You and Biodiversity

In this world, students will learn about the diversity of life on Earth through exploration of living things, their life cycles, and the environments they inhabit. Kids will also see how living and nonliving things work together to form a healthy ecosystem.

Grades K-1

Grade 2

Grade 3

Grade 4

Grade 5

Grade 6

Grade 7

Grade 8

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Grades K-1			
Curriculum Themes:	**Life Cycles of Organisms**	**Characteristics of Organisms**	**Organisms & Their Environments**
Theme Topics:	stages of growth for plants and animals; what organisms need to grow; terms for babies and adults in different species	physical characteristics of different plants and animals; how organisms make or find food; relationships between living and nonliving things	features of different habitats; how natural disasters and human behaviors can impact the environment; ways that organisms adapt to their surroundings
Key Terms:	grow, mature, life span, life cycle, living, nonliving	trait, predator, prey, producer, consumer, community, wildlife	environment, habitat, adapt, endangered, ecosystem
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Biodiversity 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

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Grade 2			
Curriculum Themes:	**Life Cycles of Organisms**	**Characteristics of Organisms**	**Organisms & Their Environments**
Theme Topics:	stages of growth for plants and animals; what organisms need to grow; terms for babies and adults in different species	physical characteristics of different plants and animals; how organisms make or find food; relationships between living and nonliving things	features of different habitats; how natural disasters and human behaviors can impact the environment; ways that organisms adapt to their surroundings
Key Terms:	grow, mature, life span, life cycle, living, nonliving	trait, predator, prey, producer, consumer, community, wildlife	environment, habitat, adapt, endangered, ecosystem
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Biodiversity 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:	**Life Cycles of Organisms**	**Characteristics of Organisms**	**Organisms & Their Environments**	
Theme Topics:	stages of growth for plants and animals; anatomy of flowering plants and how they reproduce; how life spans vary among different species	how the physical characteristics of different organisms help them to survive; traits that are and are not inherited; ways that organisms make or find food	features of different habitats; how humans impact the environment; ways that habitats may change over time; scientists who study organisms and the environment	
Key Terms:	organism, offspring, germinate, reproduce, pollination, seed, seedling, ovary, pistil, pollen, spore, life span	species, trait, characteristic, camouflage, instinct, food chain, photosynthesis, producer, consumer, predator, prey, decomposer	resource, population, endangered, extinct, ecosystem, climate, ecologist, archaeologist, fossil	
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Biodiversity 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

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Grade 4			
Curriculum Themes:	**Life Cycles of Organisms**	**Characteristics of Organisms**	**Organisms & Their Environments**
Theme Topics:	how life cycle stages vary among different plant and animal species; stages of growth for plants and animals; ways that animals care for their offspring; how life spans vary among different species	physical characteristics of different organisms; ways that organisms make or find food; how relationships between organisms affect their growth and survival	characteristics of different biomes; relationships between organisms and their ecosystems; how humans and natural disasters impact the environment; scientists who study organisms and the environment
Key Terms:	offspring, germinate, development, birth, death, pollination, reproduce, mammal, amphibian, reptile, insect, metamorphosis	species, trait, characteristic, camouflage, instinct, mimicry, invertebrate, exoskeleton, producer, consumer, predator, prey, decomposer, photosynthesis	ecosystem, resource, population, hotspot, native, non-native, biotic, abiotic, endangered, extinct, climate, keystone species
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Biodiversity 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

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Grade 5				
Curriculum Themes:	**Life Cycles of Organisms**	**Characteristics of Organisms**	**Organisms & Their Environments**	
Theme Topics:	types of reproduction in plants and fungi; ways that animal species and the environment play a role in the life cycles of plants; how life spans vary among different species	how organisms get energy from food; the relationships between organisms in the food chain; physical traits that help organisms adapt and survive; the composition of living things	the ways that organisms are impacted by internal and external stimuli; how organisms interact with each other and their ecosystems; the importance of studying and understanding the environment	
Key Terms:	reproduction, germination, pollination, fertilization, embryo, annual, perennial, regeneration, dispersal	energy, producer, consumer, carnivore, herbivore, omnivore, decomposer, predator, prey, photosynthesis, cell	stimuli, limiting factor, competition, resource, population, extinction, adapt, transplant	
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Biodiversity 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

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Grade 6				
Curriculum Themes:	**Life Cycles of Organisms**	**Characteristics of Organisms**	**Organisms & Their Environments**	
Theme Topics:	types of reproduction in plants and fungi; ways that animal species and the environment play a role in the life cycles of plants; how life spans vary among different species	how organisms get energy from food; the relationships between organisms in the food chain; physical traits that help organisms adapt and survive; the composition of living things	the ways that organisms are impacted by internal and external stimuli; how organisms interact with each other and their ecosystems; the importance of studying and understanding the environment	
Key Terms:	reproduction, germination, pollination, fertilization, embryo, annual, perennial, regeneration, dispersal	energy, producer, consumer, carnivore, herbivore, omnivore, decomposer, predator, prey, photosynthesis, cell	stimuli, limiting factor, competition, resource, population, extinction, adapt, transplant	
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Biodiversity 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

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Grade 7				
Curriculum Themes:	**Life Cycles of Organisms**	**Characteristics of Organisms**	**Organisms & Their Environments**	
Theme Topics:	the reproduction and growth cycle of flowering and non-flowering plants; types of plant reproduction and seed dispersal; life cycles of organisms	how energy moves through the food chain; physical characteristics that help organisms survive; inherited traits, reflexive behaviors & learned behaviors; types of classification	the relationships between organisms and their ecosystems; how matter cycles through an ecosystem; the importance of studying and understanding the environment	
Key Terms:	germination, fertilization, embryo, hypocotyl, ovary, ovule, pistil, anther, stamen, sporophyte, gametophyte, anemochory, hydrochory, zoochory, annual, biennial, perennial	autotroph, heterotroph, photosynthesis, chlorophyll, chloroplast, heredity, Punnett square, classification, kingdom, phylum, class, order, family, genus, species	stimulus, adaptation, keystone species, fossil, paleontology, conservation, biodiversity	
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Biodiversity 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

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Grade 8			
Curriculum Themes:	**Life Cycles of Organisms**	**Characteristics of Organisms**	**Organisms & Their Environments**
Theme Topics:	the reproduction and growth cycle of flowering and non-flowering plants; types of plant reproduction and seed dispersal; life cycles of organisms	how energy moves through the food chain; physical characteristics that help organisms survive; inherited traits, reflexive behaviors & learned behaviors; types of classification	the relationships between organisms and their ecosystems; how matter cycles through an ecosystem; the importance of studying and understanding the environment
Key Terms:	germination, fertilization, embryo, hypocotyl, ovary, ovule, pistil, anther, stamen, sporophyte, gametophyte, anemochory, hydrochory, zoochory, annual, biennial, perennial	autotroph, heterotroph, photosynthesis, chlorophyll, chloroplast, heredity, Punnett square, classification, kingdom, phylum, class, order, family, genus, species	stimulus, adaptation, keystone species, fossil, paleontology, conservation, biodiversity
Additional Learning: Vocabulary Skill & Drill	• Comprehensive multiple-choice quiz with vocabulary drawn from the Biodiversity 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