

Mrs. Whittaker: Advanced Earth Science

Unit 3: Reading and Note Guide

Chapter 12

Assignment 1

Key Terms You Should See:

Coriolis Effect

Trade Winds

Prevailing Westerlies

Polar Easterlies

Intertropical

Convergence Zone (ITCZ)

Jet Stream

Barometer

Anemometer

Hygrometer

Radiosonde

Doppler Effect

Infrared Imagery

Read pgs. 305 - 316

6. Describe how wind systems are formed.

7. For each system below, indicate the direction of travel and their general latitude boundaries.

Polar Easterlies –

Prevailing Westerlies –

Trade Winds -

8. What is happening with the winds at the ITCZ or the Doldrums? Why does it migrate?

9. Around 30° latitude, the Horse Latitudes, what happens to the air pressure? What does this do to the wind in the area?

10. What is a jet stream? Why does it form and where is it located?

*Know the symbols and characteristics for fronts

11. Pressure Systems (high and low) – What is the symbol used for each, which way is air moving (rising or falling), what direction is the air rotating (clockwise or counterclockwise), and what type of weather is likely to occur?

12. Weather instruments: What does each measure?

A. Thermometer –

B. Barometer –

C. Anemometer –

D. Hygrometer –

E. Radiosonde –

F. Radar (What does radar stand for?) –

G. Doppler Radar –

H. Satellites –

I. Infrared Imagery –