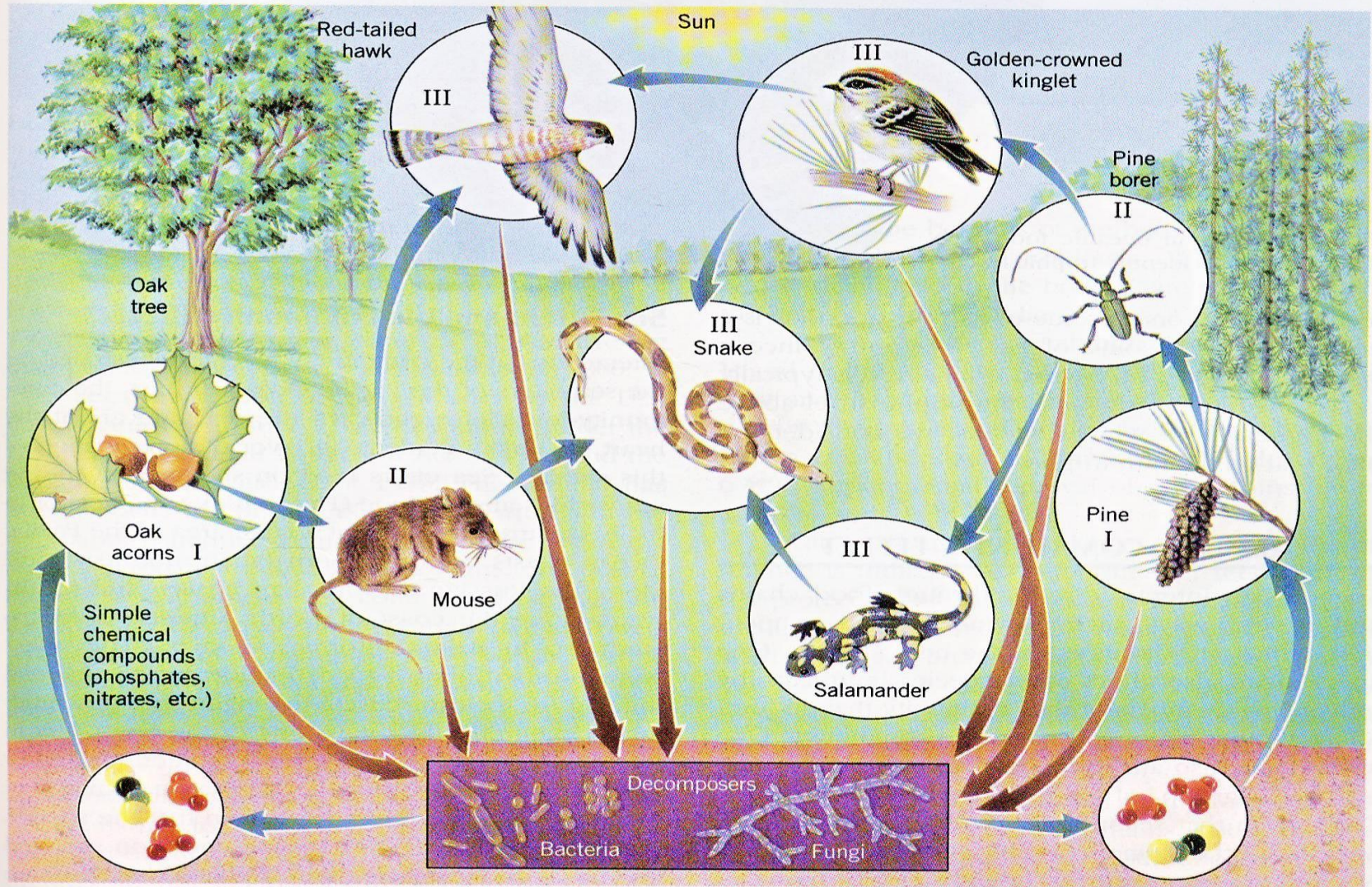


Ecosystem



- Biota refer to all living things (animals and plants including microorganisms) within a given area.
- For life to persist there must be several species within an environment that includes fluid media – air and water – to transport materials and energy.
- Life on earth is sustained by ecosystems that allow to them to sustain life.
- Sustaining life on earth requires more than individuals or species. The flow of energy and cycling of chemical elements.
- Components of ecosystem:
 - Producer
 - Consumer
 - Decomposer
 - Energy and chemical elements

FIGURE 6.3 Food webs: (a) a typical terrestrial food web. Roman numerals identify trophic levels.



- Ecosystem is an open system in regard to energy and a closed system in regard to material.
- Biodiversity involves three different concepts: genetic diversity (the total number of genetic characteristics), habitat diversity (the diversity of habitat in a given unit area), and species diversity. Species diversity involves three ideas: species richness, species evenness and species dominance.