



You and Our Home Planet

Here, students will learn about Earth's structure, the properties of Earth's materials, and our weather and climate. This world also explores relationships between the populations, resources, and environments of the planet.

Grades K-1

Grade 5

Grade 2

Grade 6

Grade 3

Grade 7

Grade 4

Grade 8

You and Our Home Planet - Curriculum Guide

Grades K-1					
Curriculum Themes:	Earth's Materials		Weather, Seasons & Other Systems		Features of the Earth's Surface
Theme Topics:	properties of soil and water; identifying natural resources; tools that scientists use to study the earth; how to reuse and recycle different materials		recognizing types of weather and precipitation; identifying seasons and how weather changes during the year; sunrise, sunset, and the number of hours in a day		introduction to different biomes and their unique characteristics; identifying types of landforms; how wind and water change the earth's surface over time
Key Terms:	nature, resource, environment, river, stream, lake, ocean, living, nonliving, nutrient, metal, experiment, beaker, ruler, measure, magnifying lens		rain, ice, snow, wind, hurricane, storm, temperature, humid, tornado, thunder, lightning, spring, summer, fall/autumn, winter, short-term, long-term		mountain, desert, island, volcano, wetland, habitat, globe, rainforest, avalanche, earthquake, cave, continent
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Home Planet curriculum				
Additional Learning: Math Skill & Drill	• Counting Numbers: skip counting with whole numbers		• Counting Money: identifying and counting coins	• Solving Equations: arithmetic (addition, subtraction)	• Shapes: 2D and 3D Shapes

Grade 2

Curriculum Themes:	Earth's Materials	Weather, Seasons & Other Systems	Features of the Earth's Surface
Theme Topics:	properties of soil and water; identifying natural resources; tools that scientists use to study the earth; how to reuse and recycle different materials	recognizing types of weather and precipitation; identifying seasons and how weather changes during the year; sunrise, sunset, and the number of hours in a day	introduction to different biomes and their unique characteristics; identifying types of landforms; how wind and water change the earth's surface over time
Key Terms:	nature, resource, environment, river, stream, lake, ocean, living, nonliving, nutrient, metal, experiment, beaker, ruler, measure, magnifying lens	rain, ice, snow, wind, hurricane, storm, temperature, humid, tornado, thunder, lightning, spring, summer, fall/autumn, winter, short-term, long-term	mountain, desert, island, volcano, wetland, habitat, globe, rainforest, cave, continent, tropical
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Home Planet curriculum		
Additional Learning: Math Skill & Drill	• Counting Numbers: skip counting with whole numbers	• Counting Money: identifying and counting coins	• Solving Equations: arithmetic (addition, subtraction, multiplication, division) • Shapes: 2D and 3D shapes, shapes of everyday objects, symmetrical vs. asymmetrical

Grade 3

Curriculum Themes:	Earth's Structure & Natural Resources	Weather, Seasons & Other Systems	Features of the Earth's Surface
Theme Topics:	soil composition and how it affects living things; scientists who study the earth, its inhabitants, and its resources; the layers of the atmosphere; identifying the physical properties of different materials	the relationship between weather and climate; how humans impact climate change; scientists who study weather patterns; types of natural disasters; the water cycle	introduction to different biomes and their unique characteristics; identifying types of landforms and how they are created; bodies of water and the seven continents
Key Terms:	minerals, nutrients, geologist, ecologist, geographer, atmosphere, stratosphere, troposphere, hydrosphere, biosphere, oxygen, renewable, nonrenewable, recycle, conservation, energy	climate, temperature, rainfall, arid, tropical, subtropical, meteorologist, forecast, mudslide, tsunami, earthquake, hurricane, tornado, avalanche, cyclone, flood, water vapor, current	wetland, desert, plains, prairie, cave, mountain, volcano, erupt, island, geyser, glacier, ocean, river, tributary, continent
Additional Learning: Vocabulary Skill & Drill	Comprehensive multiple-choice quiz with vocabulary drawn from the Home Planet curriculum		
Additional Learning: Math Skill & Drill	Counting Numbers: skip counting with whole numbers	Counting Money: identifying and counting coins and bills	Solving Equations: arithmetic (addition, subtraction, multiplication, division) Shapes: 2D and 3D shapes, shapes of everyday objects, symmetry, identifying triangles, identifying lines

Grade 4

Curriculum Themes:	Earth's Structure & Natural Resources	Climate, Weather & Other Systems	Features of the Earth's Surface
Theme Topics:	scientists who study the earth and its resources; the layers of Earth and its atmosphere; natural resources and ways people use them; fossils and how they help scientists understand past events on Earth; different forms of energy	the relationship between weather and climate; how humans impact climate change; the ways that climate change can impact storms and other weather patterns; the four main spheres/systems on Earth	introduction to different biomes and their unique characteristics; identifying landforms and how they are created; types of rocks and the rock cycle; how the earth's surface changes over time; scientists who study the earth's surface
Key Terms:	crust, mantle, outer core, inner core, atmosphere, stratosphere, troposphere, oxygen, renewable, nonrenewable, coal, petroleum, wood, metal, glass, paper, fossil, paleontologist, electricity	climate, temperature, desertification, pollution, smog, drought, overpopulation, atmosphere, geosphere, hydrosphere, biosphere	wetland, desert, plains, prairie, cave, mountain, volcano, erupt, island, geyser, glacier, ocean, river, tributary, continent, igneous, sedimentary, metamorphic, erosion, weathering, geology
Additional Learning: Vocabulary Skill & Drill	Comprehensive multiple-choice quiz with vocabulary drawn from the Home Planet curriculum		
Additional Learning: Math Skill & Drill	Counting Numbers: skip counting with whole numbers and decimals	Counting Money: identifying and counting coins and bills	Solving Equations: arithmetic and algebra (addition, subtraction, multiplication, division) Shapes: 2D and 3D shapes; triangles and quadrilaterals; identifying lines; symmetry

<u>Grade 5</u>				
Curriculum Themes:	Earth's Materials & Natural Resources		Weather, Climate & Seasons	Earth's Structure and Surface Features
Theme Topics:	the properties of water; examples of Earth's materials and natural resources and how people use them; the pH scale; scientists who study the physical properties of Earth and the environment; ways to conserve natural resources		the relationship between weather and climate; how humans impact climate change and the ways they can help to reduce its effects; how Earth's position & motion impact seasons, weather, tides & other processes; the hydrologic cycle	identifying types of biomes and how they are classified; characteristics of different landforms & bodies of water and how they change over time; types of earthquakes and how they are measured
Key Terms:	solvent, hydrophilic, hydrophobic, cohesive, adhesive, molecule, composition, permeability, minerals, metals, renewable, nonrenewable, acid, base, geology, geophysics, energy, overconsumption, deforestation		climate, temperature, barometric pressure, humidity, precipitation, acid rain, pollution, smog, drought, agriculture, axis, revolution, hemisphere, equator, current, rotation, evaporation, condensation, collection	tundra, taiga, desert, temperate forest, rainforest, grassland, chaparral, tropical, butte, canyon, glacier, estuary, wetland, river, freshwater, saltwater, volcano, mountain, cave, erosion, friction, landslide, tectonic, plate, Richter scale
Additional Learning: Vocabulary Skill & Drill	Comprehensive multiple-choice quiz with vocabulary drawn from the Home Planet curriculum			
Additional Learning: Math Skill & Drill	Counting Numbers: skip counting with whole numbers and decimals	Counting Money: identifying and counting coins and bills	Solving Equations: arithmetic and algebra (addition, subtraction, multiplication, division)	Shapes: 2D and 3D shapes; triangles and quadrilaterals; identifying lines; symmetry

Grade 6				
Curriculum Themes:	Earth's Materials & Natural Resources		Weather, Climate & Seasons	Earth's Structure and Surface Features
Theme Topics:	the properties of water; examples of Earth's materials and natural resources and how people use them; the pH scale; scientists who study the physical properties of Earth and the environment; ways to conserve natural resources		the relationship between weather and climate; how humans impact climate change and the ways they can help to reduce its effects; how Earth's position & motion impact seasons, weather, tides & other processes; the hydrologic cycle	identifying types of biomes and how they are classified; characteristics of different landforms & bodies of water and how they change over time; types of earthquakes and how they are measured
Key Terms:	solvent, hydrophilic, hydrophobic, cohesive, adhesive, molecule, composition, permeability, minerals, metals, renewable, nonrenewable, acid, base, geology, geophysics, energy, overconsumption, deforestation		climate, temperature, barometric pressure, humidity, precipitation, acid rain, pollution, smog, drought, agriculture, axis, revolution, hemisphere, equator, current, rotation, evaporation, condensation, collection	tundra, taiga, desert, temperate forest, rainforest, grassland, chaparral, tropical, butte, canyon, glacier, estuary, wetland, river, freshwater, saltwater, volcano, mountain, cave, erosion, friction, landslide, tectonic, plate, Richter scale
Additional Learning: Vocabulary Skill & Drill	Comprehensive multiple-choice quiz with vocabulary drawn from the Home Planet curriculum			
Additional Learning: Math Skill & Drill	Counting Numbers: skip counting with whole numbers and decimals	Counting Money: identifying and counting coins and bills	Solving Equations: arithmetic and algebra (addition, subtraction, multiplication, division)	Shapes: 2D and 3D shapes; triangles and quadrilaterals; identifying lines; symmetry

<u>Grade 7</u>				
Curriculum Themes:	The Structure of Earth & Its Atmosphere		Weather, Climate & Other Systems	Earth's Structure and Surface Features
Theme Topics:	how fossils help scientists understand Earth's history and the ways Earth has changed over time; layers of the atmosphere and its composition; natural resources, where to find them, and how they are used		types of weather and cloud formations; the nitrogen & hydrologic cycles; how humans impact climate change and the ways they can help to reduce its effects	identifying types of biomes and how they are classified; characteristics of different landforms & bodies of water and how they change over time; types of earthquakes and how they are measured
Key Terms:	prehistoric, paleontology, paleobotany, fossilize, petrification, permineralization, vertebrate, invertebrate, troposphere, stratosphere, ozone, ionosphere, mesosphere, conservation		altitude, doldrum, cirrus, nimbostratus, cumulonimbus, evaporation, precipitation, condensation, nitrate, fixation, denitrification, decomposition, global warming, temperature, agriculture, infrastructure, permafrost, thermal energy	tundra, taiga, desert, temperate forest, rainforest, grassland, chaparral, tropical, butte, canyon, glacier, estuary, wetland, river, freshwater, saltwater, volcano, mountain, cave, erosion, friction, landslide, tectonic, plate, Richter scale
Additional Learning: Vocabulary Skill & Drill	Comprehensive multiple-choice quiz with vocabulary drawn from the Home Planet curriculum			
Additional Learning: Math Skill & Drill	Counting Numbers: skip counting with whole numbers and decimals	Counting Money: identifying and counting coins and bills	Solving Equations: arithmetic and algebra (addition, subtraction, multiplication, division)	Shapes: 2D and 3D shapes; triangles and quadrilaterals; identifying lines; symmetry

Grade 8

Curriculum Themes:	The Structure of Earth & Its Atmosphere	Weather, Climate & Other Systems	Earth's Structure and Surface Features
Theme Topics:	how fossils help scientists understand Earth's history and the ways Earth has changed over time; layers of the atmosphere and its composition; natural resources, where to find them, and how they are used	types of weather and cloud formations; the nitrogen & hydrologic cycles; how humans impact climate change and the ways they can help to reduce its effects	identifying types of biomes and how they are classified; characteristics of different landforms & bodies of water and how they change over time; types of earthquakes and how they are measured
Key Terms:	prehistoric, paleontology, paleobotany, fossilize, petrification, permineralization, vertebrate, invertebrate, troposphere, stratosphere, ozone, ionosphere, mesosphere, conservation	altitude, doldrum, cirrus, nimbostratus, cumulonimbus, evaporation, precipitation, condensation, nitrate, fixation, denitrification, decomposition, global warming, temperature, agriculture, infrastructure, permafrost, thermal energy	tundra, taiga, desert, temperate forest, rainforest, grassland, chaparral, tropical, butte, canyon, glacier, estuary, wetland, river, freshwater, saltwater, volcano, mountain, cave, erosion, friction, landslide, tectonic, plate, Richter scale
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Additional Learning: Math Skill & Drill	Counting Numbers: skip counting with whole numbers and decimals	Counting Money: identifying and counting coins and bills	Solving Equations: arithmetic and algebra (addition, subtraction, multiplication, division) Shapes: 2D and 3D shapes; triangles and quadrilaterals; identifying lines; symmetry