

CHAPTER 2 STUDY GUIDE: WEATHER FACTORS

VOCABULARY: You need to know the following vocabulary for the test. I would recommend making flash cards to help you study.

Section 1: Energy in the atmosphere	Section 2: Heat transfer	Section 3: Winds	Section 4: Water in the atmosphere	Section 5: Precipitation
Electromagnetic waves Radiation Infrared Radiation: Ultraviolet Radiation	Thermal Energy Temperature Thermometer Heat Conduction Convection	Wind Anemometer Sea Breeze Land Breeze Global winds Coriolis Effect Jet streams Doldrums Polar Front Trade Winds Prevailing Westerlies Polar Easterlies	Evaporation Humidity Relative Humidity Psychrometer Condensation Dew Point Cumulus Cumulonimbus nimbus	Precipitation Rain Snow Sleet Hail Freezing Rain

Answer the following questions on a separate sheet of paper. You DO NOT need to use complete sentences.

Section 1: Energy in the Atmosphere

1. What are the affects of ultraviolet radiation and infrared radiation?

Section 2: Heat Transfer

1. List the 3 ways that heat can be transferred.
2. Give examples of each type of heat transfer.
3. Explain why warm air rises and cool air sinks.
4. What type of heat transfer causes most of the heating in the troposphere?

Section 3: Winds

1. What are the global wind belts? What are the areas of calm air? (Be able to identify these on a diagram)
2. What causes global winds?
3. Explain the difference between a land breeze and sea breeze.
4. Explain what causes ALL winds?

Section 4: Water in the Atmosphere

1. List and describe the steps of the water cycle, starting with evaporation. (Be able to identify each step in a diagram)
2. Know the state changes.
3. What is humidity?
4. Explain how clouds form.

Section 5: Precipitation

1. Describe the differences between the 5 main types of precipitation.