

WINDS

I. Wind Movement

A. Rotation of the Earth (coriolis effect)

1. deflects winds in the Northern Hemisphere to the right

B. Unequal heating of land and water

II. Wind Cells (Convection cells)

A. Cause = warm air rising at the equator flows to the poles. Cold air then moves from the poles back to the equator.

B. Three convection wind cells Wind Band

1. Equator to 30 degrees latitude *Trade Winds*

a. low pressure, rising air

2. 30 degrees to 60 degrees latitude *Westerlies*

a. high pressure ,sinking air

3. 60 degrees to 90 degrees latitude *Polar Easterlies*

a. low pressure ,rising air

III. Pressure Zones

A. Areas of low density, rising air or of high density, sinking air.

1. Doldrums = the equator at zero degrees latitude

2. Horse latitudes = 30 degrees N and S latitude

3. Subpolar = 60 degrees N and S latitude

IV. Hemisphere wind differences

A. Northern and Southern hemispheres have the same winds from a slightly different direction.