

1. **What** is *ecology*?
2. Study figure 52.2 in your text. It shows the different levels of the biological hierarchy studied by ecologists. Notice also the different types of questions that might be studied by an ecologist at each level of study. Use this figure to **develop a flowchart of the hierarchy from most to least inclusive**.
3. **What** is climate? **What** four factors are its components?
4. **What** is the difference between *macroclimate* and *microclimate*?
5. **Explain** how Earth's curvature and axis of rotation influence the amount of sunlight reaching a given area-for our purposes Miami and Chicago- and how these factors influence the temperature, precipitation, and levels of photosynthesis in that area.
6. Every environment on Earth is characterized by \_\_\_\_\_, or nonliving, factors and \_\_\_\_\_, or living, factors.
7. Use the example of the beech tree to **explain** how global climate change can alter the current range of a species.

8. **What** role does dispersal play in the study of the distribution of species?
9. Give an **example** of and **explain** how one species can affect the distribution of another species.
10. **List** five abiotic factors. Include an **example** and **description** of each factor's influence on living organisms.

<b>Abiotic Factor</b>	<b>Example and Description</b>