



Buffalo Zoo New York State Curriculum Program Standards

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NYS Science Curriculum Standards for Zoomobile Programs: **Zoo Tales**

Storytime and an animal encounter.

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1

Touch of Class

Comparing different animal classes.

Grade	Science Standard
Pre-K	LS1-1, LS1-2
Kindergarten	LS1-1, ESS2-2, ESS3-3
1	LS1-1, LS3-1
2	LS2-2, LS4-1
3	LS2-1, LS4-3, LS1-1, LS3-2, LS4-2
4	LS1-1, LS1-2
5	LS1-1
Middle School	LS4-3, LS4-2



Careers

Intro to animal-based careers.

Grade	Science Standard
Pre-K	LS1-1, LS1-2
Kindergarten	LS1-1
1	LS1-1, LS3-1
2	LS2-2, LS4-1
3	LS2-1, LS4-3, LS1-1, LS3-2, LS4-2
4	LS1-1, LS1-2
5	LS1-1
Middle School	LS4-3, LS4-2

Habitat Explorers

Learn about animals that live in a particular habitat.

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1, ESS2-2
1	LS1-1, LS1-2, LS3-1
2	LS4-1, ESS2-3
3	LS4-3, LS4-4
4	ESS2-2, LS1-1
5	LS2-1
Middle School	LS2-1, LS2-5



Sensory Safari

Sensory experiences for younger audiences.

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1
1	LS1-1
2	LS4-1

World Safari

Animals throughout the world.

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1, ESS2-2
1	LS1-1, LS1-2, LS3-1
2	LS4-1, ESS2-3
3	LS4-3, LS4-4
4	ESS2-2, LS1-1
5	LS2-1
Middle School	LS2-1, LS2-5



NYS Science Curriculum Standards

for Onsite Programs:

A Touch of Class

Comparing different animal classes.

Grade	Science Standard
Pre-K	LS1-1, LS1-2
Kindergarten	LS1-1, ESS2-2, ESS3-3
1	LS1-1, LS3-1
2	LS2-2, LS4-1
3	LS2-1, LS4-3, LS1-1, LS3-2, LS4-2
4	LS1-1, LS1-2
5	LS1-1
Middle School	LS4-3, LS4-2

Careers

Intro to animal-based careers.

Grade	Science Standard
Pre-K	LS1-1, LS1-2
Kindergarten	LS1-1
1	LS1-1, LS3-1
2	LS2-2, LS4-1
3	LS2-1, LS4-3, LS1-1, LS3-2, LS4-2
4	LS1-1, LS1-2
5	LS1-1
Middle School	LS4-3, LS4-2



Conservation Investigators

Investigating the world around us.

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1, ESS2-2
1	LS1-1, LS3-1
2	LS4-1, ESS2-3
3	LS4-3, LS4-4
4	ESS2-2
5	LS2-1
Middle School	LS2-1, LS2-5

Dazzling Defenses

Learn about animal adaptations!

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1
1	LS1-1, LS3-1
2	LS2-2, LS4-1
3	LS3-1
4	PS4-3
5	PS1-4.
Middle School	PS1-2, LS2-1



Habitat Explorers

Learn about animals that live in a particular habitat.

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1, ESS2-2
1	LS1-1, LS1-2, LS3-1
2	LS4-1, ESS2-3
3	LS4-3, LS4-4
4	ESS2-2, LS1-1
5	LS2-1
Middle School	LS2-1, LS2-5



NYS Science Curriculum Standards

for Distance Learning Programs:

A to Zoo

Practice the alphabet with some of your favorite zoo animals!

Grade	Science Standard
Pre-K	LS1-1, LS1-2
Kindergarten	LS1-1, ESS2-2

Zoo's Clues

Identifying zoo animals!

Grade	Science Standard
Pre-K	LS1-1, LS1-2
Kindergarten	LS1-1, ESS2-2

Who's at the Zoo?

What animals do we care for, and how?

Grade	Science Standard
Pre-K	LS1-1, LS1-2
Kindergarten	LS1-1, ESS2-2, ESS3-3
1	LS1-1, LS3-1
2	LS4-1, LS2-2
3	LS2-1, LS4-3, LS1-1, LS3-2



Wild Winter Animals

How animals prepare for the seasons!

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1
1	LS1-1, LS3-1
2	LS4-1, ESS2-3
3	LS4-3, LS4-4

Animal Classification

How scientists group animals.

Grade	Science Standard
Pre-K	LS1-1, LS1-2
Kindergarten	LS1-1, ESS2-2, ESS3-2
1	LS1-1, LS3-1
2	LS2-2, LS4-1
3	LS2-1, LS4-3, LS1-1, LS3-2, LS4-2
4	LS1-1, LS1-2
5	LS1-1



Sense-sational Animals

Animals and their amazing adaptations.

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1
1	LS1-1
2	LS4-1
3	LS4-3, LS3-2, LS1-1, LS4-2
4	LS1-1, LS1-2
5	LS1-1
Middle School	LS4-2

Behavior Basics

Animal movements and behaviors

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1
1	LS1-1
2	LS4-1
3	LS4-3, LS3-2, LS4-2
4	LS1-1, LS1-2
5	LS1-1
Middle School	LS4-2



Rainforest Experience

Animal movements and behaviors

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1, ESS2-2
1	LS1-1
2	LS4-1, ESS2-3
3	LS4-3, LS4-4
4	ESS2-2
5	LS2-1
Middle School	MS-LS2-1, LS2-5

Habitat Explorers

Take an adventure around the world while visiting the Buffalo Zoo!

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1, ESS2-2
1	LS1-1
2	LS4-1, ESS2-3
3	LS4-3, LS4-4
4	ESS2-2
5	LS2-1
Middle School	MS-LS2-1, LS2-5



Animal Enrichment

Two-session program, creating enrichment and visiting the zoo!

Grade	Science Standard
Pre-K	LS1-1
Kindergarten	LS1-1, ESS2-2, ESS3-3
1	LS1-1, LS3-1
2	LS2-2, LS4-1
3	LS2-1, LS4-3, LS1-1, LS3-3, LS4-2
4	LS1-1, LS1-2
5	LS2-1
Middle School	MS-LS4-2



NYS Science Curriculum Standards

for Intensive School Programs:

Ecosystem Architects

Students will learn about the many pieces that make up an ecosystem.

Grade	Science Standard
Middle School	LS1-3, LS2-4, LS2-3, LS2-5, LS2-2, LS4-5, LS1-7

Bone Bonanza

Students will learn about the origin of bones as well as the importance of osteological knowledge in multiple fields.

Grade	Science Standard
Middle School	LS1-1, LS1-3, LS1-2
High School	LS1-2, LS1-4, LS4-5, LS4-1, ESS2-7, ESS2-2



Chemical Warfare in the Animal Kingdom

Students will learn about the different biochemical methods that some animals employ for both defensive and offensive measures, as well as their effect on other animals.

Grade	Science Standard
High School	PS1-10, LS1-2, LS1-1, LS1-3
AP Biology:	Structure of water hydrogen bonding, Elements of life, Carbohydrates, Lipids, Nucleic acids, Proteins, Cellular structure and functions, Cell size, Cellular interactions with its environment, Plasma membrane and membrane transport, Cell regulatory mechanisms (like osmosis and selective permeability), Cellular compartmentalization, Cell communication, Signal transduction pathways, Feedback, Cell cycle and regulation, Natural and artificial selection, Population genetics, Evidence of evolution and common ancestry, Phylogeny



Blunt Blood and Heroic Hemolymph

Students will learn about blood, its importance in every organism, and its practical use in several STEM fields.

Grade	Science Standard
Middle School	LS1-1, LS1-3
High School	PS1-10, LS1-2, LS4-5, LS4-1, ESS2-7
AP Biology:	Structure of water hydrogen bonding, Elements of life, Carbohydrates, Lipids, Nucleic acids, Proteins, Cellular structure and functions, Cell size, Cellular interactions with its environment, Plasma membrane and membrane transport, Cell regulatory mechanisms (like osmosis and selective permeability), Cellular compartmentalization, Cell communication, Signal transduction pathways, Feedback, Cell cycle and regulation, Natural and artificial selection, Population genetics, Evidence of evolution and common ancestry, Phylogeny



Evolution, Natural Selection, and Extinction

Students will learn about the basics behind extinction and evolution as well the historical concept around the study of those two topics.

Grade	Science Standard
High School	LS4-1, LS4-2, LS4-3, LS4-4, LS4-5
AP Biology:	Cell communication, Signal transduction pathways, Feedback, Cell cycle and regulation, Population ecology and population density, Community ecology, Biodiversity, Disruptions in ecosystems, Natural and artificial selection, Population genetics, Evidence of evolution and common ancestry, Phylogeny