

Unit: 3. EARTH'S ATMOSPHERE

VOCABULARY

albedo	ability of a material to reflect solar radiation
altitude	height above the earth's surface
barometer	instrument used to measure air pressure
carbon-oxygen cycle	describes how carbon and oxygen are exchanged and recycled on Earth
carbon monoxide	a colorless, odorless, poisonous gas
conduction	the transfer of heat between two stationary entities
convection	process of heat transfer by the circulation or movement of a liquid or a gas
Coriolis effect	a circular pattern of winds created by Earth's rotation
cyanobacteria	single-celled photosynthetic bacteria
Earth's energy budget	the balance between the amount of energy coming in from the Sun and going back out into space
exosphere	the sub-layer of the thermosphere where the atmosphere blends into space
gamma rays	shortest and strongest wavelengths of solar radiation
humidity	moisture in the air
hydrocarbon	wasted, unburned fuel given off as a gas
ion	an electrically charged atom
ionosphere	a sub-layer of the thermosphere containing ions

land breeze	cool breeze that circulates from land to sea
latent heat	heat released when water vapor condenses
mesosphere	the layer of the atmosphere just above the stratosphere; burns up most meteors
meteorite	mass of stone or metal that has passed through the atmosphere and struck the earth's surface
meteoroid	mass of stone or metal traveling through space
Milankovitch cycles	predictable variations of Earth's orbit and tilt that can affect climate
nitrogen oxide	a gas produced at high temperatures by combining nitrogen and oxygen
ozone	a molecule composed of three oxygen atoms; absorbs UV radiation
ozonosphere	a region in the upper stratosphere where ozone is concentrated
photosynthesis	process by which plants use chlorophyll and energy from sunlight to manufacture food from carbon dioxide
pollution	waste substances not ordinarily found in the atmosphere that affect Earth's natural cycles
pressure	weight or force upon something
radiation	transfer of heat or energy through rays of various wavelengths
respiration	the process by which oxygen combines with food to release energy and carbon dioxide
sea breeze	cool breeze that circulates from sea to land
stratosphere	layer of the atmosphere just above the troposphere where the temperature remains fairly constant

sulfur oxide	a gas produced when sulfur impurities in fuel burn by combining with oxygen
thermosphere	layer of the atmosphere above the mesosphere where temperatures are the highest in the atmosphere
troposphere	layer of the atmosphere nearest the earth where most weather changes occur
Van Allen radiation belts	radiation belts surrounding Earth that protect us from harmful radiation of the Sun