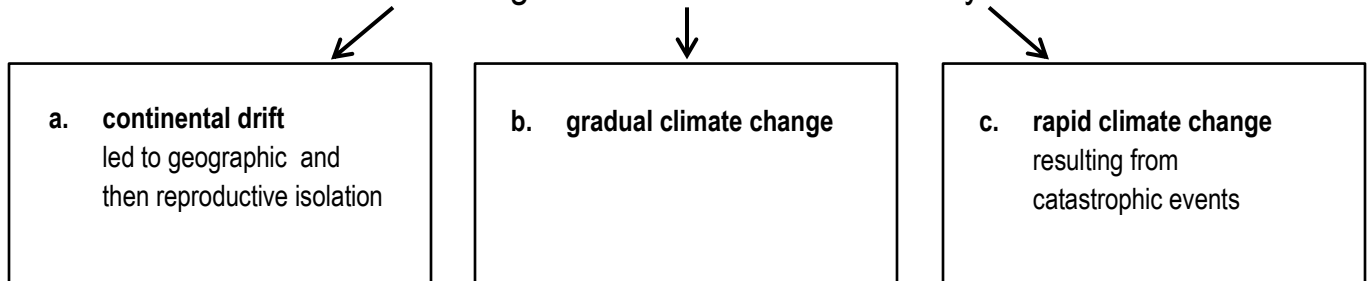


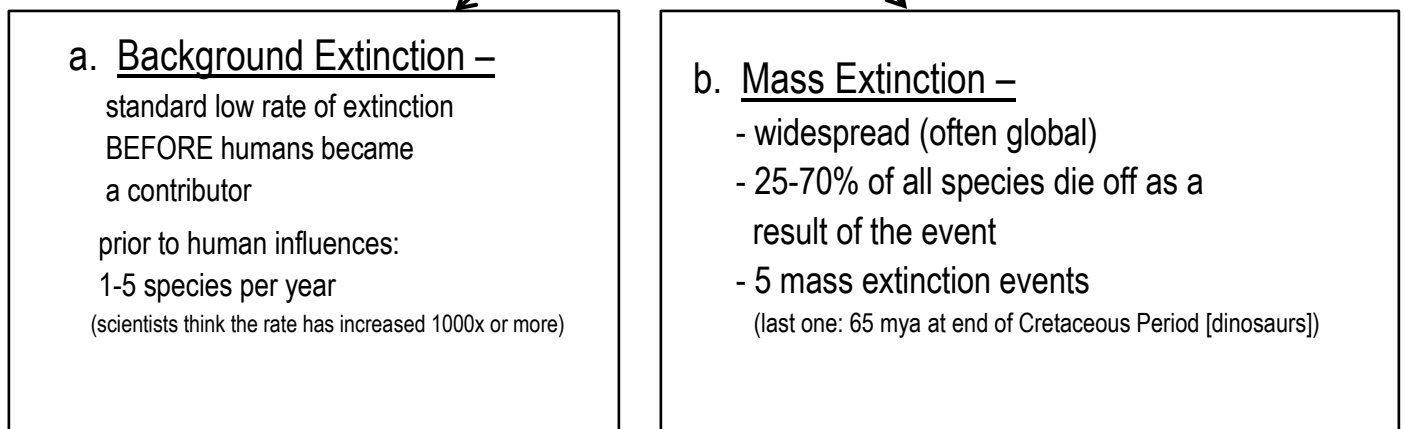
AIM: How do species become extinct?

1. **Extinction:** the complete disappearance of a species from the Earth
It is estimated that 99.9% of all species that ever existed have become extinct

2. Long-Term Patterns Influenced by:



3. Rate of Extinction



4. Adaptive Radiation:

In the time period following a mass extinction, new species evolve to fill new niches or ones left vacant.
(Ex: mammals replace niches left behind after dinosaur extinction)

The 5 Major Mass Extinctions and Adaptive Radiations

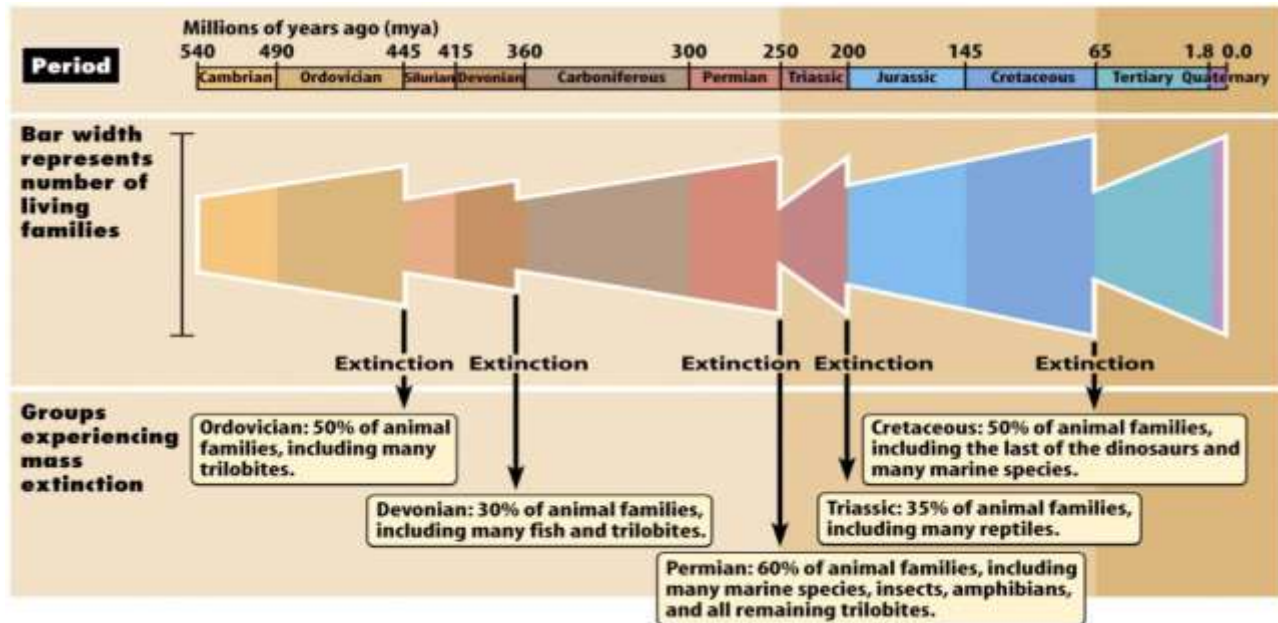
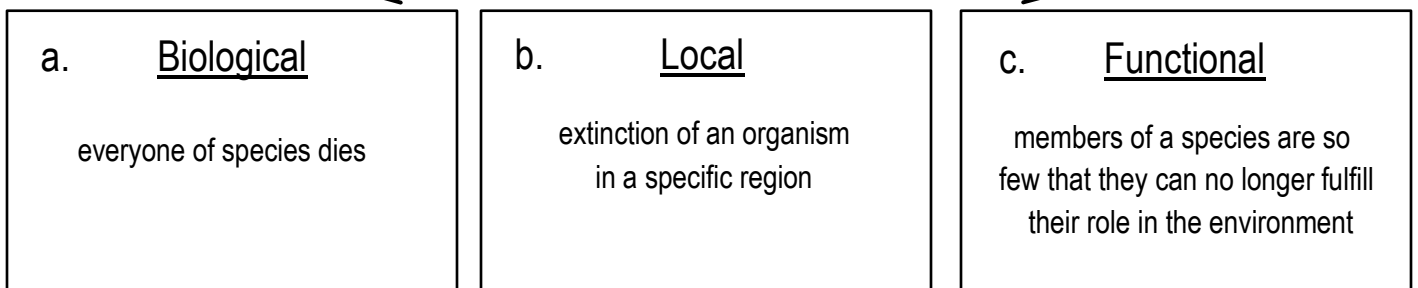


Figure 19-8 Discover Biology 3/e
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5. Scale of Extinction:



6. Causes of Extinction: (causes of a loss in biodiversity)

- Habitat Destruction / Fragmentation** – can be anthropogenic or by natural causes
- Invasive Species** – outcompete native species
- Pollution** – chemical pesticides, heavy metals
- Population of People**
- Overharvesting**

