



# All About Penguins

## Kentucky Academic Standards (K-5)

Below is a list of Kentucky Academic Standards discussed during the teaching of **All About Penguins**.

### KENTUCKY CORE CONTENT FOR ASSESSMENT

#### SCIENCE

##### End of Primary

- SC-EP-3.4.1 Students will explain the basic needs of organisms.
- SC-EP-3.4.2 Students will understand that things in the environment are classified as living, nonliving and once living. Living things differ from nonliving things. Organisms are classified into groups by using various characteristics (e.g., body coverings, body structures).
- SC-EP-3.4.3 Students will describe the basic structures and related functions of plants and animals that contribute to growth, reproduction and survival.
- SC-EP-3.4.4 Students will describe a variety of plant and animal life cycles to understand patterns of the growth, development, reproduction and death of an organism.
- SC-EP-4.6.1 Students will describe basic relationships of plants and animals in an ecosystem (food chains).
- SC-EP-4.7.1 Students will describe the cause and effect relationships existing between organisms and their environments.

##### Fourth Grade

- SC-04-3.4.1 Students will: compare the different structures and functions of plants and animals that contribute to the growth, survival and reproduction of the organisms; make inferences about the relationship between structure and function in organisms.
- SC-04-3.4.2 Students will understand that things in the environment are classified as living, nonliving and once living. Living things differ from nonliving things. Organisms are classified into groups by using various characteristics (e.g., body coverings, body structures).



- SC-04-3.4.3 Students will compare a variety of life cycles of plants and animals in order to classify and make inferences about an organism.
- SC-04-3.4.4 Students will identify some characteristics of organisms that are inherited from the parents and others that are learned from interactions with the environment.
- SC-04-4.6.1 Students will analyze patterns and make generalizations about the basic relationships of plants and animals in an ecosystem (food chain).
- SC-04-4.7.1 Students will make predictions and/or inferences based on patterns of evidence related to the survival and reproductive success of organisms in particular environments.
- SC-04-4.7.2 Students will: describe human interactions in the environment where they live; classify the interactions as beneficial or harmful to the environment using data/evidence to support conclusions.

### **Fifth Grade**

- SC-05-3.4.1 Students will describe and compare living systems to understand the complementary nature of structure and function.
- SC-05-3.5.2 Students will understand that all organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment.
- SC-05-4.7.1 Students will: describe and categorize populations of organisms according to the function they serve in an ecosystem (e.g., producers, consumers, decomposers); draw conclusions about the effects of changes to populations in an ecosystem.
- SC-05-4.7.2 Students will understand that a population consists of all individuals of a species that occur together at a given place and time. All populations living together and the physical factors with which they interact compose an ecosystem.



## **MATHEMATICS**

### **End of Primary**

MA-EP-2.1.4 Students will use nonstandard and standard units of measurement to identify measurable attributes of an object (length - in, cm; weight - oz, lb) and make an estimate using appropriate units of measurement.

MA-EP-4.1.1 Students will analyze and make inferences from data displays (drawings, tables/charts, tally tables, pictographs, bar graphs, circle graphs with two or three sectors, line plots, two-circle Venn diagrams).

MA-EP-4.1.2 Students will collect data.

MA-EP-4.1.3 Students will organize and display data.

MA-EP-4.3.1 Students will pose questions that can be answered by collecting data.

### **Fourth Grade**

MA-04-2.1.3 Students will use nonstandard and standard units of measurement to identify measurable attributes of an object (length and width) using appropriate units of measurement.

MA-04-4.1.1 Students will analyze and make inferences from data displays (drawings, tables/charts, tally tables, pictographs, bar graphs, circle graphs, line plots, Venn diagrams).

MA-04-4.1.2 Students will collect data.

MA-04-4.1.3 Students will construct data displays (pictographs, bar graphs, line plots, Venn diagrams, tables).

MA-04-4.3.1 Students will pose questions that can be answered by collecting data.

### **Fifth Grade**

MA-05-4.1.1 Students will analyze and make inferences from data displays (drawings, tables/charts, tally tables, pictographs, bar graphs, circle graphs, line plots, Venn diagrams, line graphs).

MA-05-4.1.2 Students will collect data (e.g., tallies, surveys) and explain how the skills apply in real-world and mathematical problems.



MA-05-4.1.3 Students will construct data displays (pictographs, bar graphs, line plots, line graphs, Venn diagrams, tables).

MA-05-4.3.1 Students will describe and give examples of the process of using data to answer questions (e.g., pose a question, plan, collect data, organize and display data, interpret data to answer questions).

## **SOCIAL STUDIES**

### **End of Primary**

SS-EP-1.3.2 Students will identify and give examples of good citizenship at home, at school and in the community (e.g., helping with chores, obeying rules, participating in community service projects such as recycling, conserving natural resources, donating food/supplies) and explain why civic engagement in the community is important.

SS-EP-4.1.1 Students will use geographic tools (e.g., maps, globes, mental maps, charts, graphs) to locate and describe familiar places at home, school and the community.

SS-EP-4.1.2 Students will use geographic tools to identify major landforms (e.g., continents, mountain ranges), bodies of water (e.g., oceans, major rivers) and natural resources on Earth's surface and use relative location.

### **Fourth Grade**

SS-04-4.1.1 Students will use geographic tools (e.g., maps, charts, graphs) to identify and describe natural resources and other physical characteristics (e.g., major landforms, major bodies of water, weather, climate, roads, bridges) in regions of Kentucky and the United States.

### **Fifth Grade**

SS-05-4.1.1 Students will use geographic tools (e.g., maps, charts, graphs) to identify natural resources and other physical characteristics (e.g., major landforms, major bodies of water, weather, climate, roads, bridges) and analyze patterns of movement and settlement in the United States.

SS-05-4.1.2 Students will use geographic tools to locate and describe major landforms, bodies of water, places and objects in the United States by their absolute location.