

Bringing 4-H to the Classroom – An Introduction to School Standards

Content standards establish specific expectations for the assessment of cumulative learning by the end of first grade, fourth grade, eighth grade and twelfth grade. The standards listed for this curriculum serve as a base guide and are not absolute – you may find that you add or subtract specific standards as you seek to meet the needs of your unique educational setting. In addition, as the curriculum is adapted standards for grade levels not listed here may be met. Visit the Nebraska Department of Education website to access current standard lists in each content area.

As this is a University of Nebraska-Lincoln Extension publication, the Nebraska State Educational Standards have been aligned to the materials found in this curriculum. Alignment of the Nebraska Standards is in compliance with national educational standards. If you are using this curriculum in another state, please refer to your local education department to reference your own individual state standards and see how they relate to the standards listed here.

Everyone A Gardener Activities: Aligned with Nebraska State Education Content Standards

Nebraska State Education Content Standards are “statements focusing on academic knowledge, skills and understandings that schools should teach and students should know as a result of their schooling” (Nebraska L.E.A.R.N.S., 1999).

The content area “home base” for this curriculum is Agricultural Education and/or Science.

Career Cluster Area(s): Agriculture, Food & Natural Resources; Science, Technology, Engineering & Mathematics

Applies to overall curriculum

Reading/Writing:

- 4.1.1 By the end of fourth grade, students will demonstrate the use of multiple strategies in reading unfamiliar words and phrases.
- 4.1.2 By the end of fourth grade, students will demonstrate the use of multiple strategies to increase their vocabulary.
- 4.1.3 By the end of the fourth grade, students will identify the main idea and supporting details in what they have read.
- 4.1.7 By the end of fourth grade, students will identify and apply knowledge of the text structure and organizational elements to analyze nonfiction or informational text.
- 4.2.5 By the end of fourth grade, students will demonstrate the use of self-generated questions, note taking and summarizing while learning.
- 4.3.1 By the end of fourth grade, students will participate in group discussions by asking questions and contributing information and ideas.
- 4.4.1 By the end of fourth grade, students will identify information gained and complete tasks through listening.

Choosing a Garden Site

Science:

- 4.2.1 By the end of fourth grade, students will develop the abilities needed to do scientific inquiry.
- 4.4.3 By the end of fourth grade, students will develop an understanding of living things and environments.

- 4.5.1 By the end of fourth grade, students will develop an understanding of the characteristics of earth materials.

Math:

- 4.1.1 By the end of fourth grade, students will demonstrate place value of whole numbers through the millions and decimals to the hundredth place.
- 4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.
- 4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.
- 4.2.1 By the end of fourth grade, students will estimate, add, subtract, multiply, and divide whole numbers without and with calculators and solve word problems.
- 4.3.1 By the end of fourth grade, students will estimate, measure and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.

Agricultural Education:

- 12.5.4 Students will recognize management considerations necessary to utilize, maintain, and conserve soil and water as basic elements to plant production.
- 12.5.5 Students will compare and contrast management practices and considerations necessary to provide an adequate nutritional environment for efficient plant production.
- 12.5.9 Students will identify and describe necessary cultural management strategies for efficient plant production.

Planning Your Garden

Science:

- 4.1.2 By the end of fourth grade, students will develop an understanding of evidence, models, and explanation.
- 4.4.1 By the end of fourth grade, students will develop an understanding of the characteristics of living things.
- 4.4.3 By the end of fourth grade, students will develop an understanding of living things and environments.

Math:

- 4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.
- 4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.
- 4.2.1 By the end of fourth grade, students will estimate, add, subtract, multiply, and divide whole numbers without and with calculators and solve word problems.
- 4.2.3 By the end of fourth grade, students will estimate, add, and subtract fractions with like denominators without calculators and solve word problems.
- 4.3.1 By the end of fourth grade, students will estimate, measure and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.
- 4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.
- 4.3.4 By the end of fourth grade, students will measure and determine the perimeter of a many-sided figure without a formula using standard and metric units of measure.

Agricultural Education:

- 12.5.4 Students will recognize management considerations necessary to utilize, maintain, and conserve soil and water as basic elements to plant production.
- 12.5.5 Students will compare and contrast management practices and considerations necessary to provide an adequate nutritional environment for efficient plant production.
- 12.5.7 Students will identify, explain and describe the important anatomy and physiology of plants.
- 12.5.9 Students will identify and describe necessary cultural management strategies for efficient plant production.

Preparing Your Garden for Planting

Science:

- 4.1.3 By the end of fourth grade, students will develop an understanding of change, constancy, and measurement.
- 4.1.4 By the end of fourth grade, students will develop an understanding of form and function.
- 4.2.1 By the end of fourth grade, students will develop the abilities needed to do scientific inquiry.
- 4.4.1 By the end of fourth grade, students will develop an understanding of the characteristics of living things.
- 4.4.2 By the end of fourth grade, students will develop an understanding of the life cycles of living things.
- 4.4.3 By the end of fourth grade, students will develop an understanding of living things and environments.
- 4.5.1 By the end of fourth grade, students will develop an understanding of the characteristics of earth materials.
- 4.6.2 By the end of fourth grade, students will develop an understanding of science and technology.
- 4.6.3 By the end of fourth grade, students will develop an understanding of the abilities to distinguish between natural objects and objects made by humans.

Math

- 4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.
- 4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.
- 4.3.1 By the end of fourth grade, students will estimate, measure and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.
- 4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.

Reading/Writing:

- 4.2.1 By the end of fourth grade, students will write using standard English (conventions) for sentence structure, usage, punctuation, capitalization and spelling.

Agricultural Education:

- 12.5.4 Students will recognize management considerations necessary to utilize, maintain, and conserve soil and water as basic elements to plant production.
- 12.5.5 Students will compare and contrast management practices and considerations necessary to provide an adequate nutritional environment for efficient plant production.

12.5.9 Students will identify and describe necessary cultural management strategies for efficient plant production.

Planting Your Garden

Science:

4.4.1 By the end of fourth grade, students will develop an understanding of the characteristics of living things.

4.4.3 By the end of fourth grade, students will develop an understanding of living things and environments.

Math:

4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.

4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.

4.3.1 By the end of fourth grade, students will estimate, measure and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.

4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.

Agricultural Education:

12.5.4 Students will recognize management considerations necessary to utilize, maintain, and conserve soil and water as basic elements to plant production.

12.5.5 Students will compare and contrast management practices and considerations necessary to provide an adequate nutritional environment for efficient plant production.

12.5.7 Students will identify, explain and describe the important anatomy and physiology of plants.

12.5.9 Students will identify and describe necessary cultural management strategies for efficient plant production.

Caring for Your Garden

Science:

4.4.1 By the end of fourth grade, students will develop an understanding of the characteristics of living things.

4.4.2 By the end of fourth grade, students will develop an understanding of the life cycles of living things.

4.4.3 By the end of fourth grade, students will develop an understanding of living things and environments.

4.6.2 By the end of fourth grade, students will develop an understanding of science and technology.

4.6.3 By the end of fourth grade, students will develop an understanding of the abilities to distinguish between natural objects and objects made by humans.

Math:

4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.

4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.

- 4.3.1 By the end of fourth grade, students will estimate, measure and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.
- 4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.

Agricultural Education:

- 12.5.4 Students will recognize management considerations necessary to utilize, maintain, and conserve soil and water as basic elements to plant production.
- 12.5.5 Students will compare and contrast management practices and considerations necessary to provide an adequate nutritional environment for efficient plant production.
- 12.5.6 Students will identify and demonstrate environmentally compatible pest management strategies which promote efficient plant production.
- 12.5.7 Students will identify, explain and describe the important anatomy and physiology of plants.
- 12.5.9 Students will identify and describe necessary cultural management strategies for efficient plant production.

Harvesting and Storing Your Garden Produce

Science:

- 4.4.1 By the end of fourth grade, students will develop an understanding of the characteristics of living things.
- 4.4.2 By the end of fourth grade, students will develop an understanding of the life cycles of living things.
- 4.4.3 By the end of fourth grade, students will develop an understanding of living things and environments.

Math:

- 4.3.1 By the end of fourth grade, students will estimate, measure and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.
- 4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.

Agricultural Education:

- 12.5.7 Students will identify, explain and describe the important anatomy and physiology of plants.
- 12.5.9 Students will identify and describe necessary cultural management strategies for efficient plant production.