

Name _____ Date _____ Period _____

STUDY GUIDE CHAPTER 15

1. GASES: Know the % of oxygen and nitrogen in the atmosphere. Classify all others as trace or super-trace.
2. Know all 5 layers of the atmosphere in order. Know the main features of each.
3. Draw air molecules at low temperatures (cold) and at warm temperatures (warm). [This refers to the circle pictures with the dots.] Classify each as high or low density and high or low pressure. Know that warm air rises and cold air sinks.
4. Why is ozone important? How is it being destroyed?
5. Study diagrams of Earth, Venus, and Mars. Show how sunlight radiation is reflected or absorbed. Know how the thickness (or thinness) of the atmosphere affects this.
6. Know definitions and examples of conduction, radiation, and convection. State which one requires a direct contact and which ones don't.
7. How do convection currents form? Draw a cycle diagram.
8. Draw and fully explain how each of these form: land breeze and sea breeze.
9. Discuss the Coriolis Effect. Know what is meant by *actual path* and *intended path*. Know how the Coriolis Effect is related to Earth's rotation on its axis. Know how the Coriolis Effect is different in the north than in the south.
10. Draw the Earth and label all 7 surface winds: polar easterlies (both), prevailing westerlies (both), trade winds (both), and doldrums. Draw the arrows to indicate the direction of the winds.
11. Know all about solar energy. Know the advantages (pros) and disadvantages (cons).
12. Know which layers of the atmosphere get colder as you move up. Know which layers of the atmosphere get warmer as you move up. Know the reasons why they get warmer!
13. Know which part of the Earth rotates faster and which part rotates slower.
14. Know what's wrong with the word **COLD!**