

301 Centennial Mall South, 4th Floor P.O. Box 95107 • Lincoln, NE 68509-5107 Phone: 800-NECORN1 (800-632-6761) or 402-471-CORN (2676)

The Nebraska Department of Education provides academic standards for mathematics, reading/writing, science and social studies/history. This document matches these standards with the National Corn Growers Association's Corn Curriculum and lists them by unit.

# **UNIT 1: CORN DEVELOPMENT**

#### Nebraska Mathematics Standards

- 1.1.1 By the end of first grade, students will recognize, write, and orally express the sequential order of the number system.
- 1.1.2 By the end of first grade, students will demonstrate ways of representing numbers and compare relations among numbers.
- 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
- 4.2.2 By the end of fourth grade, students will estimate, add, and subtract decimals without and with calculators and solve word problems.
- 8.2.1 By the end of eighth grade, students will add, subtract, multiply, and divide decimals and proper, improper, and mixed fractions with uncommon and common denominators with and without the use of technology.
- 8.2.2 By the end of eighth grade, students will identify the appropriate operation and do the correct calculations when solving word problems.
- 8.2.3 By the end of eighth grade, students will solve problems involving whole numbers, integers, and rational numbers (fractions, decimals, ratios, proportions, and percents) with and without the use of technology.
- 8.4.3 By the end of eighth grade, students will use formulas to solve problems involving perimeter and area of a square, rectangle, parallelogram, trapezoid and triangle, as well as the area and circumference of circles.

#### Nebraska Reading/Writing Standards

- 1.1.5 By the end of first grade, students will respond to fiction and non-fiction text through writing, drawing, and verbal responses.
- 1.1.7 By the end of first grade, students will write about familiar experiences, people, objects, or events.
- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.

- 4.1.6, 8.1.4 Students will identify and apply knowledge of the structure, elements, and literary techniques to analyze fiction.
- 4.2.4, 8.2.4 Students will demonstrate the use of multiple forms to write for different audiences and purposes.

#### Nebraska Science Standards

- 1.2.1, 4.21, 8.21 Students will develop the abilities needed to do scientific inquiry.
- 1.3.1, 4.31 Students will develop an understanding of the characteristics of materials.
- 1.4.1, 4.41 Students will develop an understanding of the characteristics of living things.
- 1.4.2 By the end of first grade, students will develop an understanding of the life cycles of organisms.
- 4.4.2 By the end of fourth grade, students will develop an understanding of the life cycles of organisms.
- 4.4.3 By the end of fourth grade, students will develop an understanding of living things and environments.
- 8.4.1 By the end of eighth grade, students will develop an understanding of the structure and function in living systems.
- 1.3.1, 4.4.1, 8.4.1 Students will identify information gained and complete tasks through listening.

- 1.1.2 By the end of first grade, students will compare and contrast the past and present contributions of cultures to school and family.
- 1.1.7 By the end of first grade, students will explain how families and individuals earn, spend, and save.
- 4.1.3 By the end of fourth grade, students will describe social and economic development of Nebraska in the 20th century.
- 4.1.8 By the end of fourth grade, students will describe characteristics of a market economic system and the interactions of consumers and producers.
- 8.3.5 By the end of eighth grade, students will explain the structure and operation of the United States economy and the role of citizens as producers and consumers.

# **UNIT 2: SOIL MANAGEMENT**

## Nebraska Reading/Writing Standards

- 1.1.5 By the end of first grade, students will respond to fiction and non-fiction text through writing, drawing, and verbal responses.
- 1.1.7 By the end of first grade, students will write about familiar experiences, people, objects, or events.
- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.
- 4.2.4, 8.2.4 Students will demonstrate the use of multiple forms to write for different audiences and purposes.

#### Nebraska Science Standards

- 1.5.1, 4.5.1 Students will develop an understanding of the characteristics of earth materials.
- 4.5.3 By the end of fourth grade, students will develop an understanding of the changes in the earth and sky.
- 8.4.5 By the end of eighth grade, students will develop an understanding of diversity and adaptations of organisms.

- 1.1.4 By the end of first grade, students will recognize that climate, location, and physical surroundings affect the lives of people.
- 4.1.3 By the end of fourth grade, students will describe social and economic development of Nebraska in the 20th century.
- 8.1.9 By the end of eighth grade, students will describe key people, events, and ideas since World War II.
- 8.3.5 By the end of eighth grade, students will explain the structure and operation of the United States economy and the role of citizens as producers and consumers.

### **UNIT 3: INSECT CONTROL**

#### Nebraska Mathematics Standards

- 1.1.1 By the end of first grade, students will recognize, write, and orally express the sequential order of the number system.
- 1.1.2 By the end of first grade, students will demonstrate ways of representing numbers and compare relations among numbers.
- 1.5.1 By the end of first grade, students will collect information about objects and events in their environment (favorite candy bar, number of siblings, and number of pets).
- 1.5.3 By the end of first grade, students will compare and interpret information from displayed data (more, less, and fewer).
- 1.6.2 By the end of first grade, students will sort and classify objects according to one or more attributes (size, shape, color, and thickness).
- 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
- 4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.
- 8.2.3 By the end of eighth grade, students will solve problems involving whole numbers, integers, and rational numbers (fractions, decimals, ratios, proportions, and percents) with and without the use of technology.
- 8.5.1 By the end of eighth grade, students will collect, construct, and interpret data displays and compute mean, median, and mode.
- 8.5.4 By the end of eighth grade, students will identify statistical methods and probability for making decisions.

# Nebraska Reading/Writing Standards

- 1.1.5 By the end of first grade, students will respond to fiction and non-fiction text through writing, drawing, and verbal responses.
- 1.1.7 By the end of first grade, students will write about familiar experiences, people, objects, or events.
- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.
- 4.2.4, 8.2.4 Students will demonstrate the use of multiple forms to write for different audiences and purposes.

#### Nebraska Science Standards

- 1.4.1, 4.4.1 Students will develop an understanding of the characteristics of living things.
- 1.4.2, 4.4.2 Students will develop an understanding of the life cycles of organisms.
- 1.8.1, 4.8.1, 8.8.1 Students will develop an understanding of science as a human endeavor.
- 4.4.3 By the end of fourth grade, students will develop an understanding of living things and environments.
- 8.4.1 By the end of eighth grade, students will develop an understanding of the structure and function in living systems.
- 8.4.4 By the end of eighth grade, students will develop an understanding of populations and ecosystems.

- 1.1.4 By the end of first grade, students will recognize that climate, location, and physical surroundings affect the lives of people.
- 1.1.7 By the end of first grade, students will explain how families and individuals earn, spend, and save.
- 4.1.3 By the end of fourth grade, students will describe social and economic development of Nebraska in the 20th century.
- 8.3.5 By the end of eighth grade, students will explain the structure and operation of the United States economy and the role of citizens as producers and consumers.

# **UNIT 4: GENETICS AND BIOTECH**

#### Nebraska Mathematics Standards

- 1.5.2 By the end of first grade, students will organize and display collected information using objects and pictures.
- 1.6.2 By the end of first grade, students will sort and classify objects according to one or more attributes (size, shape, color, and thickness).
- 4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.
- 8.1.2 By the end of eighth grade, students will determine equivalences among fractions, decimals, and percents.
- 8.5.1 By the end of eighth grade, students will collect, construct, and interpret data displays and compute mean, median, and mode.
- 8.5.2 By the end of eighth grade, students will read and interpret tables, charts, and graphs to make comparisons and predictions.
- 8.5.4 By the end of eighth grade, students will identify statistical methods and probability for making decisions.

### Nebraska Reading/Writing Standards

- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.

#### Nebraska Science Standards

- 1.4.1, 4.4.1 Students will develop an understanding of the characteristics of living things.
- 8.4.2 By the end of eighth grade, students will develop an understanding of reproduction and heredity.

- 4.1.4 By the end of fourth grade, students will describe the interaction between Native Americans and their environment on the plains prior to European contact.
- 8.3.5 By the end of eighth grade, students will explain the structure and operation of the United States economy and the role of citizens as producers and consumers.

# **UNIT 5: COMPUTERS & SATELLITES**

## Nebraska Reading/Writing Standards

- 1.1.5 By the end of first grade, students will respond to fiction and non-fiction text through writing, drawing, and verbal responses.
- 1.1.7 By the end of first grade, students will write about familiar experiences, people, objects, or events.
- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.
- 4.2.4, 8.2.4 Students will demonstrate the use of multiple forms to write for different audiences and purposes.

### Nebraska Science Standards

- 1.6.1, 4.6.1, 8.6.1 Students will develop an understanding of technological design.
- 1.6.2, 4.6.2, 8.6.2 Students will develop an understanding of science and technology.

- 1.1.3 By the end of first grade, students will compare the relative location of people, places, and things.
- 1.1.5 By the end of first grade, students will identify uses of technology, such as transportation and communication.
- 4.1.10 By the end of fourth grade, students will identify and use essential map elements.
- 4.1.11 By the end of fourth grade, students will use maps and globes to acquire information about people, places, and environments.
- 8.4.6 By the end of eighth grade, students will improve their skills in historical research and geographical analysis.

# **UNIT 6: FEEDING ANIMALS**

#### Nebraska Mathematics Standards

- 1.3.4 By the end of first grade, students will identify the different units of measurement used in their environment (cents, dollars, pounds, gallons, liters, meters, miles, minutes, and hours).
- 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.
- 8.3.1 By the end of eighth grade, students will select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision.
- 8.5.2 By the end of eighth grade, students will read and interpret tables, charts, and graphs to make comparisons and predictions.

## Nebraska Reading/Writing Standards

- 1.1.5 By the end of first grade, students will respond to fiction and non-fiction text through writing, drawing, and verbal responses.
- 1.1.7 By the end of first grade, students will write about familiar experiences, people, objects, or events.
- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.
- 4.2.4, 8.2.4 Students will demonstrate the use of multiple forms to write for different audiences and purposes.

#### Nebraska Science Standards

- 1.4.1, 4.4.1 Students will develop an understanding of the characteristics of living things.
- 8.4.1 By the end of eighth grade, students will develop an understanding of the structure and function in living systems.

# **UNIT 7: FEEDING INDUSTRY**

#### Nebraska Mathematics Standards

- 4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.
- 8.5.2 By the end of eighth grade, students will read and interpret tables, charts, and graphs to make comparisons and predictions.
- 8.2.3 By the end of eighth grade, students will solve problems involving whole numbers, integers, and rational numbers (fractions, decimals, ratios, proportions, and percents) with and without the use of technology.

# Nebraska Reading/Writing Standards

- 1.1.5 By the end of first grade, students will respond to fiction and non-fiction text through writing, drawing, and verbal responses.
- 1.1.7 By the end of first grade, students will write about familiar experiences, people, objects, or events.
- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.
- 4.2.4, 8.2.4 Students will demonstrate the use of multiple forms to write for different audiences and purposes.

#### Nebraska Science Standards

- 1.1.3, 4.1.3, 8.1.3 Students will develop an understanding of change, constancy, and measurement.
- 1.2.1, 4.2.1, 8.2.1 Students will develop the abilities needed to do scientific inquiry.
- 1.3.1, 4.3.1 Students will develop an understanding of the characteristics of materials.
- 8.3.1 By the end of eighth grade, students will develop an understanding of properties and changes of properties in matter.

- 4.1.10 By the end of fourth grade, students will identify and use essential map elements.
- 4.1.11 By the end of fourth grade, students will use maps and globes to acquire information about people, places, and environments.
- 8.4.6 By the end of eighth grade, students will improve their skills in historical research and geographical analysis.

# **UNIT 8: FEEDING THE WORLD**

#### Nebraska Mathematics Standards

- 4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.
- 8.5.2 By the end of eighth grade, students will read and interpret tables, charts, and graphs to make comparisons and predictions.
- 8.2.3 By the end of eighth grade, students will solve problems involving whole numbers, integers, and rational numbers (fractions, decimals, ratios, proportions, and percents) with and without the use of technology.
- 8.3.1 By the end of eighth grade, students will select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision.
- 8.3.2 By the end of eighth grade, students will convert units within measurement systems using standard and metric, given conversion factors.

### Nebraska Reading/Writing Standards

- 1.1.5 By the end of first grade, students will respond to fiction and non-fiction text through writing, drawing, and verbal responses.
- 1.1.7 By the end of first grade, students will write about familiar experiences, people, objects, or events.
- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.
- 4.2.4, 8.2.4 Students will demonstrate the use of multiple forms to write for different audiences and purposes.

- 1.1.2 By the end of first grade, students will compare and contrast the past and present contributions of cultures to school and family.
- 1.1.6 By the end of first grade, students will identify basic economic concepts.
- 4.1.8 By the end of fourth grade, students will describe characteristics of a market economic system and the interactions of consumers and producers.
- 4.1.10 By the end of fourth grade, students will identify and use essential map elements.
- 4.1.11 By the end of fourth grade, students will use maps and globes to acquire information about people, places, and environments.
- 8.3.5 By the end of eighth grade, students will explain the structure and operation of the United States economy and the role of citizens as producers and consumers.
- 8.3.6 By the end of eighth grade, students will compare the United States economic system to systems in other countries.

# **UNIT 9: FEED YOUR FACE**

#### Nebraska Mathematics Standards

- 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.
- 4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.
- 8.3.1 By the end of eighth grade, students will select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision.

## Nebraska Reading/Writing Standards

- 1.3.1, 4.4.1 Students will identify information gained and complete tasks through listening.
- 4.1.3, 8.1.1 Students will identify the main idea and supporting details in what they have read.

#### Nebraska Science Standards

- 1.1.2, 4.1.2, 8.1.2 Students will develop an understanding of evidence, models, and explanation.
- 1.1.3, 4.1.3, 8.1.3 Students will develop an understanding of change, constancy, and measurement.
- 1.2.1, 4.2.1, 8.2.1 Students will develop the abilities needed to do scientific inquiry.
- 1.4.1, 4.4.1 Students will develop an understanding of the characteristics of living things.
- 8.4.1 By the end of eighth grade, students will develop an understanding of the structure and function in living systems.

- 4.1.10 By the end of fourth grade, students will identify and use essential map elements.
- 4.1.11 By the end of fourth grade, students will use maps and globes to acquire information about people, places, and environments.
- 8.4.6 By the end of eighth grade, students will improve their skills in historical research and geographical analysis.