

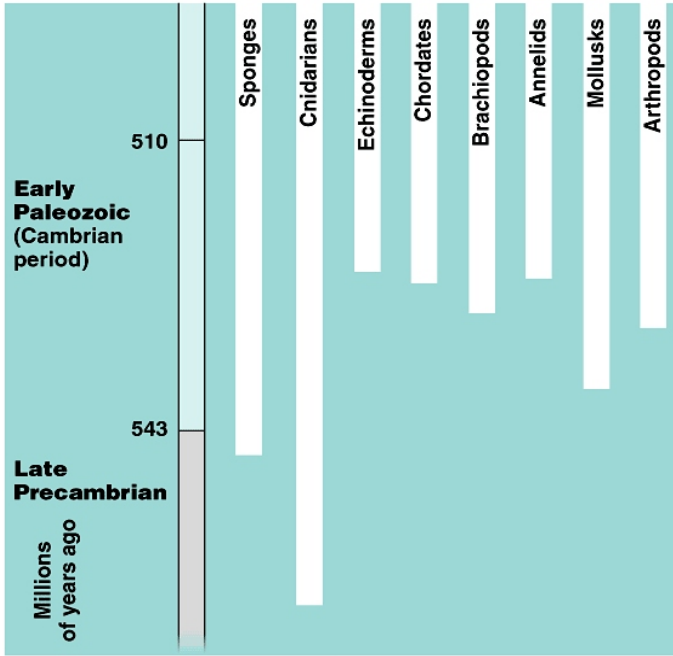
Copyright © Pearson Education, Inc., publishing as Benjamin Cummings.



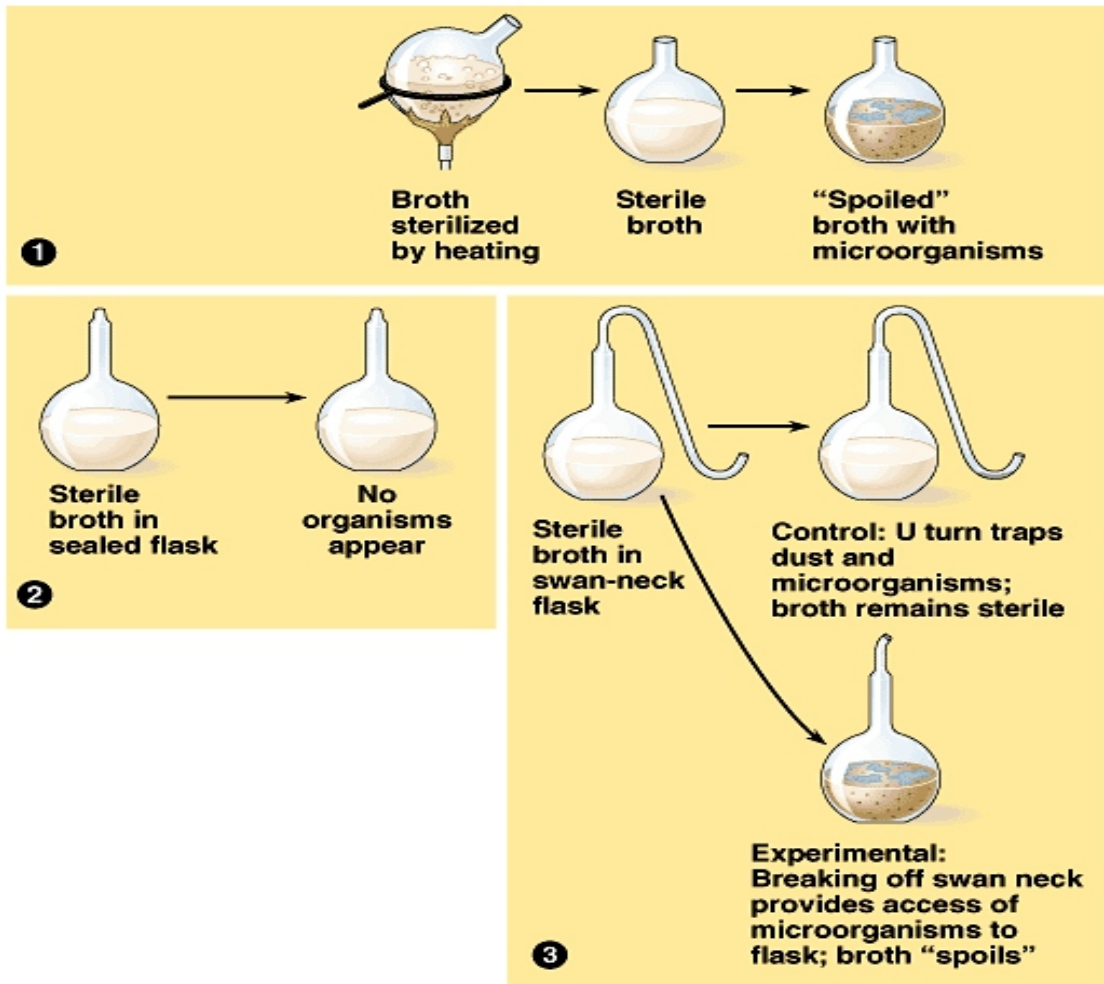
**Fossilized ancient bacterium**

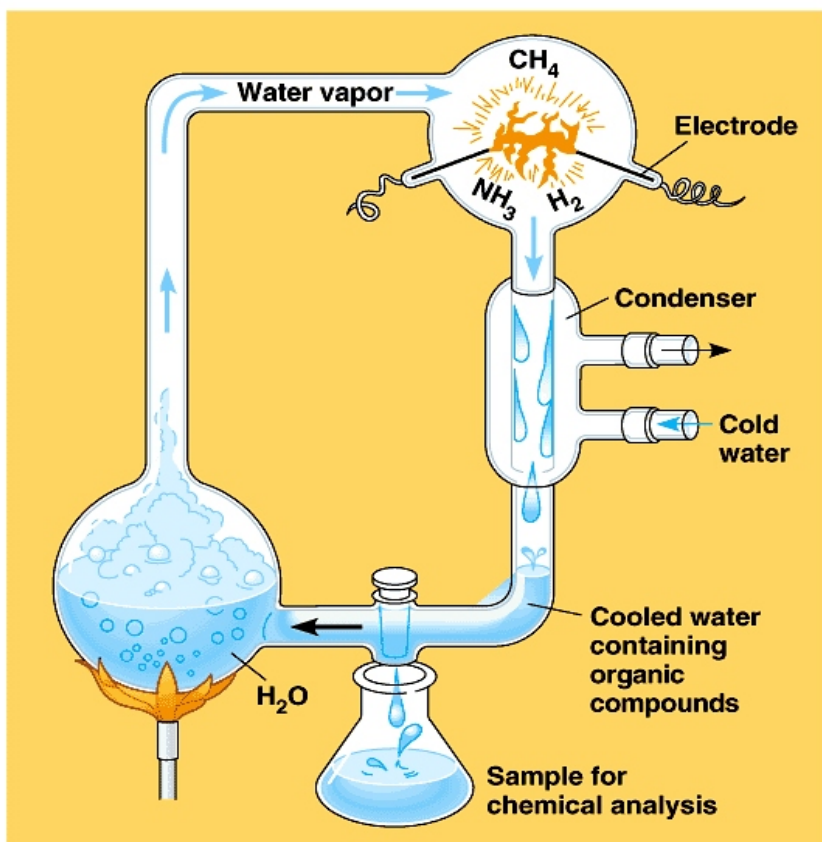


**Living *Leptolyngbya* bacterium**

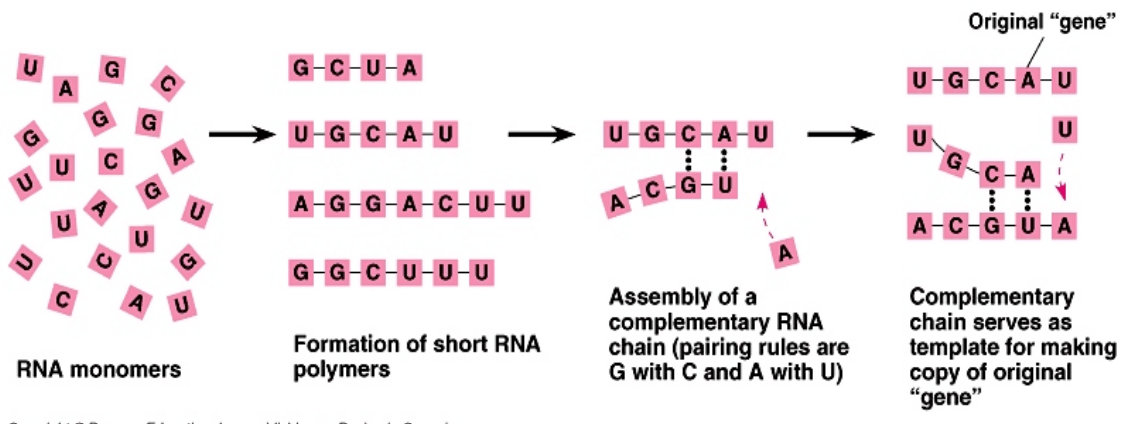


Copyright © Pearson Education, Inc., publishing as Benjamin Cummings.

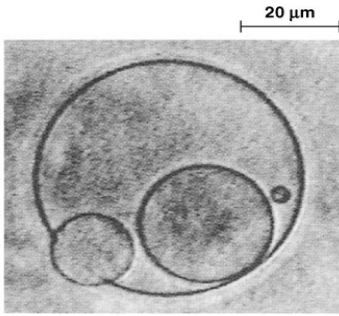




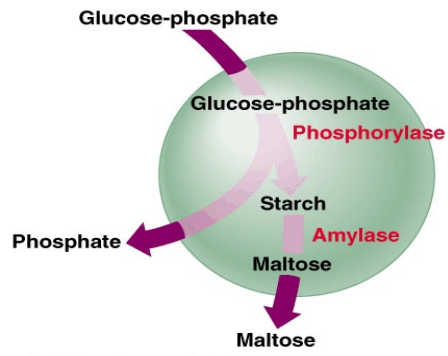
Copyright © Pearson Education, Inc., publishing as Benjamin Cummings.



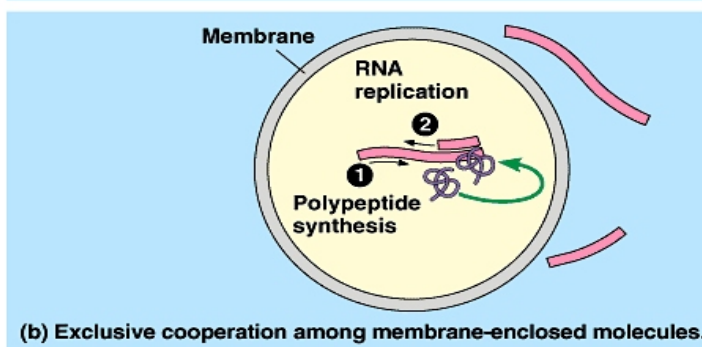
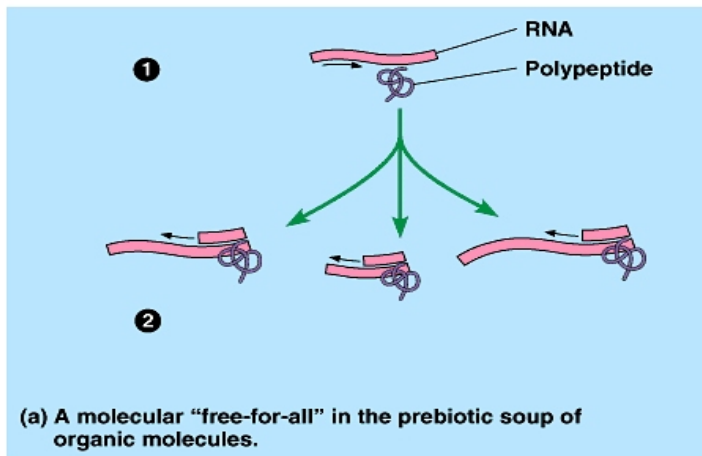
Copyright © Pearson Education, Inc., publishing as Benjamin Cummings.



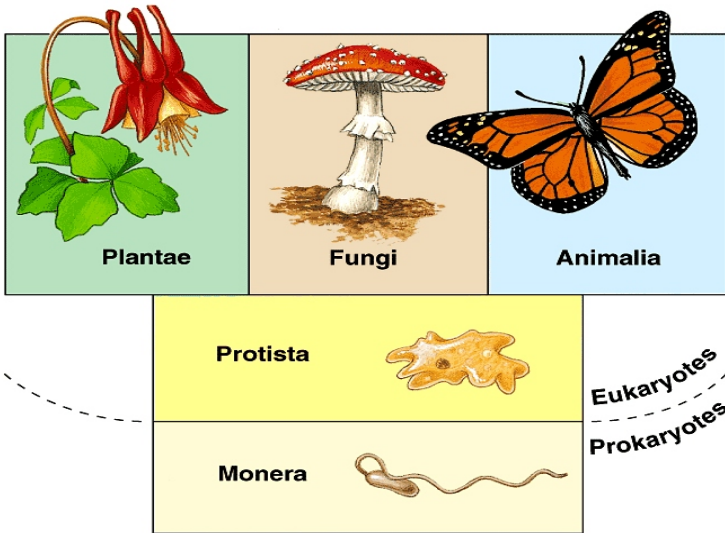
**(a) Simple reproduction**  
Copyright © Pearson Education, Inc., publishing as Benjamin Cummings.



**(b) Simple metabolism**



Copyright © Pearson Education, Inc., publishing as Benjamin Cummings.



Copyright © Pearson Education, Inc., publishing as Benjamin Cummings.



(a) The five-kingdom system



(b) The three-domain system



(c) How many kingdoms?

Copyright © Pearson Education, Inc., publishing as Benjamin Cummings.