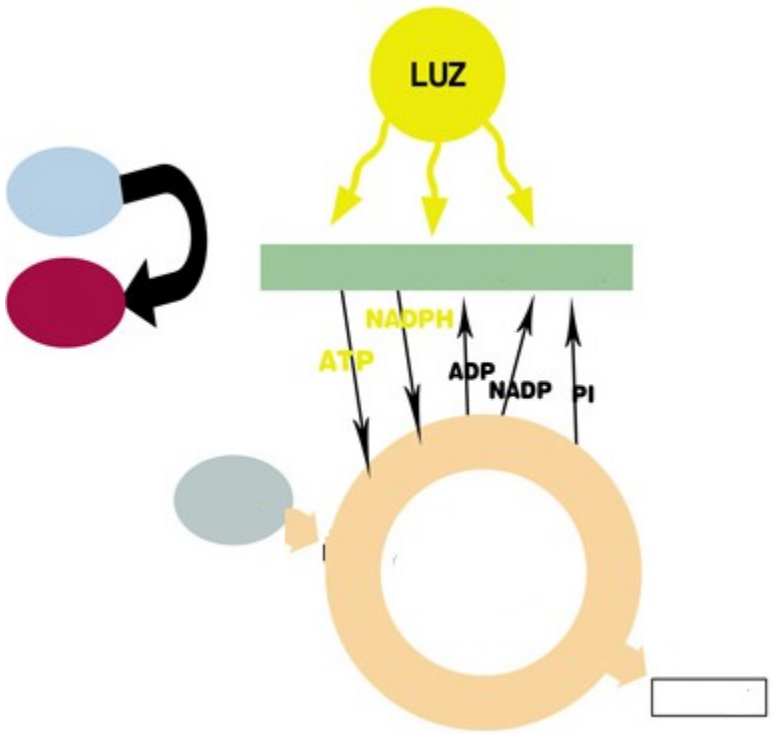



Ciclo de la Energía
Sol
$C_6 H_{12} O_6$
+
$6O_2$
ADP
Fotosíntesis
Respiración
ATP
$6CO_2$
+
$6H_2O$

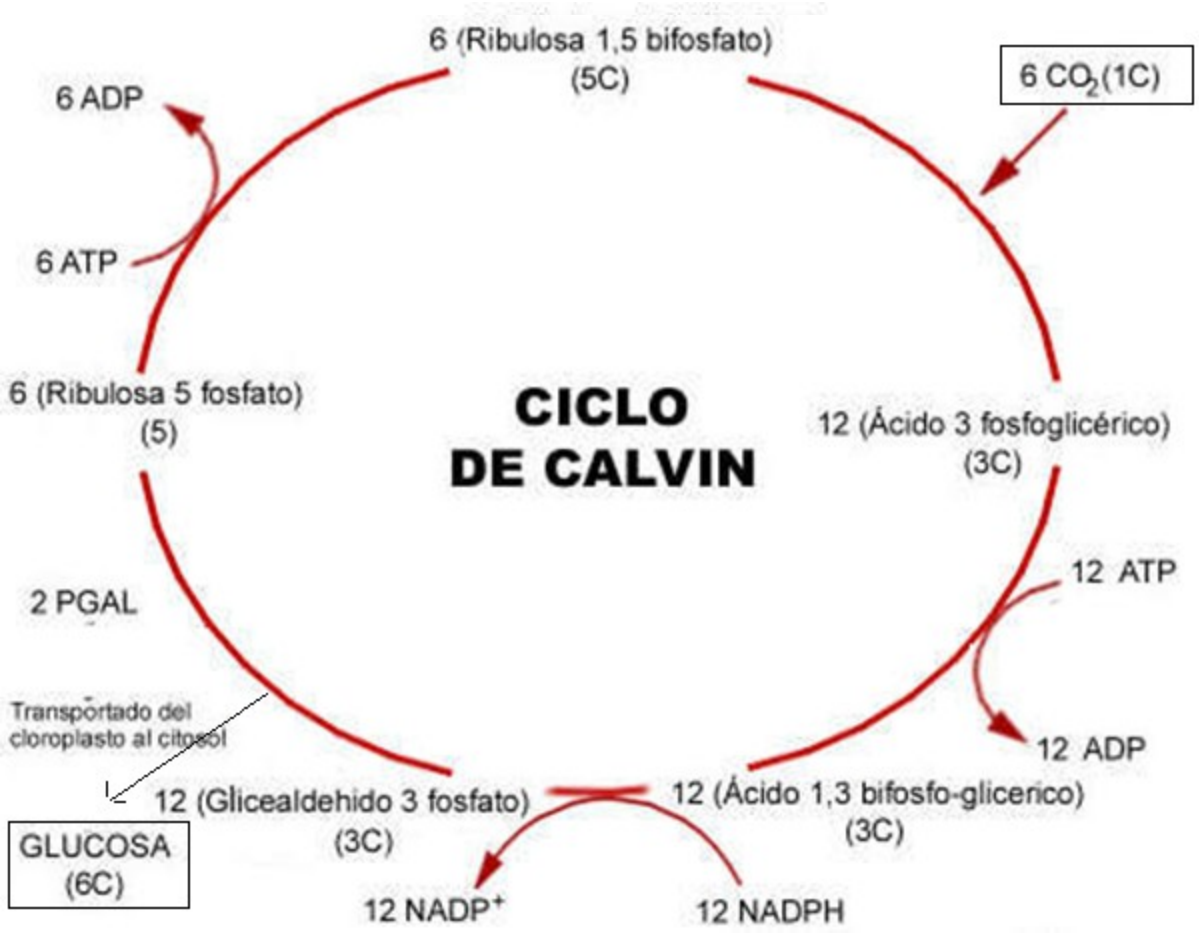
31/03/12


LUZ
H2O
O2
FOTOFOSFORILACIÓN
NADPH
ATP
ADP
NADP
PI
CO2
CICLO DE CALVIN
BERSON
AZÚCAR

31/03/12



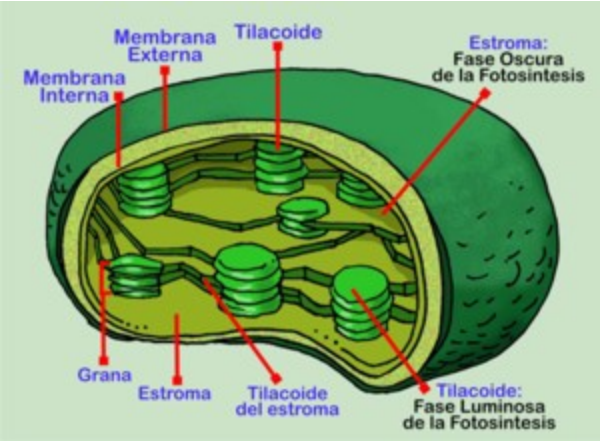
31/03/12


CICLO
DE CALVIN
6 (Ribulosa 1,5 bifosfato)
(5C)
6 CO_2(1C)
12 (Ácido 3 fosfoglicérico)
(3C)
12 ATP
12 ADP
12 (Ácido 1,3 bifosfo-glicerico)
(3C)
12 NADPH
12 $NADP^+$
12 (Glicealdehido 3 fosfato)
(3C)
2 PGAL
Transportado del
cloroplasto al citosol
GLUCOSA
(6C)
6 (Ribulosa 5 fosfato)
(5)
6 ATP
6 ADP

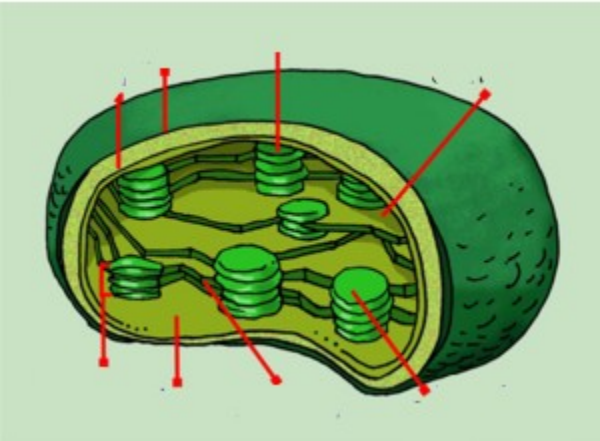
31/03/12

CICLO
DE CALVIN
6 (Ribulosa 1,5 bifosfato)
(5C)
12 (Ácido 3 fosfoglicérico)
(3C)
12 ATP
12 ADP
12 (Ácido 1,3 bifosfo-glicerico)
(3C)
12 NADPH
12 NADP+
12 (Glicealdehido 3 fosfato)
(3C)
Transportado del
cloroplasto al citosol
2 PGAL
6 (Ribulosa 5 fosfato)
(5)
6 ATP
6 ADP

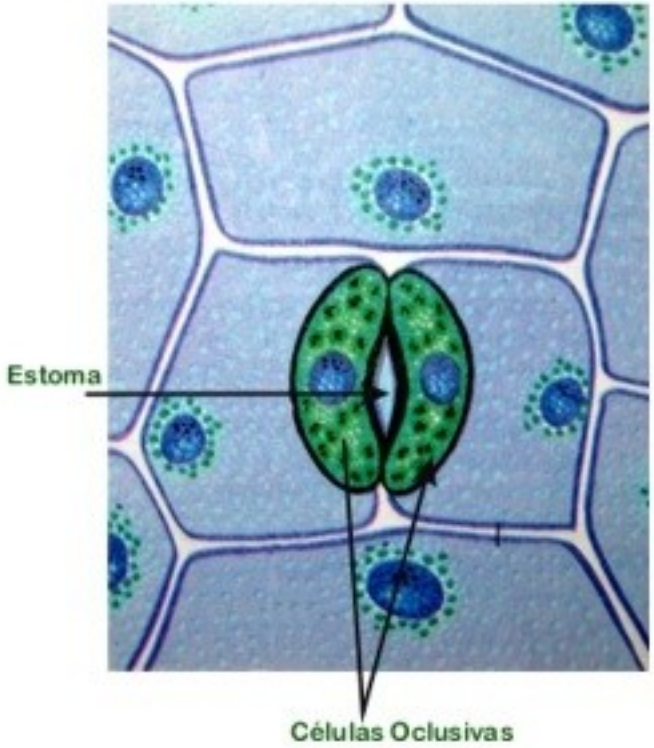
31/03/12


Membrana Externa
Tilacoide
Estroma: Fase Oscura de la Fotosintesis
Membrana Interna
Grana
Estroma
Tilacoide del estroma
Tilacoide: Fase Luminosa de la Fotosintesis

31/03/12



31/03/12



31/03/12