

Earth Science Vocabulary

1610 Vocabulary Words

SECTION 1

Fields of Science

astronautics
astronomy
biology
chemist
chemistry
geologist
geology
meteorologist
meteorology

mineralogist
mineralogy
oceanographer
paleontologist
petrologist
petrology
physics
seismologist
technology

Metric System

absolute zero
arc
area
calorie
Celsius
centi
centigrade
centimeter
classification
concentration
deci
deka
density

kilogram
kilometer
L
length
liter
mass
matter
measurement
meter
metric system
milli
milliliter
ml

English System
Fahrenheit
grams
gravity
hecto
ice
instrument
kilo

percent deviation
percent error
specific gravity
square centimeters
time
volume
weight

Scientific Processes

conclusion
control
data
data collecting
data table
direct relationship
drawing conclusions
dynamic equilibrium
error
hypothesis

inference
observation
percent error
probability
problem solving
scientific method
senses
theory
variable

Chemistry

acids
atom
atomic mass
atomic number
aurora australis
aurora borealis
base
boiling point
chemical bonding

melting point
metal
mixture
molecules
negative ions
neutron
nonmetal
nucleus
organic

chemical change
chemical compound
chemical properties
compound
condensation point
condensation surface
ductility
electron
electron cloud
element
energy level
freezing point
gas
inorganic
malleability

oxidation
phase
phase change
physical change
physical properties
physical state
plasma
positive ions
proton
solid
solidification
soluble
solution
temperate climate
temperature

Weather

absolute humidity
air pressure
ammonia
anemometer
aneroid barometer
atmosphere
atmospheric pressure
atmospheric variables
barograph
barometer
barometric pressure
bimetallic thermometer
blizzard
carbon dioxide
Celsius
Centigrade

low pressure
magnetosphere
marine climate
maritime polar
maritime tropical
mercury barometer
mesopause
mesosphere
methane
millibar
models
moisture
mountains
nitrogen
occluded front
orographic effect

circumpolar whirl
climate
clinometer
cloud
cloud seeding
cold front
condensation
condensation nuclei
condense
conduction
continental polar
continental tropical
convection
convection current
corillera
cumulonimbus clouds
cyclone
desert climate
dew
dew point
divergence zone
doldrum
dry-bulb thermometer
exosphere
eye of cyclones
fog
front
frost
greenhouse effect
Hadley cell
hail
hailstorms
high pressure
horse latitudes
humidity

oxygen
ozone layer
ozonosphere
Polar northeasterlies
polar winds
polar zone
precipitation
pressure
pressure gradient
prevailing westerlies
radiation
rain
relative humidity
Sahara Desert
saturated
sea breeze
seasons
sleet
sling psychrometer
snow
south polar zone
south temperate zone
stationary front
stratopause
stratosphere
sublimation
temperate zones
thawing
thermosphere
thunder
tornadoes
trade winds
Tropic of Cancer
Tropic of Capricorn
tropical zone

hurricane
hygrometer
inches of mercury
interior plane
ionosphere
isobar
isoline
isosurface
isotherms
land breeze
latitude wind cells
leeward
lightning
liquid thermometer

tropics
tropopause
troposphere
Van Allen radiation belt
warm front
water vapor
weather map
weather station
weather vane
westerlies
wet-bulb thermometer
wind
wind vane

Models

agonic line
graphic model
mathematical model
mechanical model

mental model
model
physical model
scale

Measuring the Earth

apogee
arctic circle
atmosphere
atmospheric pressure
atmospheric variables
average slope
axis
bench mark
chronometer

isosurface
isotherm
Landsat
latitude
lithosphere
longitude
magnetic declination
magnitude
map projections

circumference
computer imaging
conic projection
contour interval
contour line
contour map
coordinate system
coordinates
crust
depression contour
diameter
distortion
equator
Eratosthenes
field
field gradient
field map
geographic poles
gnomonic projection
gradient
gravimeter
gravitation
gravity
great circle route
horizontal axis
hydrosphere
imaging radar
isobar
isoline

map scale
Mercator
meridian
North Pole
North Star
oblate spheroid
orbit
orbital speed
orbital velocity
parallel
perigee
photogrammetry
pneumbra
polar coordinates
Polaris
polyconic
prime meridian
profile
remote sensing
scalar field
scale
sea level
side looking radar
slope
South Pole
topographic map
umbra
vector field
vertical axis

Celestial & Terrestrial Observation

altitude
annual motion

noon
parallax

apogee
apparent diameter
apparent solar day
apparent solar time
autumnal equinox
azimuth
celestial equator
celestial navigation
celestial north pole
celestial objects
celestial poles
Coriolis effect
declination right ascension
earth's revolution
eclipse
ecliptic plane
equator
equinox
frictional drag
horizon
hour circle
international date line
latitude
local noon
mean solar day
meridian
neap tide

period
prime meridian
revolution
rotation
sidereal day
sidereal year
solar day
solar eclipse
solar noon
solar time
solar year
solstice
spring equinox
spring tides
standard time
summer solstice
sun dial
sun time
time
time meridian
Van Allen belt
vernal equinox
winter solstice
year
yearly motion
zenith

Moon

1st quarter
3rd quarter
annular eclipse
celestial north pole

new moon
old crescent
old gibbous
penumbra

crescent moon
eclipse
full moon
lunar eclipse
lunar rocks
maria
new crescent moon
new gibbous

phase
phases
precession
rille
solar eclipse
tidal range
total eclipse
umbra

SECTION 2

Sun - Stars - Galaxies

aphelion
apparent magnitude
astronomical unit
binary stars
black hole
Cepheid variable
constellation
continuous spectrum
Copernican model
corona
daily motion
dark line spectra
Doppler effect
dwarf stars
eccentricity
ellipse
elliptical galaxy
energy transformation
epicycles
focus

nuclear fusion
optical telescope
parallax of a star
perihelion
photosphere
planet deferent
prism
prominences
protoplanet
protostars
Ptolemy model
pulsar
quasars
radio astronomy
radio telescope
red giants
red shift
reflecting telescope
refracting telescope
retrograde motion

foucault pendulum
galaxy
gaseous core
geocentric model
giant star
globular clusters
gravity field
heliocentric model
inertia
irregular galaxy
law of gravitation
light year
multiple mirror telescope
nebulae
neutron star
nova

retrograde rotation
revolution
rotation
single mirror reflecting telescope
solar eclipse
spiral galaxy
star
star clusters
supergiants
supernovas
terrestrial
terrestrial motion
terrestrial radiation
transformation of energy
variable star

Solar System - Planets

asteroids
Earth
Jovian planets
Jupiter
Mars
Mercury

Neptune
Pluto
Saturn
Sun
Uranus
Venus

Solar System

aphelion
asteroids
chromosphere
comet
deferent

meteorite craters
meteorites
meteors
meteroid
Oort cloud

elliptical orbits
epicycles
equal area law
geocentric system
harmonic law
heliocentric system
inner planets
Kepler's second law
Kepler's third law
magnetic storms

orbit
outer planets
perihelion
period
photosphere
solar prominences
solar system
solar winds
sunspots

Space Explorations

apogee
communication satellite
geosynchronous orbit
navigation satellites
Newton's Third Law
perigee

rockets
satellite
space shuttle
space station
stationary orbit
weather satellite

Energy & Energy Transfer in Earth Processes

absolute zero
absorbed
absorption
calorie
closed system
condensation
condensation surface
conduction
conservation of energy
convection
convection cell

heat source
kinetic energy
latent heat
latent heat of fusion
latent of vaporization
melting
open system
period
potential energy
radiation
reflected

| | |
|--------------------------------|-----------------------|
| convection current | reflection |
| crest | refracted |
| crystal | refraction |
| crystal structure | scattering |
| crystalline solid | sink |
| crystallization | specific heat |
| electrical energy | swash |
| electromagnetic energy | temperature |
| electromagnetic radiation | thermal energy |
| electromagnetic spectrum | transmitted |
| energy | transverse wave |
| evaporation | trough |
| freezing | tsunami |
| friction | ultraviolet radiation |
| gravitational potential energy | vaporization |
| heat | wave crest |
| heat energy | wave peak |
| heat of condensation | wavelength |
| heat sinks | |

Insolation and the Earth's Surface

| | |
|--------------------------|---------------------|
| absorption | radiation |
| aerosols | radiative balance |
| angle of insolation | radioactive dating |
| Celsius | radioactive decay |
| conduction | radioactivity |
| convection | reflection |
| duration of insolation | reradiation |
| Fahrenheit | scattering |
| greenhouse effect | source |
| half life | southern hemisphere |
| hemisphere | square centimeter |
| incoming solar radiation | square meter |

insolation
ionosphere
latitude
northern hemisphere

temperature
temperature inversions
ultraviolet rays
x-rays

Precipitation

barometric pressure
circumpolar whirl
cloud
cloud seeding
condensation nuclei
dew
dew point
frost
hail

high pressure
isobars
isoline
low pressure
meteorologist
precipitation
sleet
supercooled water
weather

Cloud Types

advection fog
altostratus
cirrocumulus
cirrostratus
cirrus clouds
cloud

cumulonimbus
cumulus
fogs
radiation fog
stratus

Types Air Masses

air mass
air pressure
anticyclone
atmospheric transparency

low
m
maritime air
maritime polar mP

| | |
|-----------------------|----------------------|
| blizzard | maritime tropical mT |
| c | mP |
| cold front | occluded front |
| continental air | P |
| continental polar | polar air |
| continental tropical | pressure gradient |
| cP | rawinsonde |
| cT | source region |
| cyclone | stationary front |
| dew-point temperature | T |
| front | track |
| gradient | tropical air |
| high | warm front |
| humidity | waterspout |
| jet stream | wind |

Atmospheric Energy Changes

| | |
|------------------------------|---------------------------|
| adiabatic change | perpendicular insolation |
| adiabatic cooling | planetary wind |
| adiabatic lapse rate | planetary wind belt |
| adiabatic temperature change | precipitation |
| advection | relative humidity |
| aerosols | reradiated |
| albedo | saturation |
| chinooks | saturation vapor pressure |
| circulation cell | solar radiation |
| combustion | sublimation |
| condensation | thunderstorms |
| condensation nuclei | tornadoes |
| convection | transparency |
| convection cells | transpiration |
| convergence zone | tropical cyclone |
| cyclone | tropical storm |

deposition
dew point
direct rays
dry adiabatic
dynamic equilibrium
evaporation
Hadley cell
hurricanes
infrared

twister
typhoon
vapor pressure
vertical rays
vortex
water vapor
waterspout
wet adiabatic

Moisture and Energy Budgets

actual evapotranspiration
adhesion
aeration
aerobic bacteria
anaerobic bacteria
aquifer
arid climate
artesian well
capillary action
capillary fringe
capillary migration
capillary water
change in soil storage
cirque
climate
cohesion
continental climate
crevasse
deficit
delta ST
Ea
elevation

latitude
latitudinal climate patterns
leeward side
marine climate
midlatitude climates
ocean current
orographic effect
P + St
particle shape
permafrost
permeability
permeable
planetary wind belts
polar climate
pollution
porosity
potential evapotranspiration
precipitation
recharge
run off
soil storage
storage

Ep
eutrophication
evaporate
evapotranspiration
geysers
ground water
humid climate
hydrologic cycle
impermeable
infiltration
isotherm

subsurface water
surplus
tropical climate zone
usage
water budget
water cycle
water storage
water table
windward side
zone of aeration
zone of saturation

Water Availability Factors

aquifer
geysers
glaciers
ground water
impermeable
mountain
permafrost
permeability

permeability rate
permeable
stream
stream discharge
subsurface water
thermal pollution
water pollution
windward side

SECTION 3

Erosional Process - Weathering

atmosphere
braided stream
calcareous
carbon dioxide + water
carbon dioxide cycle

leaching
levees
lichens
lithosphere
mature river

carbonation
carbonic acid
chemical weathering
crystal lattice
denudation
desert
desert soil
forest soil
frost action
frost action
grassland soil
hydrolysis
hydrosphere
ice wedging
immature soil
joint
landslide

mudflow
oxidation
pedalfers
pedocals
physical weathering
plant action
proton
root-pry
rust
rust
soil
soil association
soil horizon
soil profile
tropical soil
weathering

Erosion

abrasion
alluvial fan
angle of repose
arctic soil
base level
bed load
buttes
cave
cavern
coastal plain
continental glaciers
coral atoll
coral reefs
corals

mudflow
natural bridges
organic activity
oxbow lakes
plain
playa
plunge pools
potholes
residual sediment
residual soil
ripple marks
river valley
rock
rock cycle

creep
deflation
delta
density currents
desert soil
divide
drainage basin
dunes
effect of discharge
erosion by ice
erosion by waves
erosion by winds
erosion
exfoliation
fiords
flood plain
glacial milk
glaciers
gully
headward erosion
ice erosion
ice wedging
landslide
leaching
levee
mature stream
meander
mesas
mosses

rock flour
rock formation
rock resistance
rock structure
run off
sandbar
sediment
sinkholes
slumping
stalactite
stalagmite
stream bed
stream discharge
stream drainage pattern
stream piracy
talus
transported sediment
transported soil
transporting system
tributaries
tributary
valley glaciers
velocity
ventifact
walking the outcrop
water gap
water table
wind
wind erosion

Deposition Process

accretion
alluvial fan

impermeable
indirect glacial deposits

braided stream
buttes
clay
colloids
compression
cross-bedded
deposition
direct glacial deposits
erosional deposition system
evaporites
flocculation
fluvio-glacial deposits
graded bedding
horizontal sorting

joints
organic deposits
pore spaces
precipitates
precipitation
recrystallization
saturated
sediments
sorting
talus
turbidity current
unsorted particles
vertical sorting

Rock & Mineral Characteristics

axes of a crystal
bedrock
cleavage
cleavage planes
gangue
metal
mineral
mixtures
monomineralic rocks

nonmetal
ore
physical properties
polymineralic
regolith
rock
silicon-oxygen tetrahedron
specific gravity

Rock Identification

cleavage
color
conchoidal fracture
crystal shape

hardness
luster
Mohs scale
streak

fracture

texture

Rock Types

amphibole
andesite
basalt
batholith
biotite
bituminous coal
bressia
chalk
clastic
coal
feldspar
flint
foliation
gems
geodes

halite
igneous rocks
intrusions
intrusive rock
lava
metamorphic
mica
oxides
pumice
pyrite
rock salt
sandstone
sedimentary
uranium 238

Crystals

axes of a crystal
chain silicates
cleavage
cleavage planes
compression
conchoidal fracture
crystallization
crystal
crystal faces

cubic page
hexagonal
isolated tetrahedra
monoclinic
orthorhombic
sheets silicate
tetragonal
triclinic

Rock Formation

| | |
|---------------------------|--------------------------|
| banding | nonfoliated |
| cementation | nonsedimentary rock |
| clastic | ore mineral |
| clastic sedimentary rocks | organic sedimentary rock |
| clastic sediments | original horizontality |
| compaction | petrology |
| complex mountains | plutonic rock |
| concretion | polymineralic rocks |
| connate water | porphyry |
| constituent unit | recrystallization |
| contact metamorphism | regional metamorphism |
| contact metamorphism zone | regolith |
| distorted structure | rock cycle |
| extrusive igneous rock | rock salt |
| folded strata | sedimentary rock |
| foliation | silica tetrahedron |
| fossil fuels | soft coal |
| igneous rock | thermal metamorphism |
| intrusion | transition zone |
| intrusive igneous rock | uranium |
| lignite | vein |
| lithified | volcanic ash |
| magma | volcanic rock |
| metamorphic rocks | volcano |

Dynamic Crust

| | |
|----------------------------|-----------------------|
| active continental margins | mountain |
| bench mark | ocean floor spreading |
| braided stream | ocean trenches |
| caldera | oceanic crust |
| cinder cone | oozes |

climate record
coastal plain
composite volcano
constructive landform
continental drift
continental margins
continental rises
coprolites
countercurrents
craters
density currents
diatoms
dikes
dome
earthquake zones
fault
faulting
folded strata
fossil
geosyncline
laccolith
lava
lava plateau
manganese nodules
mid-ocean ridges

passive continental margins
phytoplankton
plains
plateau
ring of fire
rock magnetism
salinity
shield volcanoes
sill
stock
strata
thermocline
tilted sedimentary beds rocks
tilted strata
trench
turbidity currents
uplifting forces
upwelling
vent
viscous
volcanic ash
volcanic bomb
volcanic dust
volcanic mountains
volcano

SECTION 4

Earthquakes

amplitude
anticlines
axis of fold

L - wave
longitudinal wave
mantle

bedding phase
block mountain
body wave
brittle
buoyancy
compressional wave
continental crust
convergence zone
core
crust
deep focus
earthquake
earthquake waves
epicenter
fault
fault block mountain
focal depth
focus
fracture
granite
igneous
igneous rock
inner core
joint system

Mercalli scale
MOHO
Mohorovicic discontinuity
normal fault
outer core
P - wave
primary
primary wave
reverse fault
Richter magnitude scale
Richter scale
rift valley
S - wave
secondary wave
seismic waves
seismograph
shadow zone
shallow focus
shear waves
strike slip fault
surface wave
syncline
tension
thrust fault

Plate Tectonics

asthenosphere
Basalt-Ecogolite hypothesis
constructive landform
continental accretion
continental drift
continental growth
continental rises

isostasy
isostatic compensation
lithosphere
lithosphere plates
mid-Atlantic Ridge
midocean ridges
ocean ridges

continental shelf
continental shield
continental slope
convection cells
convergence zone
converging boundary
craton
divergence
diverging boundaries
eclogite
geosyncline
island arcs

ocean-floor sediments
ocean-floor spreading
pangala
plate tectonics
rift valley
seafloor spreading
subduction zone
transform boundaries
transform fault
trenches
uplifting

Geologic History

absolute age
amber
basement complex
carbonization
catastrophes
correlation
dikes flat
extinction
extrusion
fossil
fossil age
geologic time scale
guide fossils
half-life
igneous extrusion
index fossil
intrusion
intrusion igneous
laccoliths

mold
mutations
outcrop
paleontologists
petrified
pluton
radioactive dating
radioactive decay
radioactive element
radiometric
rate of sedimentation
relative age
sills
superposition
tar pits
trace fossils
unconformity
uniformitarianism
xenoliths

lava flow

Nuclear Chemistry

atom
carbon 14
carnotite
chemical compound
compound
deuterium
electron
half-life

heavy hydrogen
isotope
mass number
neutron
ordinary hydrogen
proton
radioactive dating
radioactive decay

Geologic Eras

ammonites
amphibians
angiosperms
Archeozoic Era
brachiopods
Cambrian Period
Carboniferous
Cenozoic Era
conifers
cyads
Devonium Period
dinosaurs
epoch
era
gymnosperms
interglacial ages

nvertebrate
ammal
arsupial
esozoic Era
ississippiian Period
aleozoic Era
ennsylvanian Period
eriod
ermian Period
laeozoic Era
recambrian Era
roterozoic Era
eptiles
rilobites
ertebrates

Correlations & Fossil Records

anticline
brachiopod
class
epoch
era
eurypterids
extinction
family
genus
geologic timetable
graptolite
kingdom

natural selection
order
organic evolution
period
photosynthesis
phylum
relative age
specie
stromatolites
syncline
taxonomy
trilobites

Landscape Development

abrading
acid
air pollution
block mountain
cirque
cliff
complex mountains
continental glacier
corillera
debris slope
desertification
drainage basin
drainage density
drainage patterns
drift
drumlins
environmental factors

lateral moraine
leveling destructional forces
leveling forces
moraine
nonrenewable resources
nuclear waste
nunataks
outwash plains
passive solar heating
photosynthesis
physiographic provinces
physiographic region
plains
plateau
pollutant
renewable resources
respiration

escarpment
eskers
eutrophication
fault block mountains
fiords
free face
geology
geothermal energy
glacial lakes
gradient
high
horns
icebergs
kames
kettle
kettle lakes
landscape
landscape region

rolling mountains
salinization
soil depletion
solar energy
stream gradient
striations
subsidence
terminal moraine
till
topography
toxic wastes
valley glacier
waning slope
water gap
water pollution
water power
waxing slope
wind power

Energy Resources

anthracite coal
bituminous coal
coal
coal gasification
crude oil
fission
fossil fuels
fusion
gasohol
geothermal power
hydrocarbons
lignite coal

methane
natural gas
nuclear energy
nuclear fission
peat
petroleum
solar cell
solar energy
tidal power
water power
wind power

Environment

acid rain
air pollution
chlorofluorocarbon
contour farming
crop rotation
deforestation
desalination
EPA
erosion
gange
hazardous waste
hydrocarbons
hydroelectric energy
irrigation
natural resources
noise pollution
nonrenewable resources
oil pollution

ozone
ozone layer
photochemical smog
purification
recycling natural resources
renewable resources
smog
strip or open mining
sulfuric acid
sulfurous smog
temperature inversion
thermal pollution
transpiration
tropical forest
water pollution
water resources
windbreak

Restless water

barrier reef
bars
beaches
caves
deep ocean currents
high tide
low tide
neap tide
pore space
reservoirs

sand bar
sea cliffs
spring tide
surface currents
surface runoff
tides
tsunamis
turbidity currents
upwellings
watershed

rip currents

Waves

crest
trough
wave base
wave height
wave peak

wave period
wavelength
waves
wind waves

Oceans

abyssal plain
abyssal zone
aquaculture
barrier reef
bathyal zone
bathyscaph
bathysphere
benthos
buoyancy
condensation
condensation surface
continental margin
continental rise
continental shelf
continental slope
coral atolls
coral reefs
deep zone
depth of ocean
diatoms
echo sounder

lagoon
marianas trench
mid-ocean ridge
nekton
nertic zone
ocean plants
oceanographer
ooze
phytoplankton
plankton
rift zone
salinity
salt marsh
sea level
seamounts
seismograph
shoreline
sonar
speed of sound in water
submarine canyons
surface zone

evaporation
ground water
guyots
hydrosphere
intertidal zone

thermocline
trenches
turbidity
water cycle
zooplankton