**Ch. 4 Chapter Summary**

1. Evolution is the change in a population’s genetic makeup over time. Evolution forces adaptations to changes in environmental conditions in a population. The diversity of life on earth reflects the wide variety of adaptations necessary and suggests that environmental conditions have varied widely over the life of the earth.

2. An ecological niche is a species’ way of life or its functional role in a community. Everything that affects its survival and reproduction (temperature tolerance, water needs, space needs, interactions with other organisms, etc.) is a part of that niche. The ecological niche helps a population survive by the adaptive traits that its organisms have acquired.

3. Extinction of species and formation of new species constantly change the biodiversity of the earth.

4. In the future, evolution will continue to influence our environment. Man’s use of artificial selection and genetic engineering to evolve species may have unintended consequences because evolution is a long, slow process and is unpredictable.