Unit B Chapter 2 Section Review Answers

Section 2.1

1. sudden release of stress that had built up in rocks
2. most faults are at or near plate boundaries
3. normal faults: pulling apart; reverse faults: pressing together; strike-slip faults: horizontal sliding
4. Similarities: movement of rock is mainly vertical, fault plane is at an angle, both are related to plate movements; Differences: main direction of stress is opposite, direction of relative movement of blocks is opposite, each is common at a difference type of plate boundary
5. Reverse faults, because plates are pushing together along a subduction zone
6. Layers of rock that are broken and offset indicate that earthquakes have occurred.

Section 2.2

1. Seismic waves lose more energy the farther they travel
2. Its epicenter and depth (focus)
3. Where earthquakes start and how strong they are
4. Both travel out from the focus of an earthquake; both can travel through earth’s interior. Only primary waves can pass through areas inside Earth that are not solid
5. Circles showing distances from two stations to the epicenter will usually intersect in two places, only one of which can be the actual epicenter
6. Secondary waves cannot pass through Earth’s outer core, but primary waves can

Section 2.3

1. Each whole number represents an increase of a release about 32 times as much energy
2. Collapsing structures and fires
3. Fastening a building to its foundation, adding wall supports; using base insulators, moats, shear walls, shear cores, and/or cross braces during original construction
4. Go to a higher area
5. Fasten bookcases or other heavy furniture to the walls; identify the safest place to be in a room
6. Aftershocks occur because stress in the rock is still being released