

**Chp. 1a(p. 2-20): A First Look at Planet Earth**

asthenosphere  
accretion  
condrules  
conduction  
convection cell  
erosion  
homogeneous  
igneous rocks  
metamorphic rocks  
nebular cloud  
planetary differentiation  
scientific theory  
scientific hypothesis  
sedimentary rocks  
solar differentiation  
solar wind

**Chp. 11: The Earth's Interior**

asthenosphere  
continental crust  
geothermal gradient  
inner core  
isostasy  
lithosphere  
lower mantle  
mantle  
Mohorovicic discontinuity or Moho  
oceanic crust  
outer core  
upper mantle  
magnetic field  
magnetic reversals  
normal polarity  
paleomagnetism  
oceanic crust  
reverse polarity

**Chp. 1b(p. 20-37) A First look at Plate Tectonics**

continental drift  
continental crust  
convection cells  
convergent plate boundary  
divergent plate boundary  
mid-ocean ridge  
Pangaea  
plate tectonics  
seafloor spreading  
subduction  
transform plate boundary

**Chp. 12: Plate Tectonics and the Formation of Oceans (Basins)**

accretionary wedge  
forearc basin  
guyots  
hot spots  
marine magnetic anomaly  
mélange  
oceanic trenches  
ophiolite suite  
passive continental margins  
rift valley  
seamount  
volcanic arc

**Chp. 13: Plate Tectonics and the Formation of Continents**

accreted  
\*active continental margin  
coastal plain  
continental platform  
continental shelves  
continental shields  
craton  
Gondwana  
orogenesis  
Pangea  
\*passive continental margin  
Rodinia  
terrane  
*\*may require internet*

**Chp. 9: Folds, Faults, and Fabrics**

anticline  
basin  
brittle failure  
compression  
dip  
dip-slip fault  
elastic deformation  
elastic limit or yield point  
normal fault  
plastic deformation  
reverse fault  
shearing stress (or shear)  
strain  
stress  
strike  
strike-slip or transform faults  
syncline  
tension  
thrust fault

**Chp. 10: Earthquakes**

aftershock  
Benioff-Wadati zone  
body waves  
dilatancy  
epicenter  
focus  
foreshocks  
liquefaction  
Mercalli intensity scale  
moment-magnitude scale  
P waves  
Richter scale  
S waves  
seismic moment  
seismograms  
seismographs  
surface waves  
tectonic creep  
tsunami

**Chp 2: Minerals**

atom  
 atomic mass  
 atomic number  
 cleavage  
 covalent bonding  
 crystal structure  
 density  
 electron  
 elements  
 fracture  
 glass  
 ion  
 ionic bonding  
 isotope  
 metallic bonding  
 neutron  
 octet rule  
 polymorph  
 proton  
 silicates  
 silicon-oxygen tetrahedron

**Chp. 3: Igneous Processes and Igneous Rocks**

aphanitic  
 batholith  
 Bowen's reaction series  
 dike  
 extrusive/volcanic  
 felsic composition  
 fractional crystallization  
 intermediate composition  
 intrusive/plutonic  
 lava  
 mafic composition  
 magma  
 partial melting  
 pegmatite  
 phaneritic  
 pluton  
 porphyritic  
 sill  
 ultramafic composition  
 vesicles  
 viscosity  
 volcanic glass  
 xenolith

**Chp. 4: Volcanoes and Volcanism**

aa  
 caldera  
 cinder or pyroclastic cone  
 columnar joints  
 composite cone/stratovolcano  
 fissures  
 flood basalts  
 lahar  
 lava tubes  
 pahoehoe  
 pillow structure  
 pyroclastic flow or nuee ardente  
 shield volcano  
 tephra  
 vent  
 volcanic crater  
 volcanic dome  
 welded tuff (ignimbrite)

**Chp. 5 Weathering: The Breakdown of Rocks**

chemical weathering  
 dissolution  
 erosion  
 frost wedging  
 hydrolysis  
 mechanical weathering  
 oxidation  
 weathering

**Chp. 6 Sedimentation and Sedimentary Rocks**

bedding/stratification  
 cementation  
 chemical sediment  
 clastic  
 compaction  
 cross-beds  
 detrital sediment  
 gravel (Table 6-1)  
 limestone  
 lithification  
 mud (Table 6-1)  
 ripple mark  
 sand (Table 6-1)  
 sedimentary facies  
 sorting

**Chp. 7: Metamorphism and Metamorphic Rocks**

burial metamorphism  
 contact metamorphism  
 directed pressure  
 dynamothermal metamorphism  
 (or continental collision zone)  
 fault-zone metamorphism  
 foliation  
 hydrothermal metamorphism  
 lithostatic or confining pressure  
 metamorphic differentiation  
 metamorphic grade  
 metamorphic index minerals  
 mineral zones (Figs. 7.17, 7.18)  
 regional metamorphism  
 rock cleavage  
 serpentinization (Fig. 7.10)

**Chp. 8: Telling Time Geologically**

alpha decay  
 angular unconformity  
 beta decay  
 beta or electron capture  
 Cenozoic  
 closed system  
 correlation  
 daughter isotope  
 disconformity  
 half-life  
 index fossils  
 Mesozoic  
 Numerical dating  
 nonconformity  
 Paleozoic  
 parent isotope  
 Precambrian  
 principle of cross-cutting  
 relationships  
 principle of faunal succession  
 principle of inclusions  
 principle of original  
 horizontality  
 principle of superposition  
 principle of uniformitarianism  
 relative dating  
 stromatolite (Fig. 8.33)  
 unconformity (generic term)

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principle of superposition  
principle of uniformitarianism  
stromatolite (Fig. 8.33)  
unconformity (generic term)

**Chp. 19: Shores and Coastal Processes and Glaciers**

beach drift  
longshore current  
longshore drift  
rip currents  
tidal bore  
wave crest  
wave height  
wave period  
wave refraction  
wave trough  
wave-cut bench or platform  
wavelength

**Chp. 17: Glaciers and Ice Ages**

alpine glaciers  
continental ice sheet  
glacial erratic  
glacial till  
Holocene Epoch  
ice ages  
moraine  
outwash  
Pleistocene Epoch  
striations

**Chp. 15: Streams and Floods**

alluvial fan  
alluvium  
base level  
bed load  
braided stream  
capacity  
competence  
delta  
dissolved load  
drainage basin or watershed  
drainage divide  
floodplain  
gradient  
levees  
meandering stream  
stream discharge  
stream terrace  
suspended load

**Chp. 14: Mass Movements**

angle of repose  
creep  
fall  
flow  
scarp  
slide  
slump