
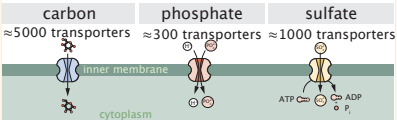


# WHAT SETS THE TIMESCALE OF CELL DIVISION?

  $\approx 5000 \text{ sec}$

(A)

## nutrient transport

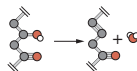


(B)

## cell envelope biogenesis

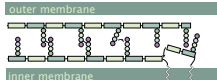
### lipid synthesis

$\approx 4000$  dehydratases



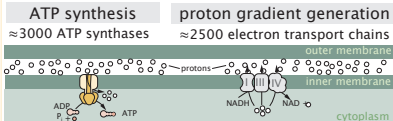
### peptidoglycan crosslinking

$\approx 100$  transpeptidases



(C)

## energy production

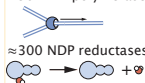


(D)

## central dogma

### replication

$\approx 50$  DNA polymerases



### transcription

$\approx 5000$  RNA polymerases



### translation

$\approx 10,000$  ribosomes

