

## Wind and the Atmosphere Quiz – Study Guide

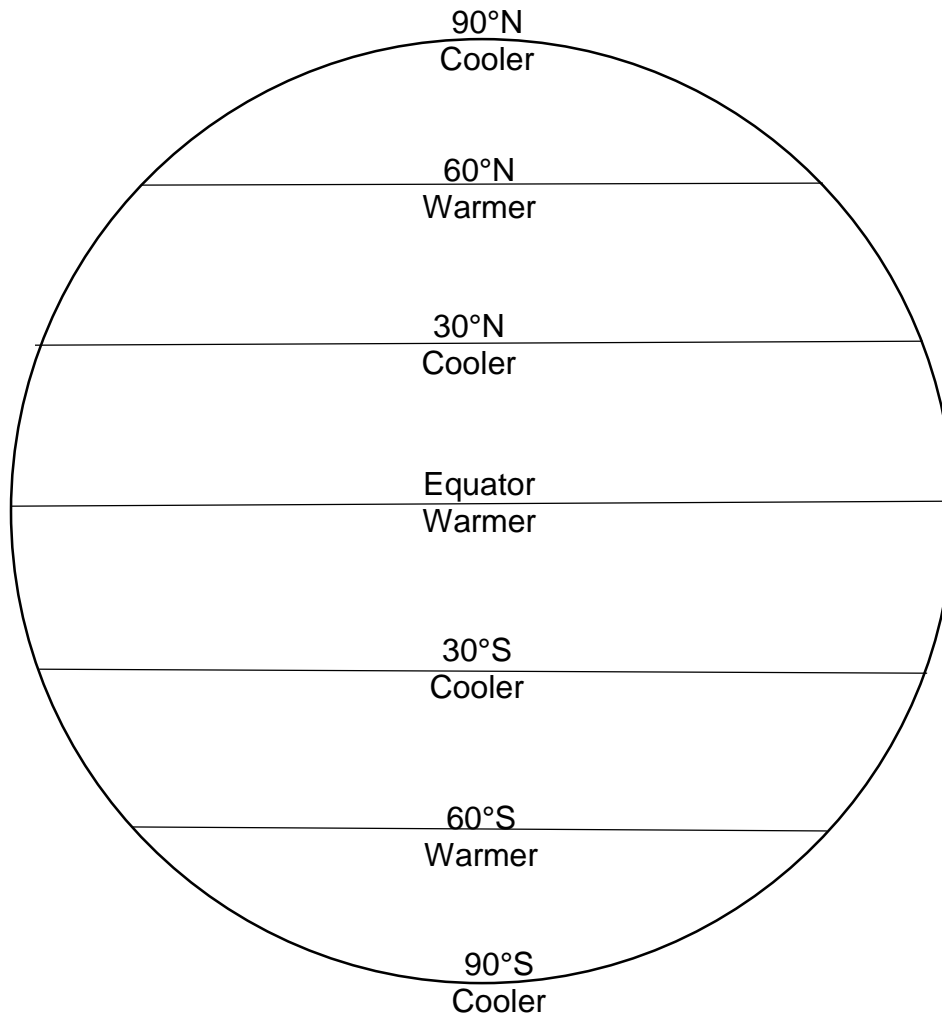
Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

1. For the Wind and the Atmosphere Quiz, you are responsible for all of the concepts covered in the notebook.

2. In addition, you should know the following vocabulary:

- Atmosphere-
- Troposphere-
- Stratosphere-
- Mesosphere-
- Thermosphere-
- Ozone layer-
- Wind-
- Density-
- Land Breeze-
- Sea Breeze-
- Convection Current/Cell-
- Global Winds-
- Coriolis Effect-
- Angle of Sunlight – Direct and Indirect
- Leeward-
- Rain Shadow-
- Windward-

3. Global Winds - On the diagram of the globe below, draw the actual model of global winds. Make sure to include all convection cells with proper orientation and circulation. Also show the proper flow of winds between the latitudes. Remember to consider the Coriolis Effect. (Bonus: label the winds and the cells with their proper names.)



4. Be able to explain the kiteboarding phenomenon:

Evie is taking beginning kiteboarding lessons in the Columbia River Gorge. She finds that they can't kiteboard in the mornings because the wind speeds are too low, but the afternoons are good (and sometimes end up getting too windy for beginners to kiteboard.)

- Why is the Columbia River Gorge such a great place for kiteboarding? (Think about the geography of the Gorge. Why would it lead to good wind?)
- Why are afternoons so much better than mornings for kiteboarding? (Think about the temperature at each time of day. Why would warmer temperatures be better?)

5. Be able to draw and explain a convection current.