

Global Winds

Name: Mrs. Renn Date: 2/20/20 Period: 1

LT: I can model and explain how winds move in global patterns.

The Relationship Between Air Temperature, Density, and Pressure

In Warm air...

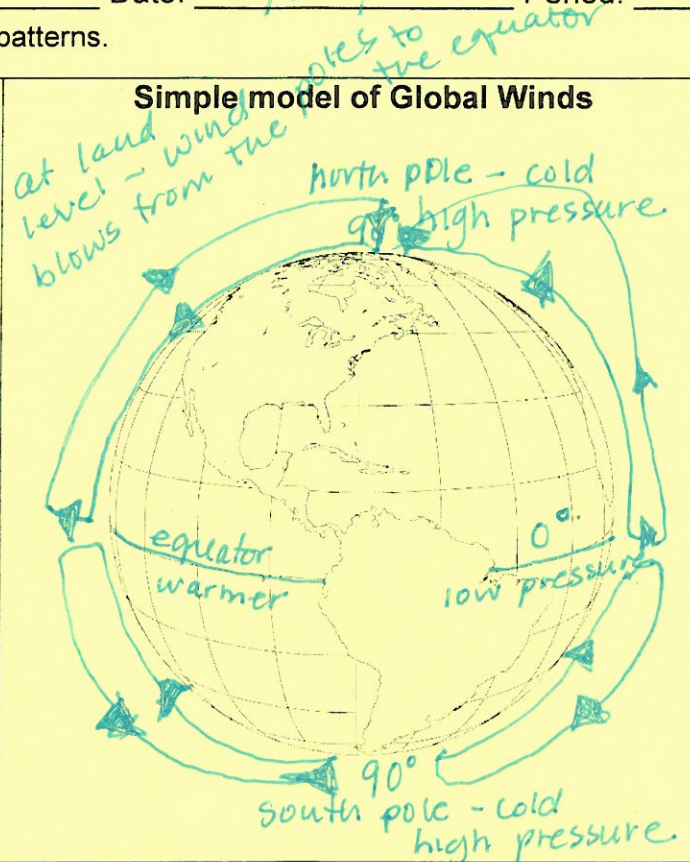
- molecules spread apart.
- They are less dense,
- so the air rises.
- This creates an area of low pressure.

In Cold air...

- molecules come closer together.
- They are more dense,
- so the air sinks.
- This creates an area of high pressure.

Wind is air moving from an area of high pressure to an area of low pressure!

Simple model of Global Winds



Convection Currents & Coriolis Effect

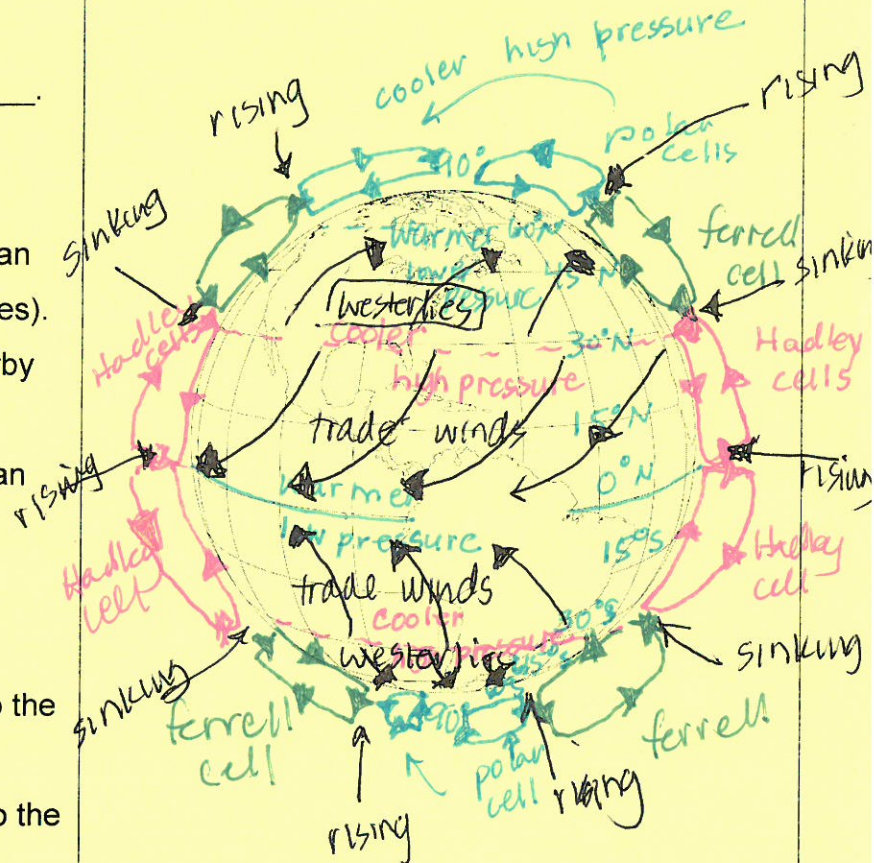
Convection currents...

- are air moving in big curves.
- They cause wind.
- They are created when air in one spot is warmed and rises, leaving behind an area of low pressure (less molecules).
- Then cold, sinking air from nearby rushes in to fill the empty space.
- Convection currents can happen on a small scale, or a global scale

Coriolis Effect...

- The rotation of the Earth causes winds to curve.
- Winds in the Northern hemisphere curve to the right.
- Winds in the Southern hemisphere curve to the left.

Actual Model of Global Winds



Actual Model of Global Winds

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