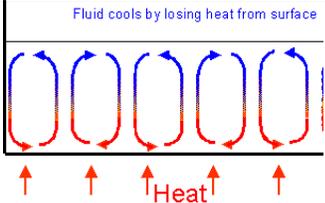
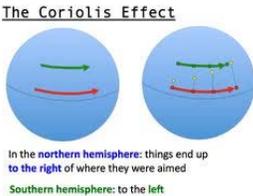
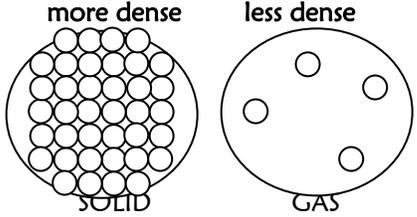


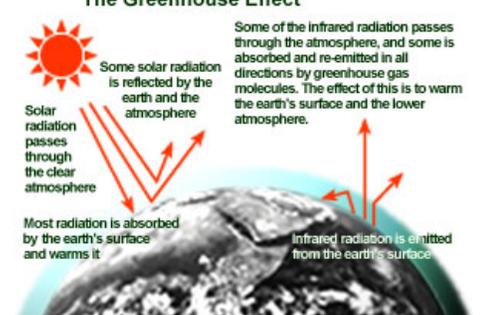
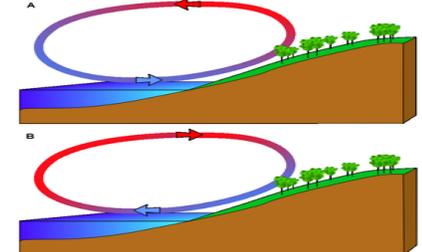
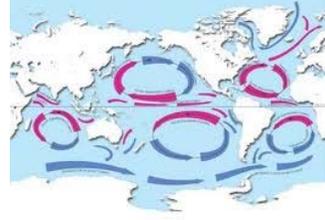
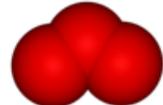
EARTH SYSTEMS UNIT VOCABULARY

<i>Term</i>	<i>Definition</i>	<i>Example</i>
Air Pressure	Atmospheric air pressure is the force exerted on Earth's surface by the weight of the air above the surface	
Atmosphere	The whole mass of air surrounding the Earth made up of 78% Nitrogen, 21% Oxygen, and other gases	
Barometer	An instrument that measures the amount of atmospheric pressure	
climate	The average conditions of temperature, precipitation, winds, and clouds in an area over time.	Five main types of climates: tropical rainy, dry, temperate marine, temperate continental, and polar.
convection	The transfer of heat by currents within fluids (liquids and gases)	
Coriolis Effect	The apparent deflection of moving air, as seen by an observer on Earth; apparent deflection is a result of Earth's rotation	
density	The amount of matter per unit volume (mass divided by volume).	Solids have molecules that are very close together; gases have molecules that are spread apart. As a result, solids have a higher density than gases. Calculate by dividing mass by volume ($d=m/v$). 

global winds

Winds resulting from the uneven heating of earth by the sun.



<i>Term</i>	<i>Definition</i>	<i>Example</i>
greenhouse effect	Greenhouse gases (carbon dioxide and water vapor) in the earth's lower atmosphere trap radiant energy from the sun keeping the earth's surface warm.	<p style="text-align: center;">The Greenhouse Effect</p>  <p>Some solar radiation is reflected by the earth and the atmosphere. Solar radiation passes through the clear atmosphere. Most radiation is absorbed by the earth's surface and warms it. Infrared radiation is emitted from the earth's surface. Some of the infrared radiation passes through the atmosphere, and some is absorbed and re-emitted in all directions by greenhouse gas molecules. The effect of this is to warm the earth's surface and the lower atmosphere.</p>
local winds	Winds resulting from the heating of land surfaces.	
Ocean Currents	A directional movement of ocean water; surface currents result from steady winds over the ocean surface; deep currents result from density variations due to temperature and salinity differences.	
ozone	A molecule consisting of 3 oxygen atoms. Found in the earth's atmosphere, it is responsible for blocking harmful ultraviolet light.	O_3 
specific heat	The amount of thermal energy required to raise the temperature of one kilogram of a substance by one Kelvin;	A copper pot filled with water is placed on a hot stove. The pot heats up very quickly because copper has low specific heat. The water takes longer to heat up because it requires more energy to heat up than the pot; water has a higher specific heat than copper.
Thermal Energy	Energy radiated by hot objects such as the Sun in the form of electromagnetic radiation	
Weather	The day to day state of the atmosphere	

Wind

A natural movement of air sometimes with considerable force from an area of high density and pressure to an area of low density and pressure.

