Unit C Chapter 3 Section Review Answers

Section 3.1

1. Plants are multicellular with cells that have a nucleus and a cell wall. They are producers and have a two stage life cycle
2. A leaf is suited for photosynthesis, having cells with many chloroplasts at its surface. Xylem brings in water. Stomata let in carbon dioxide. The cuticle keeps water in. Phloem transports sugars.
3. Xylem and phloem
4. Stomata regulate the amount of carbon dioxide, oxygen and water vapor that enters and exits the plant.
5. Soft stemmed plants have green stems, with cells that have chloroplasts. Woody stems are brown or grey; they have cells that do not have chloroplasts.
6. Plants differ in height. Some are soft-stemmed. Some are woody. They live in many different environments. Yet the basic structure is the same: roots, stems, leaves. All rely on photosynthesis to get needed energy and materials.

Section 3.2

1. They had easier access to carbon dioxide and sunlight.
2. Mosses have simple roots, stems, leaves; can store water and nutrients; and produce spores.
3. Vascular plants can grow taller and have larger stems and leaves.
4. The larger the plant, the more chloroplasts it has to capture energy
5. Differences: main moss plant produces eggs and sperm, main fern plant produces spores. Similarities: two part life cycle, have spores, need water.
6. Asexual reproduction allows plants to spread more quickly. Plants can reproduce under conditions that are not favorable to sexual reproduction.