

# Key

## Study Guide for Cycle 2 CFA

1. When you change position you are in motion
2. The location you compare your object or place's position to is called the reference point
3. What is the difference between speed and velocity? Speed is a measure of how fast you are going, velocity is speed in a given direction
4. On a distance time graph, what does a flat line mean? the object is at rest for a period of time
5. On a distance time graph, what does a line going up mean? Object is moving at a constant speed
6. On a distance time graph, what does a line going down mean? Returning to the start
7. Convection is heat transfer in a liquid or a gas
8. Conduction is heat transfer through direct contact
9. Radiation is heat transfer through electromagnetic waves through space
10. What happens to air density as altitude increases? decreases
11. List and describe the layers of the atmosphere from sea level up Troposphere - weather occurs here, Stratosphere - ozone, mesosphere - coldest layer, thermosphere - hottest, exosphere - outermost
12. What is the Coriolis Effect? Earth's rotation changes the direction of the wind
13. What kind of weather is associated with high pressure? Fair weather, clear blue skies "happy" weather
14. What kind of weather is associated with low pressure? Stormy weather, clouds
15. What is a land breeze? a breeze blowing toward the sea from the land, due to warmth of the sea
16. What is a sea breeze? a breeze blowing toward the land from the sea, due to land warming up
17. Why do land breezes and sea breezes occur? during the day land heats faster than water, air above land becomes warmer than above ocean
18. What is a cold front and what type of weather does it bring? gusty winds, cold temps, rain - cold dense air replaced warm air mass
19. What is a warm front and what type of weather does it bring? warm air slides over cold air mass, condenses into clouds, warmer temps, gentle rain or light snow
20. What is a stationary front and what type of weather does it bring? cold + warm front stop moving clouds, prolonged rain