

Scope and Sequence

Pretest and Posttest 1

Earth's Structure	
Science Cards	Vocabulary
1 Earth's Layers	crust, mantle, outer core, inner core
2 Earth's Crust	continental crust, ocean crust, tectonic plate
3 Minerals	mineral, inorganic, crystal
4 Identifying Minerals	streak, luster, cleavage, fracture
5 Properties of Minerals	hardness, Mohs hardness scale, specific gravity, fluorescence
6 Igneous Rocks	intrusive, texture, extrusive, lava
7 Sedimentary Rocks	sediment, stratification, compaction, cementation
8 Metamorphic Rocks	foliated, nonfoliated, metamorphism
9 Earth's Rock Cycle	uplift, weathering, erosion, deposition
Build Your Vocabulary: Earth's Structure (page 72)	
Laboratory Activity 1: Identifying Minerals with the Mohs Scale (pages 74–75)	

Pretest and Posttest 2

Plate Tectonics	
Science Cards	Vocabulary
10 Theory of Plate Tectonics	lithosphere, asthenosphere, convection current
11 Convergent Plate Boundaries	convergent boundary, subduction zone
12 Divergent Plate Boundaries	spreading center, mid-ocean ridge, rift valley
13 Sliding Plate Boundaries	transform plate boundary, fault
14 Earth Movements	stress, compression, tension, shearing
15 Earthquakes	seismic wave, focus, epicenter, tsunami
16 Locating Earthquakes	seismograph, seismogram, Richter scale
17 Volcanoes	vent, crater, hot spot, caldera
Build Your Vocabulary: Plate Tectonics (page 76)	
Laboratory Activity 2: Plate Boundaries in Action (pages 78–79)	

Earth's Changing Surface

Pretest and Posttest 3

Science Cards	Vocabulary
18 Models of Earth	cartography, hemisphere, latitude, longitude
19 Topographic Maps	elevation, relief, contour line, slope
20 Mapping Earth Today	remote sensing, optical satellite, radar
21 Landforms	mountain, plains, plateau, canyon
22 Weathering	chemical weathering, oxidation, mechanical weathering
23 Soil	humus, profile, horizon, loam
24 Erosion by Gravity	mass movement, mudflow, creep
25 Erosion by Running Water	watershed, meander, levee, delta
26 Erosion by Waves	beach, longshore current, sandbar
27 Erosion by Wind	deflation, abrasion, loess, dune migration
28 Erosion by Glaciers	glacier, till, outwash, moraine
29 Soil Conservation	conservation, contour farming, strip-cropping, no-till farming

Build Your Vocabulary: Topographic Map (page 80)

Laboratory Activity 3: Interpreting a Topographic Map (pages 82–83)

Earth's History

Pretest and Posttest 4

Science Cards	Vocabulary
30 Relative Dating	relative dating, superposition, unconformity
31 Absolute Dating	absolute dating, radiometric dating, radioisotope, half-life
32 Geologic Time	era, period, epoch
33 How Fossils Form	mold, cast, carbon film, trace fossil
34 Uses of Fossils	paleontology, index fossil, extinction
35 Fossil Fuels	fossil fuel, nonrenewable resource, reserve

Build Your Vocabulary: Fossil Fuels (page 84)

Laboratory Activity 4: Using Sound Waves (pages 86–87)

Earth's Atmosphere

Pretest and Posttest 5

Science Cards	Vocabulary
36 Our Atmosphere	atmosphere, troposphere, stratosphere
37 Ozone	ozone layer, ultraviolet radiation, chlorofluorocarbons
38 Energy in the Atmosphere	heat balance, radiation, conduction, convection
39 Air Pressure	air pressure, altitude, density, barometer
40 Global Winds	Coriolis effect, westerlies, jet stream, easterlies
41 Local Winds	sea breeze, land breeze, valley breeze, mountain breeze
42 Air Quality	pollution, smog, acid rain

Build Your Vocabulary: Atmosphere (page 88)

Laboratory Activity 5: What is in the Air? (pages 90–91)

Scope and Sequence

Pretest and Posttest 6

Weather and Climate	
Science Cards	Vocabulary
43 Weather	weather, meteorology
44 Humidity	humidity, heat index, relative humidity, dew point
45 Air Masses	tropical air, polar air, maritime, continental
46 Fronts	cold front, warm front, stationary front, occluded front
47 The Water Cycle	evaporation, transpiration, precipitation, infiltration
48 Clouds	cirrus cloud, cumulus cloud, stratus cloud, fog
49 Precipitation	rain gauge, sleet, hail
50 Weather Maps	isobar, isotherm, high-pressure center, low-pressure center
51 Weather Forecasts	forecast, Doppler radar, station model
52 Severe Weather	thunderstorm, lightning, updraft, supercell
53 Severe Weather: Tornadoes	tornado, Fujita scale, wind shear, funnel cloud
54 Severe Weather: Hurricanes	hurricane, eye, eye wall, storm surge
55 Climate	climate, tropical zone, temperate zone, polar zone
56 Regional Precipitation	latitude, rain shadow
57 Regional Temperature	altitude, marine climate, continental climate, prevailing winds
58 Climate Regions	vegetation, desert, permafrost
59 Greenhouse Effect	greenhouse gas, radiation, reflection, absorption
60 Changes in Climate	ice age, El Niño, sunspot
61 Global Warming	global warming, polar ice cap, extinction
Build Your Vocabulary: Tornadoes (page 92)	
Laboratory Activity 6: Modeling a Tornado (pages 94–95)	

Pretest and Posttest 7

Space	
Science Cards	Vocabulary
62 Rotation and Revolution	rotation, axis, revolution, orbit
63 The Moon	natural satellite, highlands, maria, impact crater
64 Phases of the Moon	waxing, waning, crescent, gibbous
65 Eclipses	solar eclipse, umbra, penumbra, lunar eclipse
66 Tides	high tide, low tide, spring tide, neap tide
67 The Sun	fusion, photosphere, chromosphere, corona
68 The Solar System	ellipse, solar system, planet
69 Inner Planets	terrestrial planet, greenhouse effect, moon
70 Mars	space probe, artificial satellite, rover
71 Outer Planets	gas giant, hydrogen, ring, methane

Space (continued)

Pretest and Posttest 7

Science Cards	Vocabulary
72 Dwarf Planets	astronomer, dwarf planet
73 Asteroids, Meteoroids and Comets	asteroid, comet, meteoroid
74 Measuring Distances in the Universe	astronomical unit, light year, speed of light
75 Stars	constellation, apparent magnitude, luminosity, absolute magnitude
76 Stellar Evolution	nebula, main sequence, supernova, black hole
77 Galaxies	galaxy, Local Group, quasar
78 Big Bang Theory	cosmology, theory, red shift, dark matter
79 Exploring Space	rocket, space station, space shuttle
80 Artificial Satellites	artificial satellite, low Earth orbit, geosynchronous orbit
81 Telescopes	reflecting telescope, refracting telescope, radio telescope, observatory
Build Your Vocabulary: The Solar System (page 96)	
Laboratory Activity 7: Sizes in the Solar System (pages 98–99)	

Water

Pretest and Posttest 8

Science Cards	Vocabulary
82 Water	photosynthesis, glacier, groundwater, wetland
83 Ponds and Lakes	reservoir, nutrients, eutrophication, algae
84 Water Underground	permeable, zone of saturation, water table, aquifer
85 Water Conservation	irrigation, water conservation
86 Water Pollution	point source pollution, nonpoint source pollution
87 Oceans	salinity, density current, upwelling, surface current
88 Ocean Floor Features	continental shelf, rift zone, seafloor spreading, sonar
89 Ocean Zones	plankton, nekton, benthos
90 Ocean Resources	aquaculture, tidal energy, desalination
Build Your Vocabulary: Water (page 100)	
Laboratory Activity 8: Temperature, Salinity, and Water Density (pages 102–103)	