

**Chapter 3: Climates of Earth** If you do not have a copy of this assignment, copy the complete sentence – as well as the rest of the sentence from the book.

**Directions:** Read chapter 3 of your textbook. As you read, complete the following sentences with as much detail as possible. They go in order. Some may require a diagram.

**I. Climate and Weather (3.1)**

1. Weather is
2. Climate is the term for
3. Whether the climate in a particular region is cool, wet, hot or dry, the most important of which is
4. The earth's axis is an
5. It is currently tilted at
6. For this reason, the angle of tilt affects the
7. The earth's revolution and its tilt cause
8. These changes follow a regular progression known as
9. The seasons are reversed
10. Around March 21, the sun's rays fall directly on the
11. This day is called the equinox because
12. The direct sunlight on the Tropic of Cancer around June 21, brings the Northern Hemisphere
13. This is known as the
14. Copy the diagram on page 57 as best you can. Then explain how the earth's tilt and rotation causes seasons.
15. At the North Pole, the sun
16. At the South Pole
17. The tilt of the earth's axis as it revolves around the sun causes this natural phenomenon known as
18. Only part of the Sun's radiation passes through
19. Enough radiation, however, reaches the earth
20. The Earth's atmosphere is like the glass in a greenhouse -
21. Many scientists claim that in recent decades a rise in
22. This trend is known as
23. As more fossil fuels are burned,

**II. Factors Affecting Climate (3.2)**

1. Places located in the low latitude zones have
2. Because of this, the zone is called the
3. The earth's polar areas are called the
4. The most variable weather on Earth is found in the
5. The mid-latitudes generally have a temperate
6. As elevation increases, temperatures
7. Because Earth rotates to the east, the global winds are displaced
8. This phenomenon called the
9. At the Equator, global winds are diverted north and south leaving a narrow
10. In the early days of wind-powered sailing, crews feared
11. To lighten the load of ships, sailors would
12. This practice gave rise to the name at the edges of the Tropics known as
13. Ocean Currents are caused by many of the same factors that cause winds including:
14. El Nino is a periodic
15. Mountain ranges influence precipitation and affect climate also, the windward side –
16. After precipitation is released,
17. The rain shadow effect often causes
18. Diagram out a mountain to explain the Rain Shadow Effect (you may use the example on page 64 to help you) . Label the windward side and leeward side of a mountain. Be as descriptive as possible in your diagram.