Science A–Z

FOOD CHAINS (5–6)

Correlation of Resources to National Science Standards

Use the chart below to discover how selected Science A–Z resources in the Food Chains unit support certain Next Generation Science Standards (NGSS). While a single reading resource, science activity, comprehension support, or lesson cannot satisfy an entire Performance Expectation, using these resources together can help students develop the understandings and abilities they will need in order to satisfy each standard listed below. Most standards cited align with the grade level of this Science A–Z unit. For a reverse correlation tool that connects the standards to resources, visit our NGSS correlations page: www.sciencea-z.com/main/NextGenerationScienceStandards.*

Check the Performance Expectations Key below this chart for the complete text of the standards cited for each resource.

Resource Type	Resource Title	Performance Expectations
Unit Nonfiction Book	*Food Chains and Food Webs* (3 reading levels)	**5-PS3-1; 5-LS1-1; 5-LS2-1; MS-LS1-6; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-4; MS-LS2-5**
Project-Based Learning Pack	*How Environmental Changes Affect Food Webs*	**3-LS4-4; 5-LS2-1; MS-LS2-2; MS-LS2-4; MS-LS2-5**
Process Activity	*Paper Food Chains and Food Web*	**5-PS3-1; 5-LS2-1; MS-LS2-2; MS-LS2-3; MS-ESS2-1**
FOCUS Book	*Micro Food Chains*	**5-LS2-1; MS-LS1-6; MS-LS2-2; MS-LS2-3; MS-LS2-5**
FOCUS Book	*Apex Predators*	**5-PS3-1; 5-LS2-1; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-4**
FOCUS Book	*Broken Chains*	**3-LS4-4; 5-LS2-1; 3-5-ETS1-1; 3-5-ETS1-2; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-4; MS-LS2-5; MS-ETS1-1; MS-ETS1-2**
FOCUS Book	*Plants vs. Animals*	**5-PS3-1; 5-LS2-1; MS-LS2-3**
FOCUS Book	*Jurassic Food Chains*	**3-LS4-1; 5-LS2-1; MS-LS2-3; MS-LS2-4; MS-LS4-1**
Investigation Pack	Topic: Properties of Food Chains I. Files: *Sonoran Desert; African Savanna; Amazon Rainforest; Antarctica; Florida Everglades; Yellowstone National Park* Mystery File: *Urban Habitat*	**4-LS1-1; 5-PS3-1; 5-LS2-1; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-5**
Debate	*Population Control*	**3-5-ETS1-2; MS-LS2-4**
Science Video	*A Bear Down Under* (no audio)	**5-LS2-1**

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Science Video	*Grizzly Bears Compete with a Wolf*	**MS-LS2-2**
Science Video	*In the Zone—Phytoplankton*	**3-LS4-3; 3-LS4-4; 5-LS1-1; MS-LS2-3; MS-LS2-5; MS-ESS3-3**
Science Video	*Marine Food Web* (no audio)	**MS-LS2-3; MS-LS2-5**
Science Video	*The Ocean's Green Machines*	**5-LS1-1; MS-LS1-6; MS-LS2-4; MS-LS2-5**
Science Video	*Worms Are Decomposers* (no audio)	**5-LS2-1**
Career Files	*Ecologist; Ornithologist; Rice Agronomist*	**MS-LS2-1; MS-LS2-2; MS-LS2-5**
Quick Read	*Dark, Hot, and Hostile* (3 reading levels)	**5-LS2-1; MS-LS2-1; MS-LS2-3**
Quick Read	*Invasion of the Zebra Mussels* (3 reading levels)	**3-LS4-4; 5-LS2-1; MS-LS2-4; MS-LS2-5**
Science Diagram	*Food Chain*	**5-PS3-1; MS-LS1-6**
Science Diagram	*Forest Food Web*	**5-LS2-1; MS-LS2-3**
Science Diagram	*Ocean Food Web*	**5-LS2-1; MS-LS2-3**

Performance Expectations Key

3-LS4-1. Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.

3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

5-PS3-1. Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.

5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

MS-LS1-6. Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

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MS-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

MS-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

MS-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

MS-LS4-1. Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.

MS-ESS2-1. Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.

MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.