

: 3



ATP

ATP

( )

2

. ( ATP)

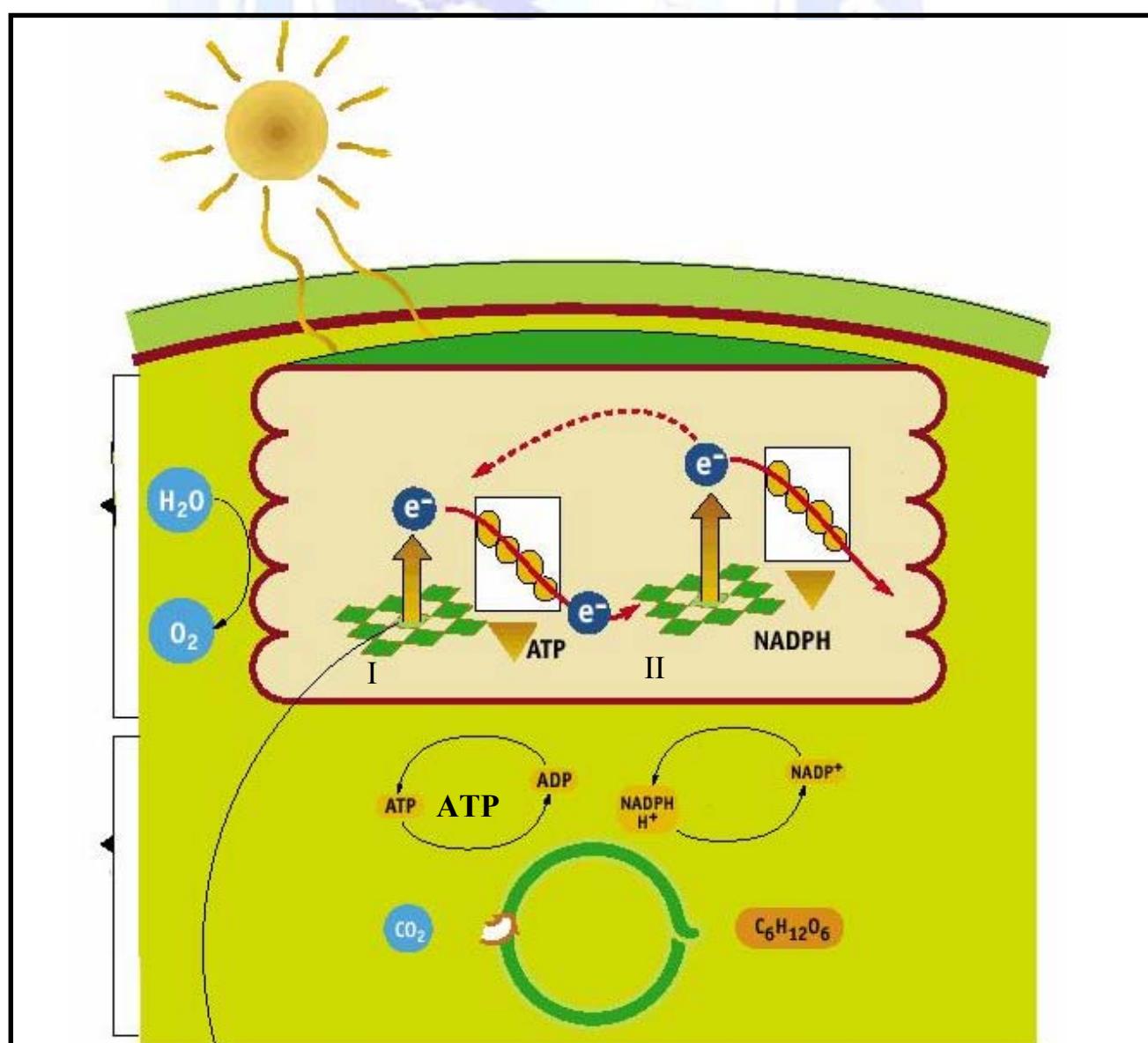
( )

3



◀

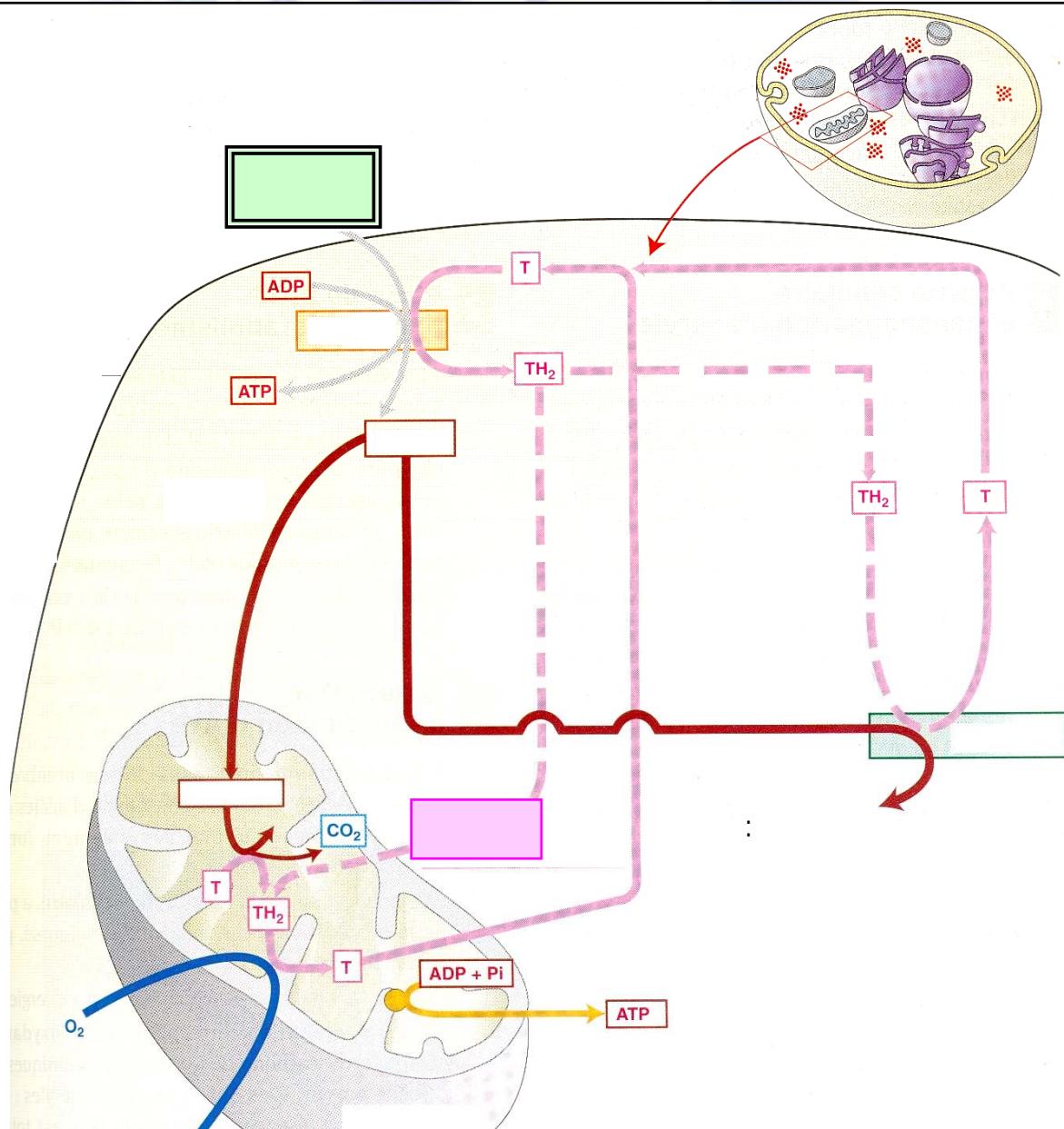
1

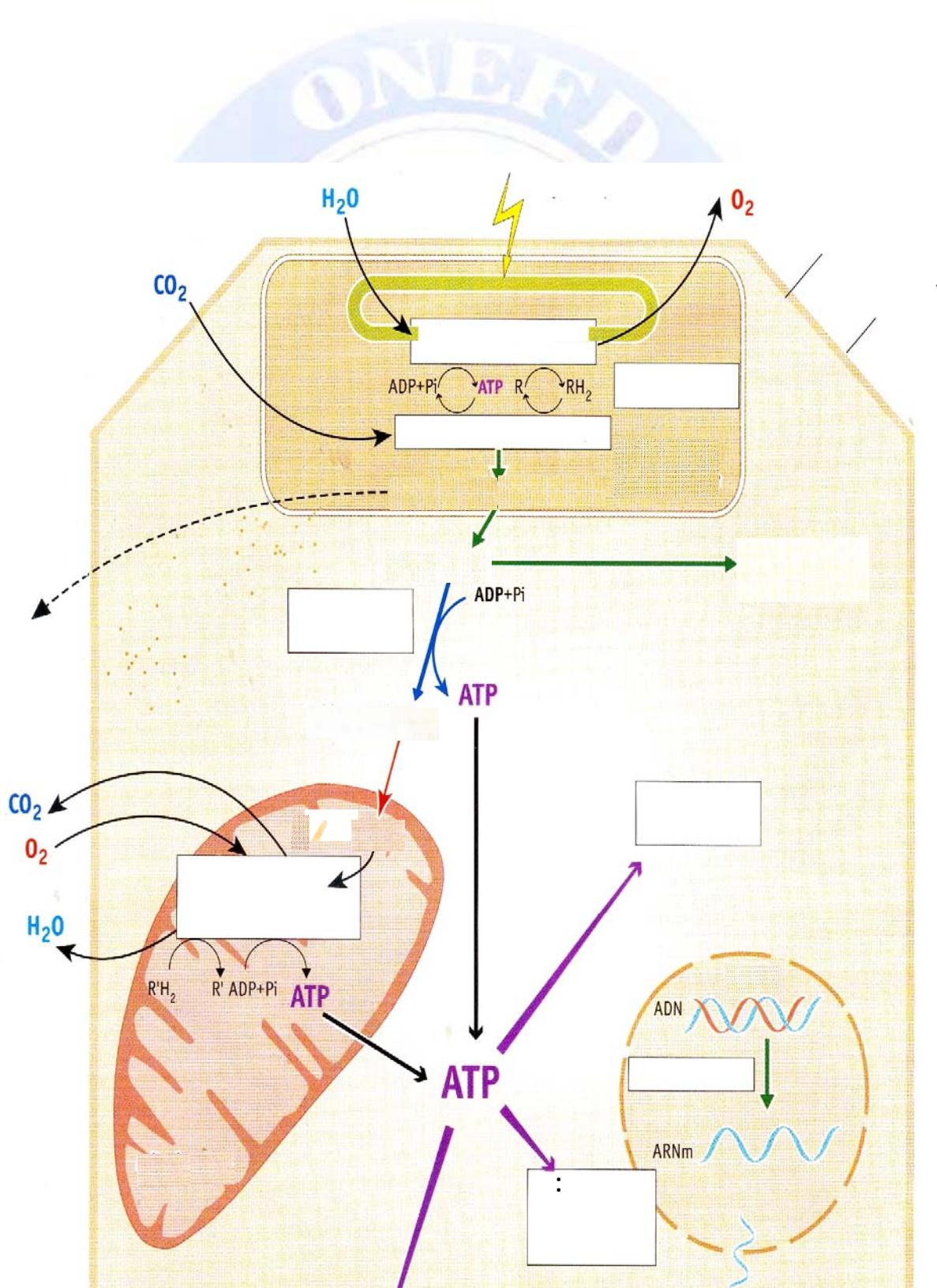


( )

2

. ( ATP)

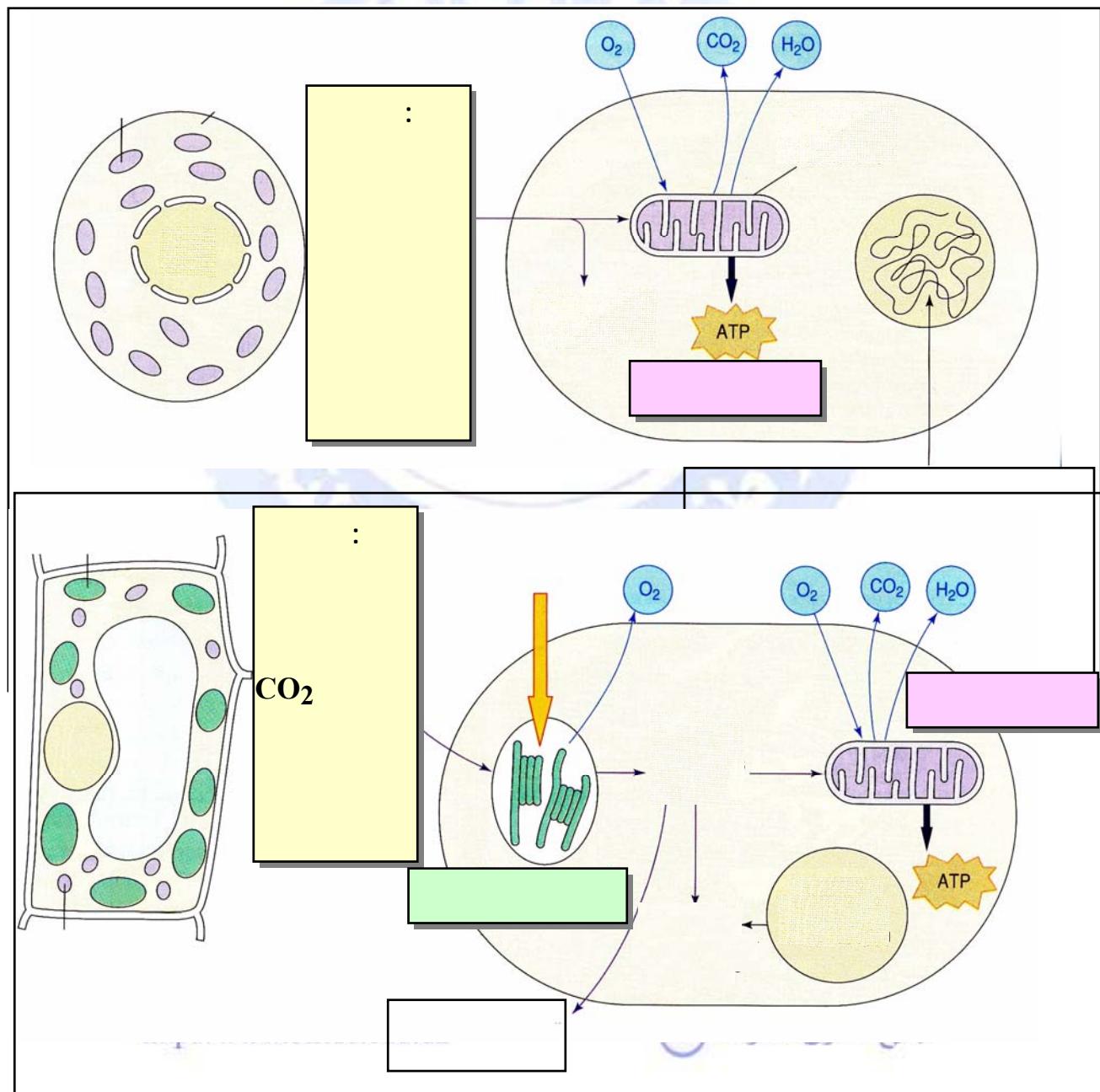




# المفاهيم المبنية

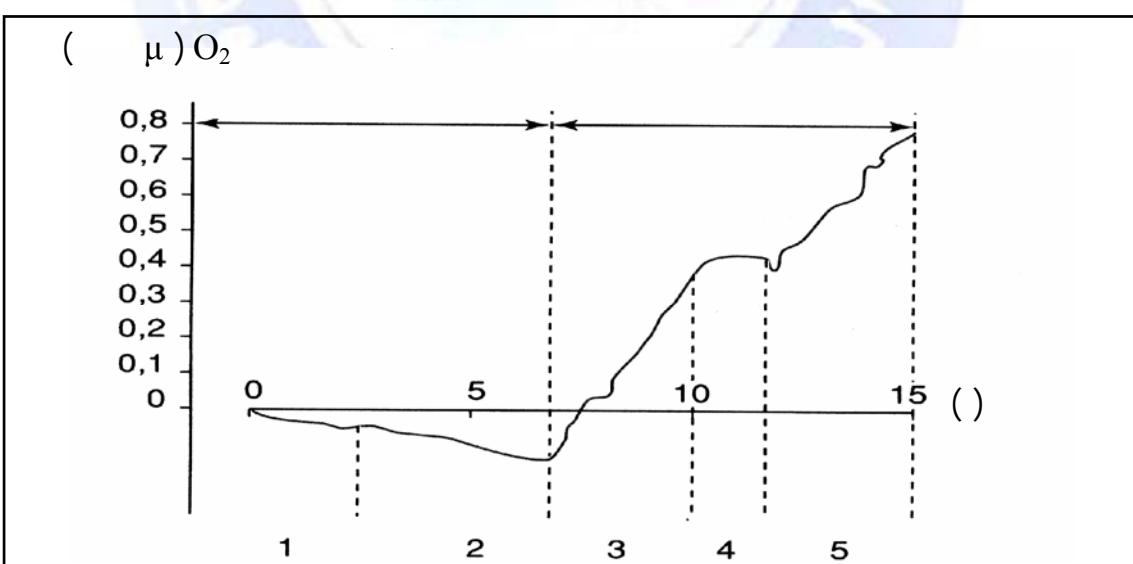
(

)



# التقويم

: 1



)

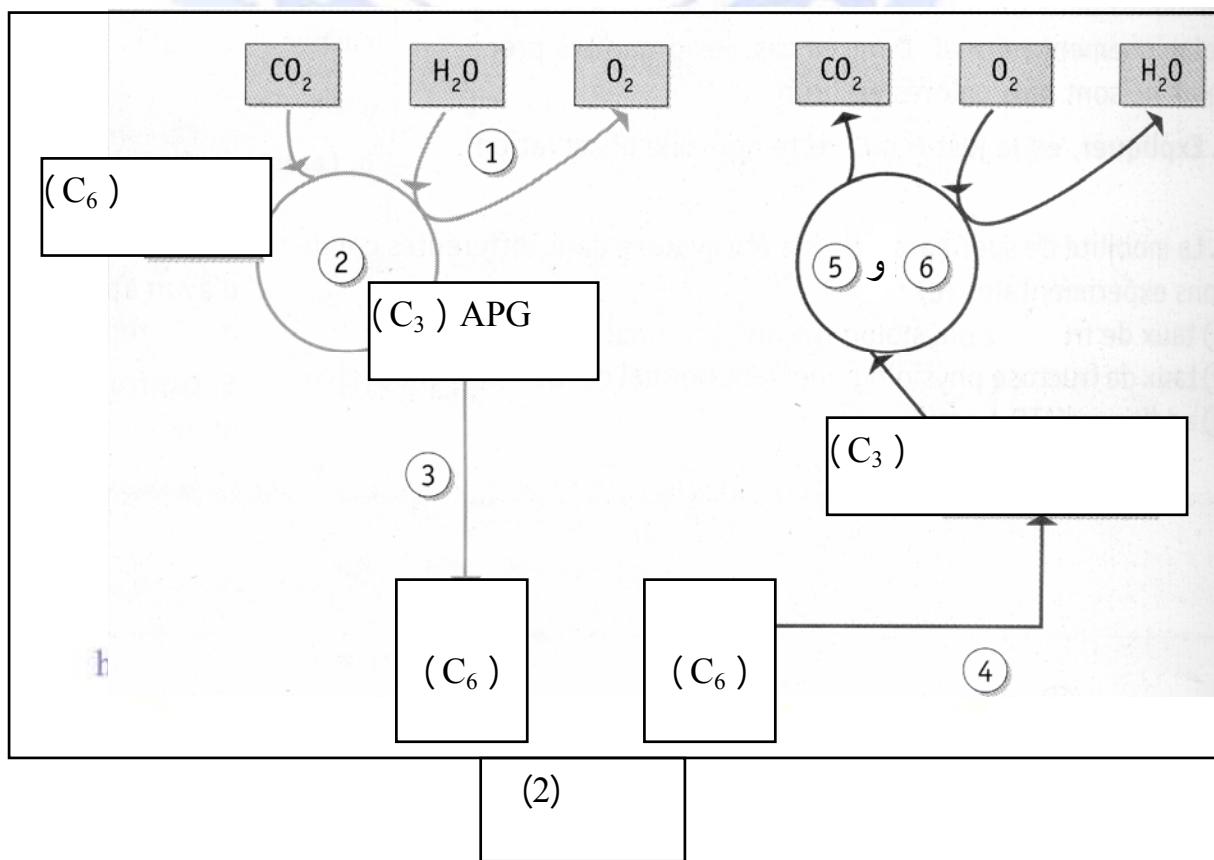
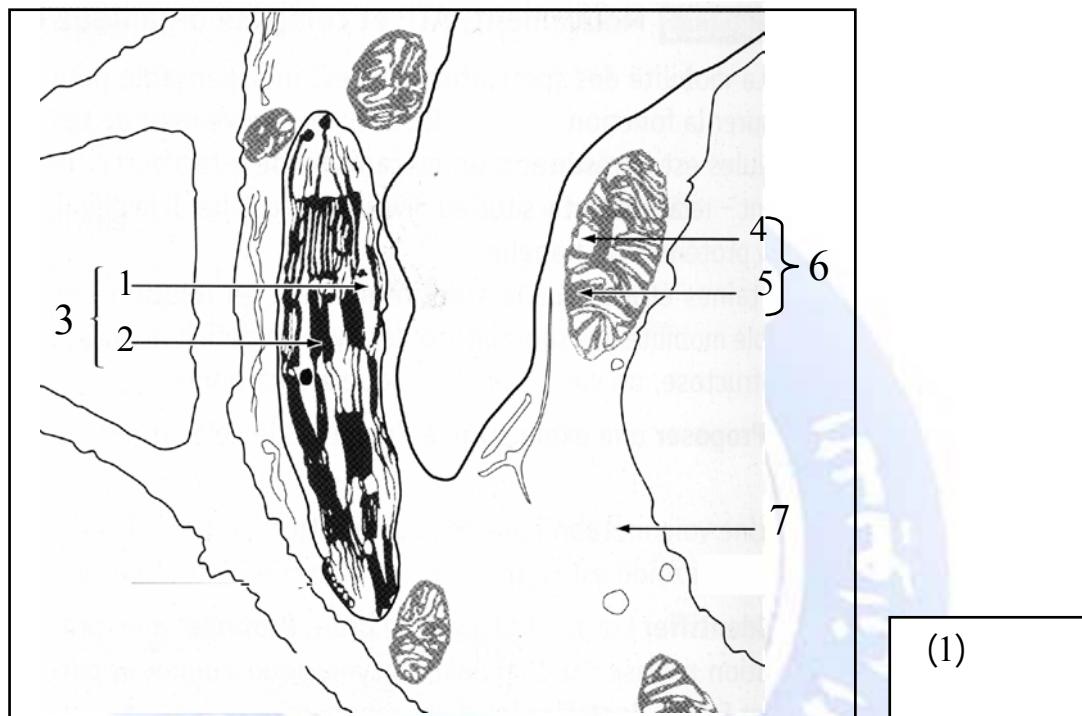
5 1

1

: 2

(1)

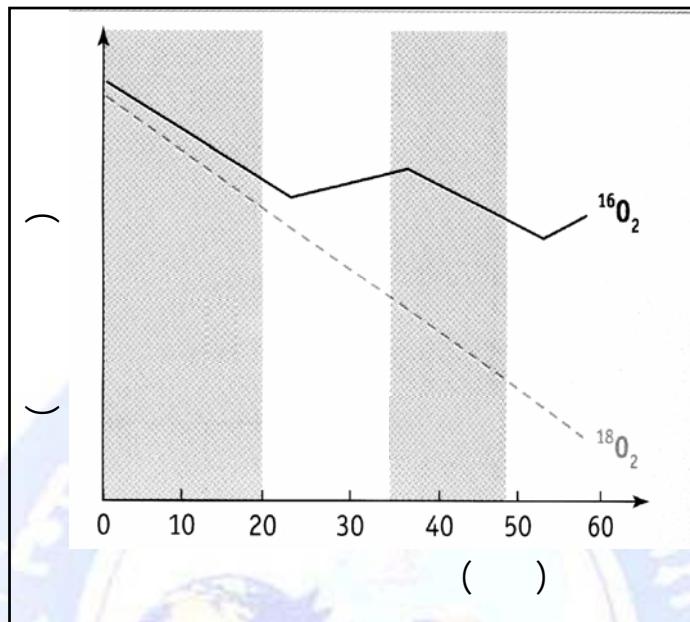
. (2)



$^{16}\text{O}_2$

1

( $^{18}\text{O}_2$ )    ( $^{16}\text{O}_2$ )



$^{18}\text{O}_2$

(3)

(2)

(1)

7    1

1

2

3

4

5

( $\Delta$  35 ← 20)

$^{18}\text{O}_2$      $^{16}\text{O}_2$