

Glossary

Blue words and phrases are Core Vocabulary terms for the unit, and Student Reader page numbers are listed in parentheses. **Bold-faced words and phrases** are additional vocabulary terms related to the unit that you should model for students during instruction and that are often used within the Student Reader, and these latter terms do not have specific page numbers listed. Vocabulary words are not intended for use in isolated drill or memorization.

A

analysis, n. thorough study of the details of something complex

atom, n. the smallest particle of a specific element

authority, n. an individual recognized as an expert

B

benefit, n. something that produces a helpful outcome

biofuel, n. a combustible (burnable) fuel made from the remains of recently living organisms (48)

biosphere, n. the Earth system that encompasses all living things

C

consensus, n. general agreement

cost-benefit analysis, n. a study of the costs and benefits associated with an action

cost effective, adj. describing the balance of factors when benefits outweigh costs (33)

D

decompose, v. to separate into more basic parts; to rot

E

efficiency, n. the degree of producing desired results

electricity, n. a form of energy resulting from the flow of charged particles (3)

electron, n. a negatively charged atomic particle

emission, n. something sent forth or released

enriched, adj. describing a material that has been fortified in some way to make it more useful

F

fact, n. a piece of information that is indisputably true

ferment, v. to go through a chemical change breaking down an energy-rich compound

fission, n. the splitting of atomic nuclei, resulting in the release of a great deal of energy

flare, n. a sudden outburst

fossil fuel, n. a fuel formed from the fossilized remains of organisms (2)

fracking, n. a process of using fluids to fracture rock to create access to petroleum resources

fuel cell, n. a device in which a chemical reaction takes place to produce electricity, similar to a battery (50)

G

geothermal energy, n. energy produced by heat that is transferred from Earth's interior (43)

geyser, n. a geothermal spring that intermittently erupts water and steam

greenhouse gas, n. a gas that traps heat in Earth's atmosphere (20)

H

hybrid, n. a combination of two types; a vehicle that uses two different sources of fuel (49)

hydroelectric power, n. electricity generated by the energy in moving water, usually through a dam (31)

I

industrial, adj. related to manufacturing activity

N

natural gas, n. combustible mixtures of gases from fossil fuel formation

nonrenewable resource, n. a resource that cannot be restored as quickly as it is used (1)

nuclear energy, n. energy produced by the splitting of atoms, tiny particles of matter (21)

nuclear waste, n. radioactive by-products generated by materials used in nuclear power plants

O

opinion, n. a belief, impression, or judgment that is not an undisputed fact

P

permafrost, n. a permanently frozen layer of Earth

petrochemical, n. a chemical material derived from petroleum

photon, n. a quantity of electromagnetic energy, modeled as a particle

power grid, n. the network of electricity generation and transfer in a region

pros and cons, n. the benefits and costs of any factor being evaluated

R

radioactivity, n. the property of elements that spontaneously emit energetic particles

regenerative braking, n. technology that generates electricity from energy transferred when brakes slow down a moving vehicle

reliable, adj. suitable to be depended upon

renewable resource, n. a resource that can be restored more quickly than it is used up (1)

S

solar cell, n. a device that converts sunlight to electricity (37)

solar power, n. the use of sunlight to meet energy needs (37)

strip mining, n. removing resources by digging to expose them at Earth's surface level

sustainable, adj. describing the practice of using resources in ways that do not permanently deplete them or cause untenable damage

V

values, n. beliefs about worth or importance

viable, adj. capable of functioning successfully

W

wind farm, n. many wind turbines installed together in an area to generate electricity for a community (28)