Earth Systems and Resources

AP Environmental Science · Vocabulary in context

Word	Example
lithosphere	The **lithosphere** is the Earth's solid outer layer.
plates /pleɪts/	The Earth's surface is broken into large **plates**.
plate tectonics /pleɪt tek'tɒnɪks/	**Plate tectonics** explains why the plates move.
plate boundaries	Earthquakes happen at **plate boundaries**.
divergent /daɪ'vɜːdʒənt/	At a **divergent** boundary, plates move apart.
convergent /kən'vɜːdʒənt/	At a **convergent** boundary, plates move together.
transform /træns'fɔːm/	At a **transform** boundary, plates slide past each other.
subduction	In **subduction**, one plate sinks under another.
fault	A **fault** is a crack where rocks move.
hot spots	Hawaii formed over one of the Earth's **hot spots**.
soil /sɔɪl/	Plant roots grow in **soil**.
parent material	Soil forms from the **parent material** below it.
weathering /'weðərɪŋ/	**Weathering** breaks rock into small pieces.
humus /'hjuːməs/	**Humus** is dark material made from rotting plants.
horizons /hə'raɪznz/	Soil has layers called **horizons**.

exercises.lol exercises.com.cn

Word	Example
erosion /ɪ'rəʊʒn/	Bare hillside soil is easily lost through **erosion**.
overgrazing /ˌəʊvə'greɪzɪŋ/	**Overgrazing** removes plant cover and exposes soil.
turbidity /tɜː'bɪdɪti/	Mud raises the **turbidity** of river water.
texture /'tekstʃə/	Sand gives soil a rough **texture**.
porosity /pɔː'rɒsɪti/	Soil with high **porosity** has lots of space between its grains.
permeability /ˌpɜːmə'bɪlɪti/	Sandy soil has high **permeability**: water flows through quickly.
water holding capacity	Clay has a high **water holding capacity**.
loam /ləʊm/	**Loam** mixes sand, silt and clay.
soil texture triangle	The **soil texture triangle** names soils by their sand, silt and clay.
atmosphere /'ætməsfɪə/	The **atmosphere** is the layer of gases around Earth.
troposphere /'trɒpəsfɪə/	Most weather occurs in the **troposphere**.
stratosphere /'strætəsfɪə/	The **stratosphere** contains the protective ozone layer.
ozone layer /'əʊzəʊn 'leɪə/	The **ozone layer** absorbs much harmful ultraviolet radiation.
mesosphere	The **mesosphere** is above the stratosphere.
thermosphere	The **thermosphere** is very hot but has very little air.

Word	Example
exosphere	The **exosphere** is the outermost layer of the atmosphere.
global wind patterns /ˈgləʊbl wɪnd ˈpætnz/	**Global wind patterns** move heat from the equator to the poles.
convection cell	Warm air rises and cool air sinks in a **convection cell**.
Coriolis effect /ˌkɒrɪˈəʊlɪz ɪˈfekt/	The **Coriolis effect** makes winds curve as the Earth spins.
prevailing winds	**Prevailing winds** blow mostly from one direction.
trade winds	The **trade winds** blow toward the equator.
westerlies	The **westerlies** blow from west to east.
watershed /ˈwɔːtəʃed/	A **watershed** is all the land that drains into one river.
divide /dɪˈvaɪd/	A **divide** is high ground that separates two watersheds.
runoff /ˈrʌnɒf/	**Runoff** is rain that flows over the ground into rivers.
floodplain	A **floodplain** is flat land beside a river.
insolation	**Insolation** is the sunlight that reaches the Earth.
seasons /ˈsiːznz/	The **seasons** are caused by the Earth's tilt.
tilt of the Earth's axis	The **tilt of the Earth's axis** gives us summer and winter.

exercises.lol exercises.com.cn

Word	Example
climate /ˈklaɪmət/	The desert has a hot, dry **climate**.
rain shadow /reɪn ˈʃædəʊ/	A **rain shadow** is the dry side of a mountain.
windward	The **windward** side of a mountain gets lots of rain.
leeward	The **leeward** side of a mountain is dry.
El Niño /el ˈniːnjəʊ/	**El Niño** can weaken upwelling near Peru.
La Niña /læ ˈniːnjə/	During **La Niña**, the eastern Pacific becomes cooler than normal.
upwelling /ˈʌpwəlɪŋ/	**Upwelling** brings cold water full of nutrients up to the surface.