

**Iowa and Common Core**  
**Second Grade**

**Second Grade Mathematics**

- **Measurement & Data-**
  - **Relate addition and subtraction to length.**
    - **2.MD.B.6** Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.
  - **Represent and Interpret Data**
    - **2.MD.D.10** Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.
- **Operational & Algebraic Thinking-**
  - **Work with Equal Groups of Objects to Gain Foundations for Multiplication.**
    - **2.OA.C.3** Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
- **Geometry-**
  - **Reason with Shapes and Their Attributes**
    - **2.G.A.1** Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

## Second Grade Science

### **NG= Next Generation Standards**

#### ➤ **NG Ecosystems: Interactions, Energy, & Dynamics**

- **2-LS2-2** Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.
- **LS2.D Social Interactions and Group Behavior** Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size (Note: Moved from K–2). (3-LS2-1)

#### ➤ **NG Biological Evolution: Unity and Diversity**

- **2-LS4-1** Make observations of plants and animals to compare the diversity of life in different habitats.

#### ➤ **NG Earth's Systems**

- **2-ESS2-2.** Develop a model to represent the shapes and kinds of land and bodies of water in an area.

#### ➤ **Science as Inquiry-**

- **S.K-2.SI.1 Ask questions about objects, organisms, and events in the environment.**
  - Students should answer their questions by seeking information from their own observations, investigations and from reliable sources of scientific information.
- **S.K-2.SI.2 Plan and conduct simple investigations**
  - In earliest years, investigations are largely based on direct observations. As students develop, they design and conduct simple investigations to answer questions.
- **S.K-2.SI.5 Use data to construct reasonable explanations.**
  - Students should learn what constitutes evidence.
  - Students' explanations should reflect the evidence they have obtained.

#### ➤ **Life Science-**

- **S.K-2.LS4 Understand and apply knowledge of way to help take care of the environment**
  - Humans depend on their natural and constructed environments.
  - Humans change environments in ways that can be either beneficial or detrimental to themselves or other organisms.

## Second Grade Social Studies

- **Behavioral Sciences-**
  - **SS.K-2.BS.1 Understand all people have individual traits.**
    - Understand that people are alike and different in many ways.
    - Understand that individuals will respond to events differently.
- **Geography-**
  - **SS.K-2.G.1 Understand the use of geographic tools to locate and analyze information about people, places, and environments.**
    - Understand representations of locales and regions on maps and globes.
    - Understand representations of the earth such as maps, globes and photographs.
  - **SS.K-2.G.3 Understand how human factors and distribution of resources affect the development of communities and the movement of populations.**
    - Understand the role that resources play in human's daily lives.
  - **SS.K-2-G.4 Understand how geographic process and human actions modify the environment and how the environment affects humans.**
    - Understand ways in which people depend on the physical environment.
- **History**
  - **SS.K-2.H.1 Understand people construct knowledge of the past from multiple and various types of sources.**
    - Understand past, present, and future time in relation to historical events.
    - Understand that people in different times and places view the world differently

## Second Grade English Language Arts

### ➤ **Writing-**

#### ▪ **Text Types and Purposes**

- **W.2.1** Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.
- **W.2.2** Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

#### ▪ **Research to Build and Present Knowledge**

- **W.2.7** Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).

### ➤ **Speaking & Listening-**

#### ▪ **Comprehension and Collaboration**

- **SL.2.1** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

### ➤ **Language-**

#### ▪ **Knowledge of Language**

- **L.2.3** Use knowledge of language and its conventions when writing, speaking, reading, or listening.

### ➤ **Reading-**

#### ▪ **Integration of Knowledge & Ideas**

- **RL.2.7** Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

## Second Grade 21st Century Skills

- **Employability Skills-**
  - **21.K-2.ES.1 Communicate and work appropriately with others to complete tasks.**
    - Work appropriately and productively with others.
    - Use different perspectives to increase innovation and the quality of work.
  - **21.K-2.ES.3 Demonstrate integrity and ethical behavior, and social responsibility.**
    - Accept ownership for actions
    - Demonstrate trustworthiness and honesty
    - Make decisions based on important core values
- **Civic Literacy-**
  - **SS.K-2.PSCL.1 Understand the basic concepts of government and democracy and that the Constitution defines rights and responsibilities of citizens.**
    - Understand rights and responsibilities.
  - **SS.K-2.PSCL.2 Understand how government affects citizens and how citizens affect government.**
    - Understand the characteristics of a good leader.
    - Understand respect for other's point of view.

**Lessons with Mathematics Standards**

<i>Beginning Playground Pick Up</i> .....	2.MD.D.10
<i>Celebrate Urban Birds</i> .....	2.OA.1 (also has Science standard)
<i>Geometric Jumble Recycled</i> .....	2.G.A.1
<i>Photographing a Math Problem</i> .....	2.OA.C.3
<i>Recycled Fractals</i> .....	2.G.A.1
<i>Time-line Math</i> .....	2.MD.B.6

**Lessons with Science Standards (including Next Generation Standards)**

<i>Class Service Project</i> .....	S.K-2.LS4
<i>Field Trip to Your Square</i> .....	S.K-2.SI.1
<i>How are We Alike, How are We Different?</i> .....	2-LS4-1
<i>Guilds &amp; Communities, Plants &amp; People</i> .....	LS2.D (also has Social Studies standard)
<i>Landforms, at Home &amp; Beyond</i> .....	2-ESS2-2
<i>Making a Class List</i> .....	S.K-2.SI.1
<i>Who Will Pollinate our Garden?</i> .....	2-LS2-2
<i>A Sound Map (21<sup>st</sup> Century Skills)</i> .....	K-2-ETS1-1
<i>Celebrate Urban Birds- (Mathematics)</i> .....	2-LS4-1
<i>Reconstructing the Squares (English Language Arts)</i> .....	2-LS4-1
<i>Searching for Meaning through Jigsaw Discussions (21<sup>st</sup> Century Skills)</i> .....	S.K-2.LS.4
<i>Writing a Persuasive Letter (English Language Arts)</i> .....	S.K-2.SI.5

**Lessons with Social Studies Standards**

<i>Birds of a Feather</i> .....	SS.K-2.BS.1
<i>First People, Blood Run</i> .....	NHS- SS.K-2.H.1
<i>Hunting for Treasure</i> .....	SS.K-2.G.1
<i>Mapping the Route Home to School</i> .....	SS.K-2.G.1
<i>We Need Earth Game</i> .....	SS.K-2.G.3, SS.K-2.G.4
<i>Guilds &amp; Communities, Plants &amp; People</i> .....	SS.K-2.BS.2

**Lessons with English Language Arts Standards**

<i>Earth Circle of Life</i> .....	W.2.2
<i>The Keyboard Game &amp; Three-Letter Word Forming</i> .....	SL.2.1
<i>Native American Parfleche</i> .....	RL.2.7
<i>Reconstructing the Squares</i> .....	SL.2.1 (also has Science standard)
<i>Recycled Art</i> .....	L.2.3
<i>Writing a Persuasive Letter</i> .....	W.2.1 (also has Science standard)

**Lessons with 21<sup>st</sup> Century Skills Standards**

<i>A Sound Map</i> .....	21.K-2.ES.1 (also has Science standard)
<i>Hide a Penny</i> .....	21.K-2.ES.1
<i>Planning a Service Project</i> .....	21.K-2.ES.1
<i>Reading for Responsibility in the Garden</i> .....	21.K-2.ES.3
<i>Searching for Meaning through Jigsaw Discussions</i> .....	SS.K-2.PSCL.1 (also has Science standard)
<i>The Giving Trees</i> .....	SS.K-2.PSCL.2