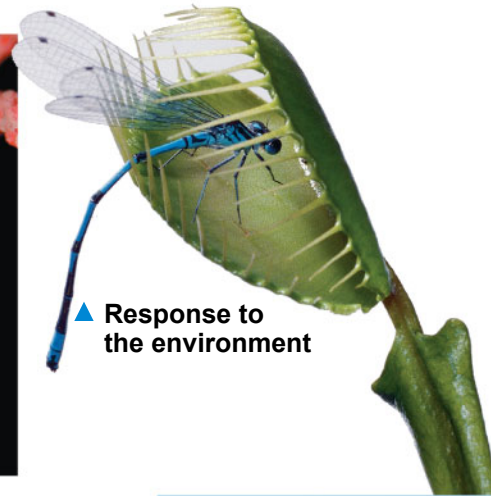


▼ Order



▲ Evolutionary adaptation



▲ Response to the environment



▲ Regulation

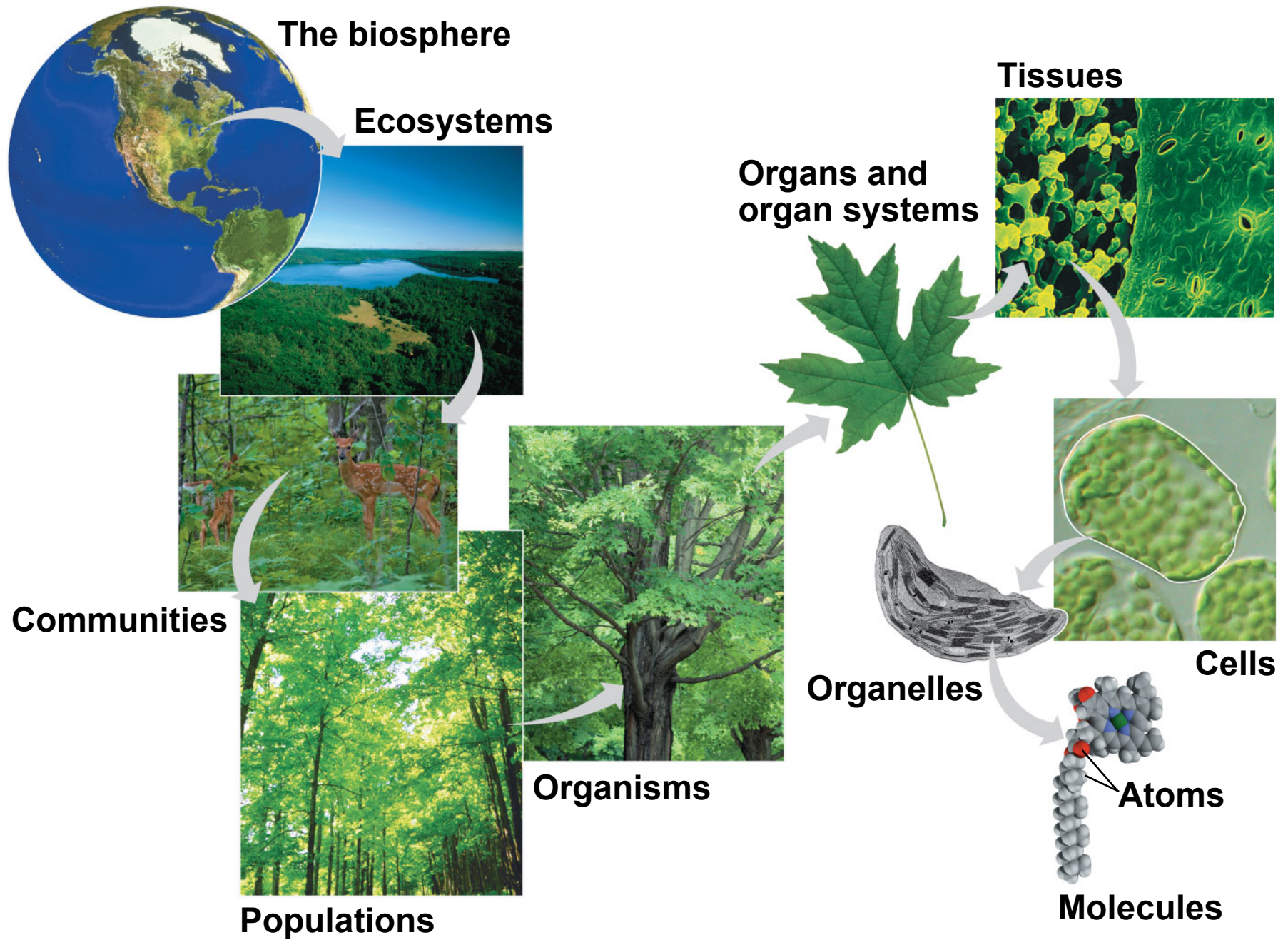


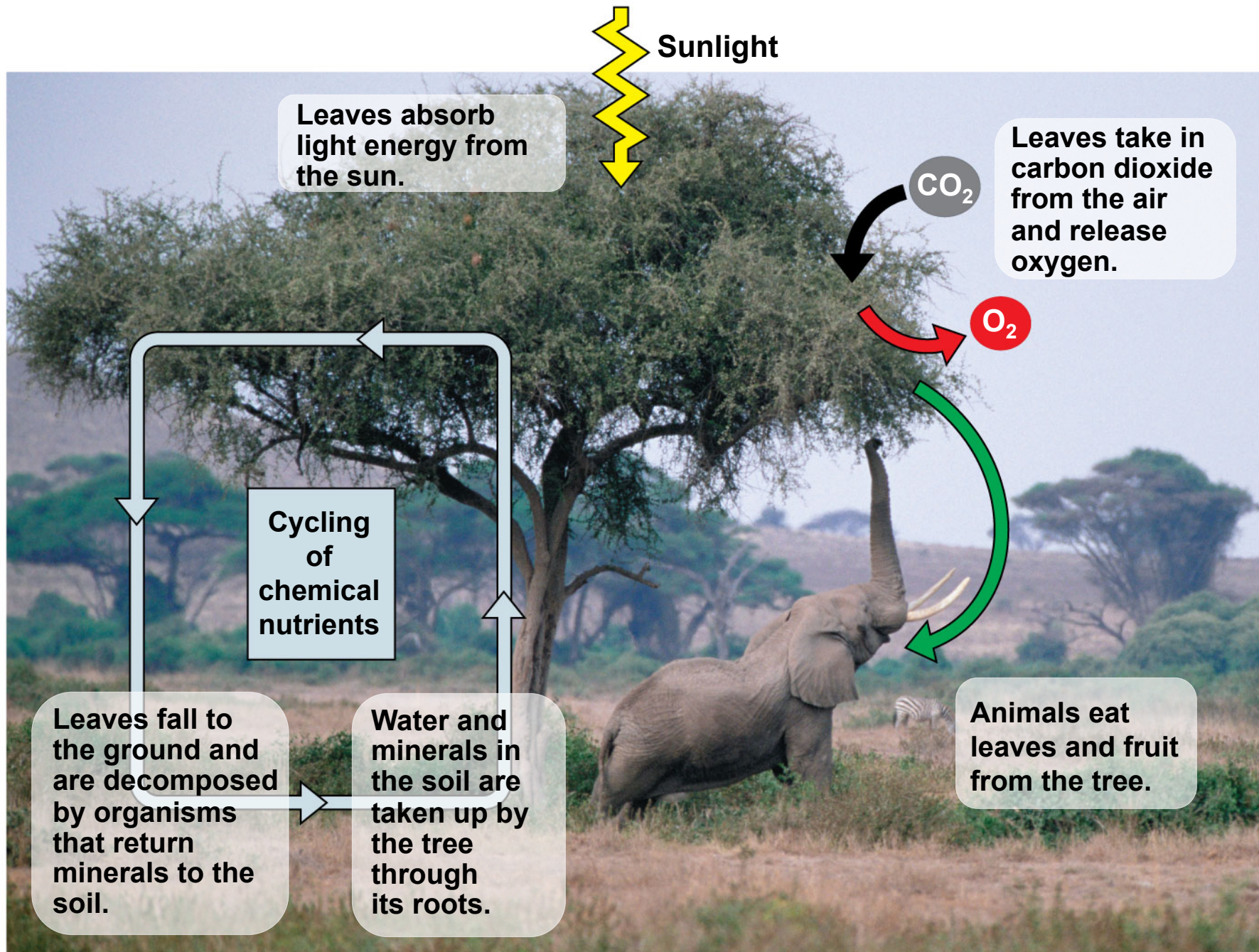
▲ Energy processing

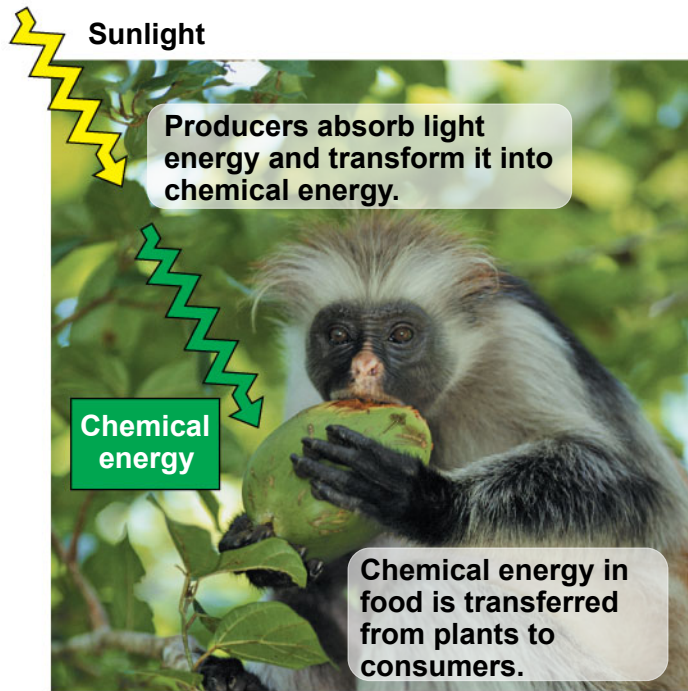
► Reproduction



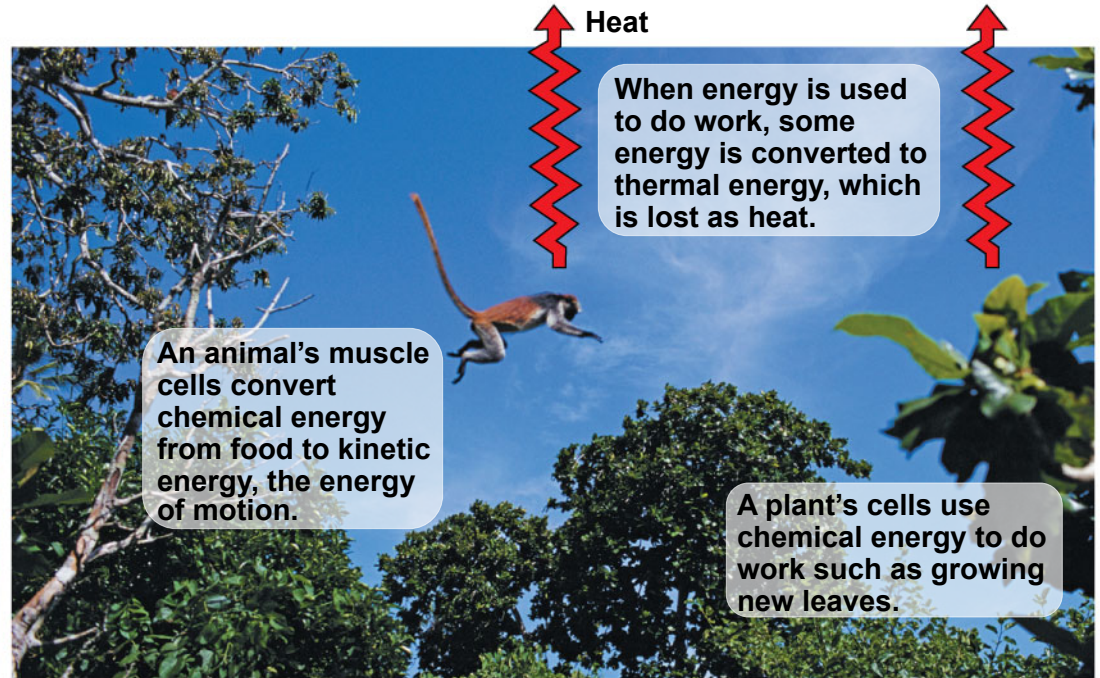
◀ Growth and development







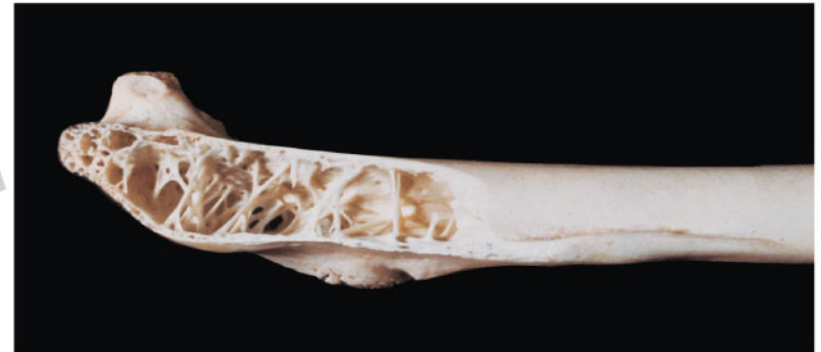
(a) Energy flow from sunlight to producers to consumers



(b) Using energy to do work

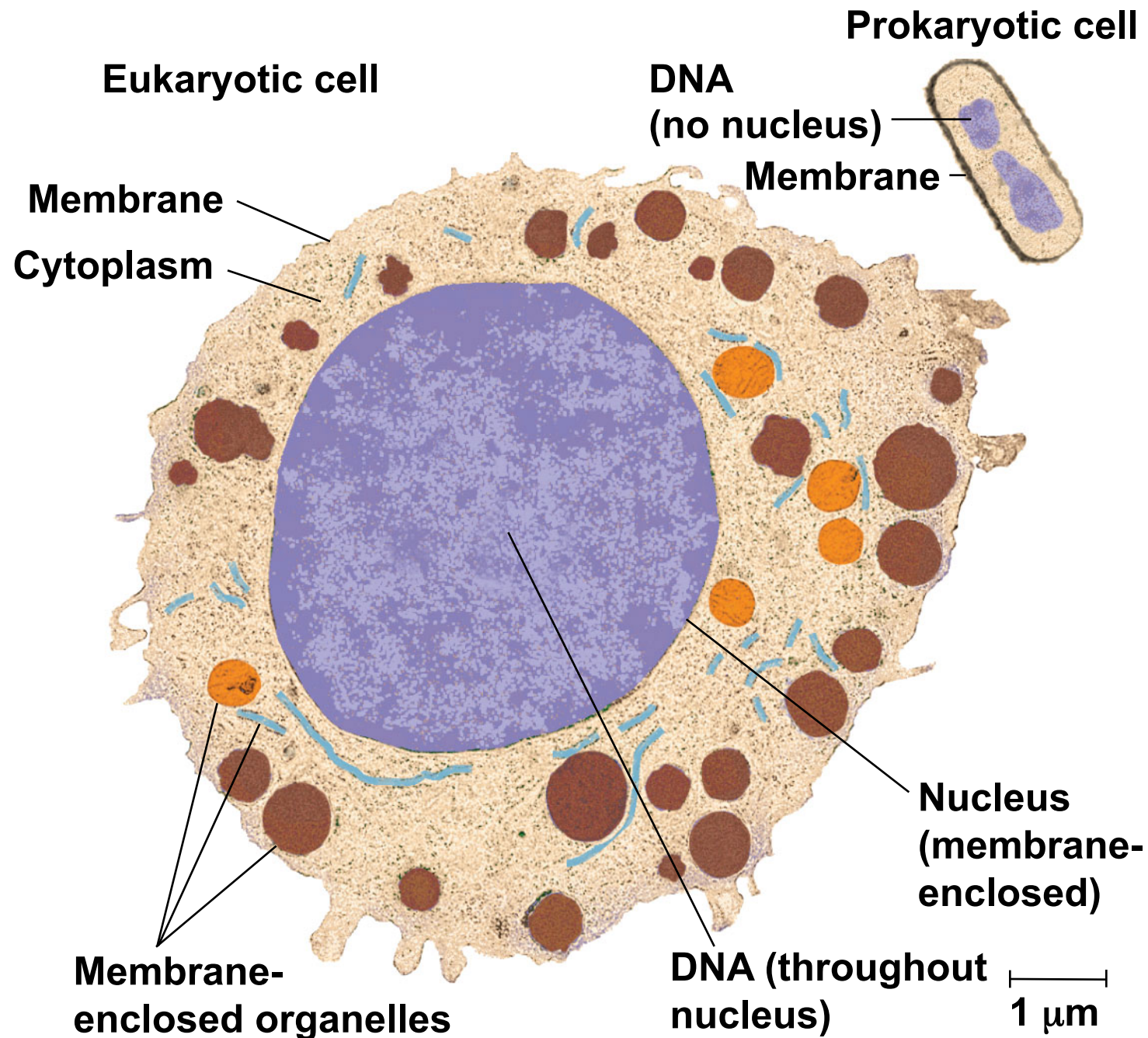


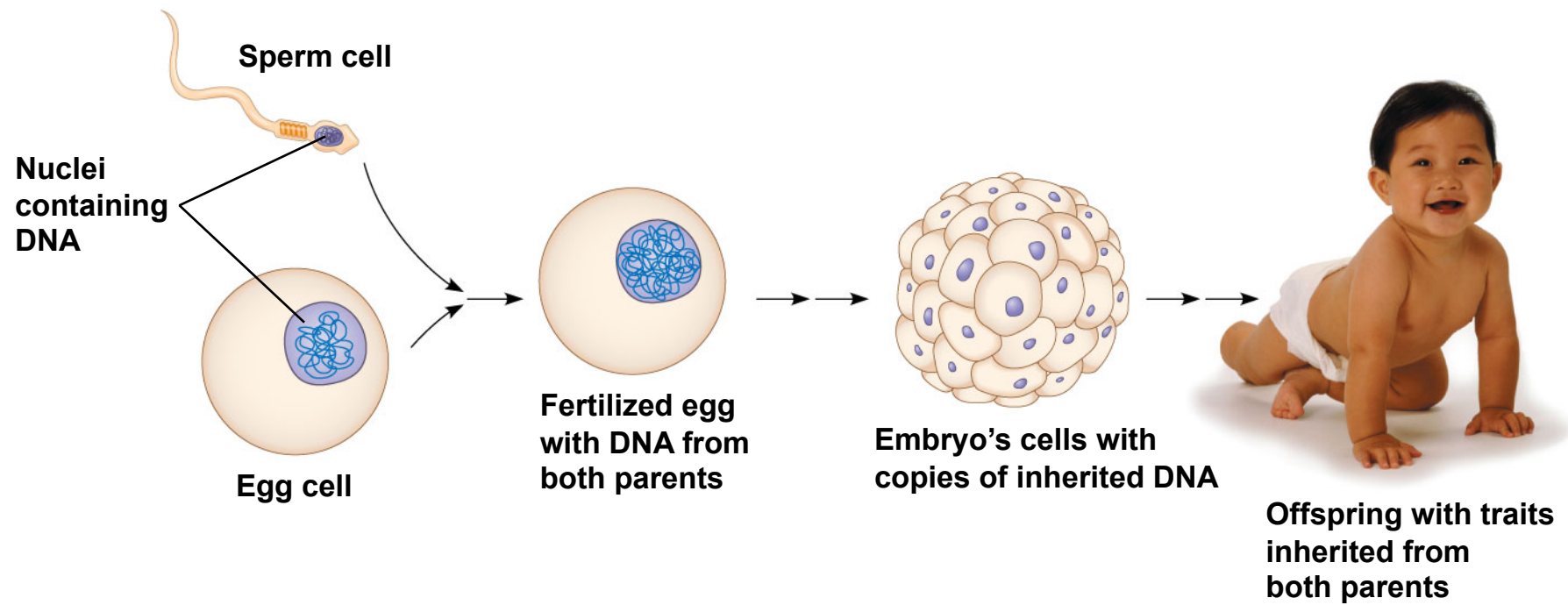
(a) Wings



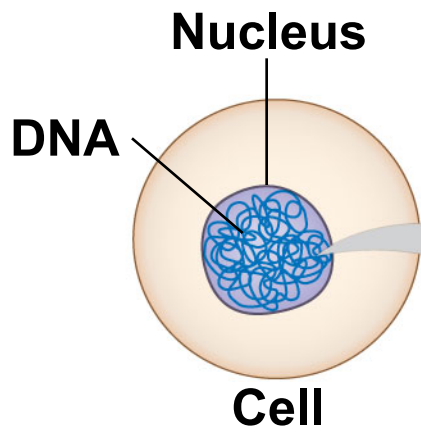
(b) Wing bones

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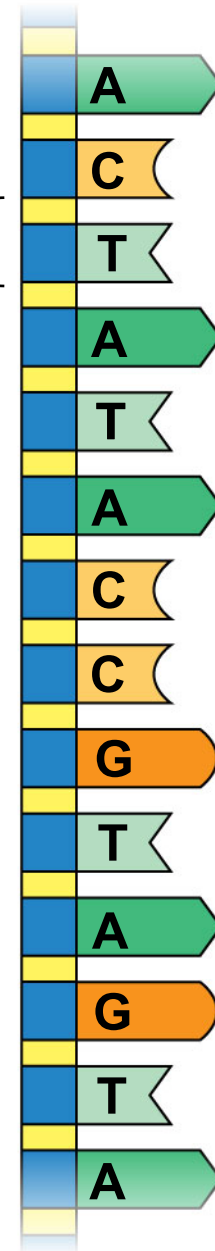


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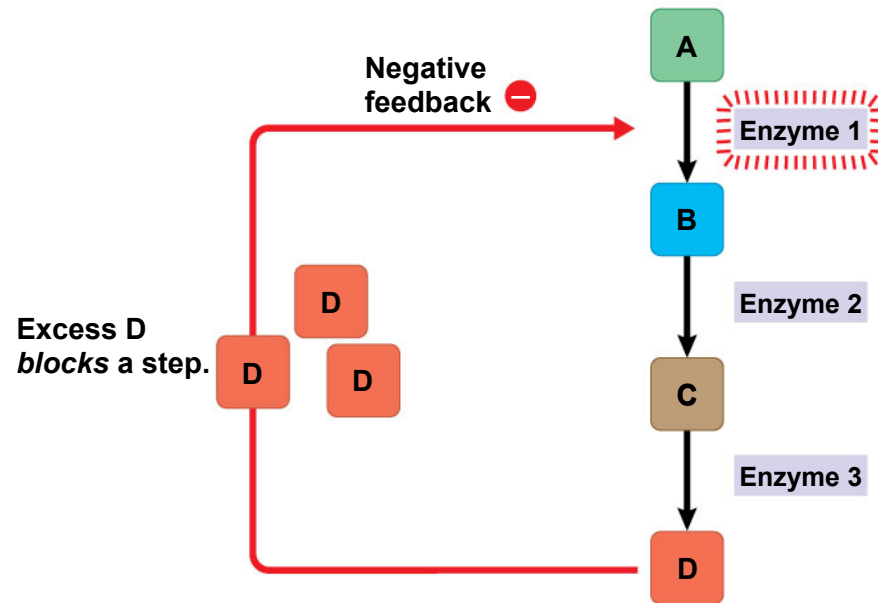


(a) DNA double helix

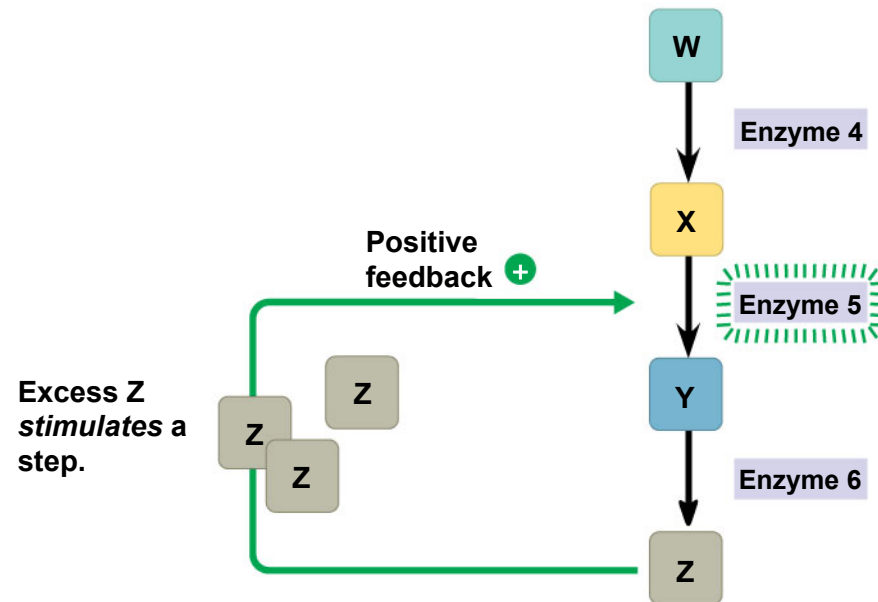
Nucleotide



(b) Single strand of DNA

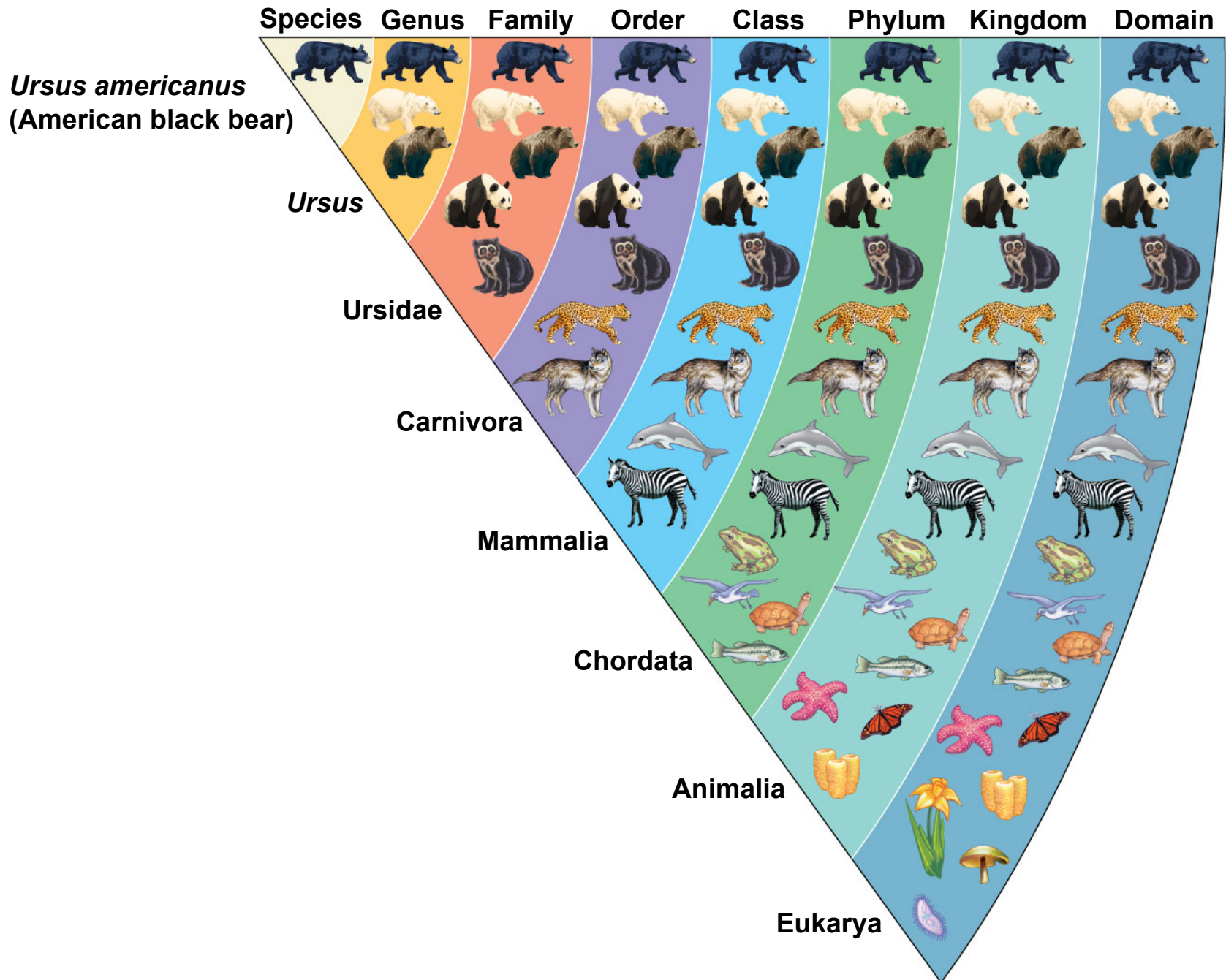


(a) Negative feedback

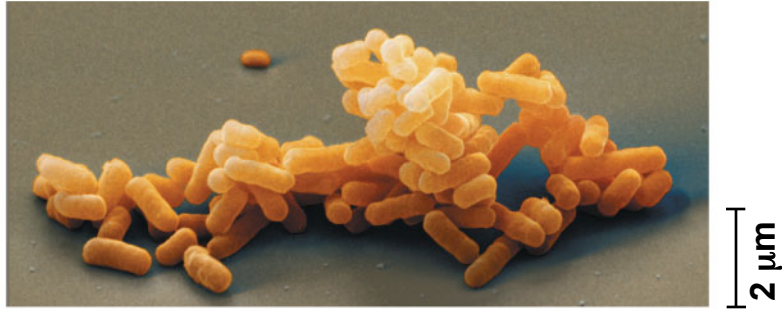


(b) Positive feedback

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(a) Domain Bacteria



(b) Domain Archaea



(c) Domain Eukarya



▲ Kingdom Plantae



► Kingdom Fungi

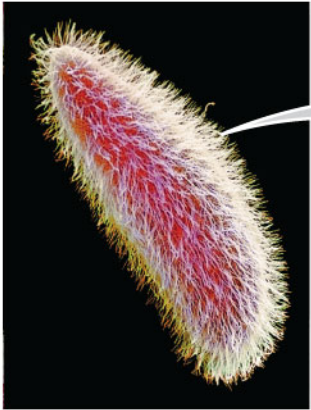


◀ Kingdom Animalia

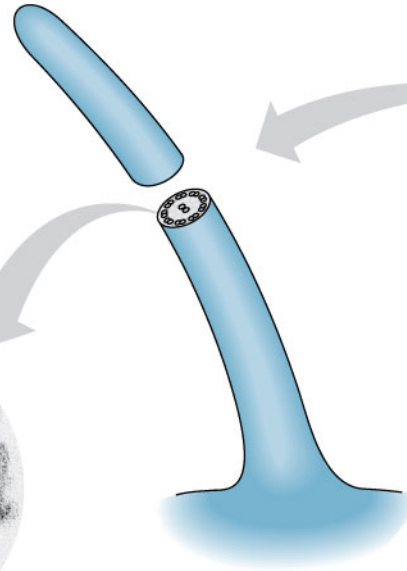
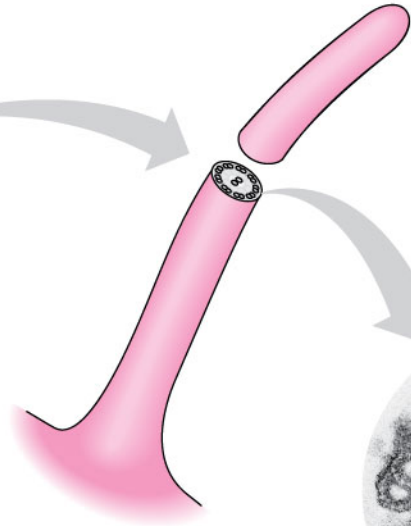
► Protists



15 μm



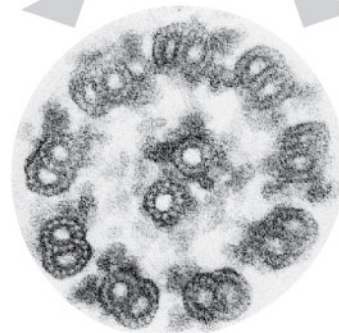
**Cilia of
*Paramecium***



5 μm



**Cilia of
windpipe
cells**



0.1 μm

**Cross section of a cilium, as viewed
with an electron microscope**



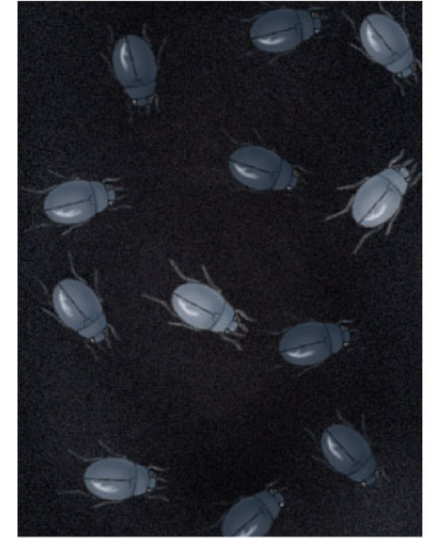
1 Population with varied inherited traits



2 Elimination of individuals with certain traits



3 Reproduction of survivors



4 Increasing frequency of traits that enhance survival and reproductive success

