Unit 08: Inquiry Research

Content Area: **English Language Arts**
Course(s):
Time Period: **Trimester 3**
Length: **8-10 sessions**
Status: **Published**

Brief Summary of Unit

Students, with assistance, locate, access, evaluate, and use information effectively and efficiently to conduct research and solve problems using digital and visual media. Students will read a fairy tale in it's original version, than read additional fractured fairy tales versions, in addition they will learn about and demonstrate their understanding of the inquiry research method, and end the unit with a STEM activity where they will build/construct a structure using the knowledge they've gained in their research.

This unit is designed to be part of a developmental progression across grade levels and make interdisciplinary connections across content areas including physical and social sciences, technology, career readiness, cultural awareness, and global citizenship. During this course, students are provided with opportunities to develop skills that pertain to a variety of careers.

Revision Date: July 2026

Standards

The identified standards reflect a developmental progression across grades/ levels and make interdisciplinary connections across content areas including social sciences, technology, career readiness, cultural awareness and global citizenship. The standards that follow are relevant to this course in addition to the associated content-based standards listed below.

Information Literacy: This unit challenges students to locate, evaluate, and use information effectively. Information literacy includes, but is not limited to, digital, visual, media, textual, and technological literacy. Lessons may include the research process and how information is created and produced; critical thinking and using information resources; research methods, including the difference between primary and secondary sources; the difference between facts, points of view, and opinions, accessing peer-reviewed print and digital library resources; the economic, legal, social, and ethical issues surrounding the use of information.

Information Literacy for Elementary Educators

LA.RL.2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
L.RF.2.3	Know and apply grade-level phonics and word analysis skills in decoding words.
9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).

9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
L.RF.2.4.A	Read grade-level text with purpose and understanding.
L.RF.2.4.B	Read grade-level text orally with accuracy, appropriate rate, and expression.
LA.RL.2.10	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
L.RF.2.4.C	Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
LA.RI.2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
L.WF.2.1	Demonstrate command of the conventions of writing.
LA.RI.2.4	Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
LA.RI.2.5	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
L.WF.2.2	Demonstrate command of the conventions of encoding and spelling.
L.KL.2.1.A	Use words and phrases acquired through conversations, reading and being read to, and responding to texts.
LA.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).
LA.W.2.8	Recall information from experiences or gather information from provided sources to answer a question.
L.VL.2.2	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.
L.VL.2.2.E	Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
RL.CR.2.1	Ask and answer questions to demonstrate understanding of key details in a literary text, referring explicitly to the text as the basis for the answers.
RI.CR.2.1	Ask and answer questions to demonstrate understanding of key details in an informational text, referring explicitly to the text as the basis for the answers.
RL.CI.2.2	Recount a text in oral and written form and determine central message (in literary texts, e.g., fables and folktales from diverse cultures).
RI.CI.2.2	Recount a text in oral and written form and determine main topic (in multi-paragraph informational text, focusing on specific paragraphs).
RL.IT.2.3	Describe how characters in a story respond to major events and challenges using key details within a text.
RI.IT.2.3	Describe the connection between a series of historical events, scientific ideas or concepts, or steps in a sequence within a text.
RL.TS.2.4	Describe the overall structure of a text, including describing how the beginning introduces the story and the ending concludes the action, identifying how each successive part builds on earlier sections.
RI.TS.2.4	Describe the overall structure of a text and effectively use various text features (e.g., graphs, charts, images, captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information.
RL.PP.2.5	Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.

RI.PP.2.5	Identify the main purpose of a text, including what the author seeks to explore, answer, explain, or describe.
RL.MF.2.6	With prompting and support, use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
RI.MF.2.6	Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
RI.AA.2.7	Describe and identify the logical connections of how reasons support specific points the author makes in a text.
RL.CT.2.8	Compare and contrast literary versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.
RI.CT.2.8	Compare and contrast two informational versions of the same idea or topic by different authors or authors from different cultures.
W.AW.2.1	With prompts and support, write opinion pieces to present an idea with reasons or information.
W.AW.2.1.A	Introduce an opinion.
W.AW.2.1.B	Support the opinion with facts, definitions, concrete details, text evidence, or other information and examples related to the topic.
W.IW.2.2	Write informative/explanatory texts to examine a topic and convey ideas and information.
W.IW.2.2.B	Develop a topic with facts definitions, concrete details, text evidence, or other information and examples related to the topic.
W.WP.2.4	With guidance and support from adults and peers, develop and strengthen writing as needed by planning, revising and editing.
W.WR.2.5	Generate questions about a topic and locate related information from a reference source to obtain information on that topic through shared and independent research.
W.SE.2.6	Prioritize information provided by different sources on the same topic while gathering ideas and planning to write about a topic.
W.RW.2.7	Engage in both collaborative and independent writing tasks regularly, including extended and shorter time frames.
SL.PE.2.1.A	Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
SL.PE.2.1.B	Build on others' talk in conversations by linking their explicit comments to the remarks of others.
SL.PE.2.1.C	Ask for clarification and further explanation as needed about the topics and texts under discussion.
SL.ES.2.3	Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
SL.UM.2.5	Use multimedia; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
SL.AS.2.6	Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
I	Inquire: Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.
I.A.1	Formulating questions about a personal interest or a curricular topic.
I.A.2	Recalling prior and background knowledge as context for new meaning.
I.B	Learners engage with new knowledge by following a process that includes:

I.B.1	Using evidence to investigate questions.
I.B.3	Generating products that illustrate learning
I.C	Learners adapt, communicate, and exchange learning products with others in a cycle that includes:
I.C.1	Interacting with content presented by others.
I.C.4	Sharing products with an authentic audience
I.D	Learners participate in an ongoing inquiry-based process by:
I.D.1	Continually seeking knowledge.
I.D.2	Engaging in sustained inquiry.
I.D.3	Enacting new understanding through real-world connections.
I.D.4	Using reflection to guide informed decisions.
V	Explore: Discover and innovate in a growth mindset developed through experience and reflection.
V.A.3	Engaging in inquiry-based processes for personal growth.
V.B	Learners construct new knowledge by:
V.B.1	Problem solving through cycles of design, implementation, and reflection.
V.B.2	Persisting through self-directed pursuits by tinkering and making.
IV.B	Learners gather information appropriate to the task by:
IV.B.1	Seeking a variety of sources.
IV.B.2	Collecting information representing diverse perspectives.
CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.
III	Collaborate: Work effectively with others to broaden perspectives and work toward common goals.
III.A.1	Demonstrating their desire to broaden and deepen understandings.
III.A.2	Developing new understandings through engagement in a learning group.
III.A.3	Deciding to solve problems informed by group interaction.
III.B	Learners participate in personal, social, and intellectual networks by:
III.B.2	Establishing connections with other learners to build on their own prior knowledge and create new knowledge
III.D	Learners actively participate with others in learning situations by:
III.D.1	Actively contributing to group discussions.
III.D.2	Recognizing learning as a social responsibility.
TECH.8.1.2	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to

	create and communicate knowledge.
TECH.8.1.2.A.3	Compare the common uses of at least two different digital applications and identify the advantages and disadvantages of using each.
TECH.8.1.2.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.2.D.1	Develop an understanding of ownership of print and nonprint information.
TECH.8.1.2.D.CS1	Advocate and practice safe, legal, and responsible use of information and technology.
TECH.8.2.2.D	Abilities for a Technological World: The designed world is the product of a design process that provides the means to convert resources into products and systems.
TECH.8.2.2.D.3	Identify the strengths and weaknesses in a product or system.
TECH.8.2.2.D.CS1	Apply the design process.

Essential Questions

- How can students use technology to brainstorm, research and produce work that effectively communicates information and ideas?
- How can we use fractured fairy tales to more deeply understand POV, story elements, culture and author's purpose?
- What skills and strategies are needed to gather information effectively, solve problems, and conduct inquiry research?
- What skills, strategies and guiding questions are needed to facilitate quality inquiry research?
- Where can students find relevant and authoritative information?
- Why do we give credit to the author or creator of any created work?

Students Will Know/Students Will Be Skilled At

- A researcher must give credit to the author or creator of any created work.
- Identify an author and illustrator as a creator of a work.
- Identifying the information needed and what resources will address those needs.
- Illustrating and communicating original ideas and stories using digital tools and resources.
- Organizing and summarizing their information.
- Research is a way to locate information for a specific purpose.
- Showing they can perform basic navigation around appropriate websites.
- To apply existing knowledge to generate new ideas or products.
- Understand that the library media center has online resources to help with inquiry research.
- Using books/pre-selected online resources/observations to gather information for a purpose.
- Utilizing the OPAC to locate relevant materials.
- What similarities and differences the fairy tales read share.
- What type of age appropriate research resources are available through the library media center.

Evidence/Performance Tasks

Students demonstrate differentiated proficiency through both formative and summative assessments in the

classroom. Based on individual student readiness and performance, assessments can be implemented as formative and/or summative.

Developmental progression across years in media is evidenced through benchmark assessments as part of the media specialist's Student Growth Objective (SGO). Follow up diagnostic assessments are used to target skill remediation. Student proficiency allows for additional or alternative assessment based on demonstration or absence of skill.

The performance tasks listed below are examples of the types of assessments teachers may use in the classroom and the data collected by the district to track student progress.

- Benchmark/Alternative: Design Plan & Build
- Formative: Completed graphic organizers.
- Formative: Gathers information to satisfy an informational need.
- Formative: Locate and selects appropriate print and digital resources.
- Formative: Makes a list of resources used.
- Formative: Uses appropriate note-taking skills.
- Formative: Uses drawing/writing/technology to record information.

Learning Plan

Media Specialists may personalize instruction during this unit and address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students.

Media Specialists at the elementary level design their own unique lesson plans in order to incorporate the essential questions provided in this unit. The order in which this information is presented is dependent upon the variables specific to each elementary school community. For example, students may be called to the carpet for a lesson followed by guided practice, then independent practice. After the lesson, students will check out books. Library Media time ends with an electronic story or students going to a makerspace station.

Second grade students, with assistance, locate, access, evaluate, and use information effectively and efficiently to conduct research and solve problems using digital and visual media. Students will read a fairy tale in it's original version, than read additional fractured fairy tales versions, in addition they will learn about and demonstrate their understanding of the inquiry research method, and end the unit with a STEM activity where they will build/construct a structure using the knowledge they've gained in their research.

Suggested Learning Plan

Week 1: Introduction to Inquiry & Bridges

Focus Question: How do bridges help people and animals get from one place to another?

Learning Activities

- Display photographs of different kinds of bridges.
- Ask students:
    - Why do people build bridges?
    - Have you ever crossed a bridge?
    - What would happen if there wasn't a bridge?
- Read *The Three Billy Goats Gruff*.mn
- Introduce several bridge types by sharing pages from *A Book of Bridges*.
- Identify the **arch bridge** found in the story.

Discussion Questions

- Why did the goats need a bridge?
- Why do you think an arch bridge was a good choice?
- What questions do you have about bridges?

Resources

- Google Slides: Inquiry – The Three Billy Goats Gruff
- Book: *The Three Billy Goats Gruff* by George Bridge
- Book: *A Book of Bridges* by Cheryl Keely

Week 2: Introducing Fractured Fairy Tales

Focus Question: How can an author change a familiar story?

Learning Activities

- Review the original story.
- Introduce the term **fractured fairy tale**.
- Read *The Three Billy Goats Fluff*.
- Compare the characters, setting, and events with the original story.
- If time permits, read or watch *The Three Silly Billies*.

Resources

- Book: *The Three Billy Goats Fluff* by Rachael Mortimer
- TumbleBooks: *The Three Silly Billies* by Margie Palatini

Week 3: Comparing Fairy Tale Versions

Focus Question: How are fractured fairy tales similar to and different from the original story?

Learning Activities

- Read *The Three Cabritos*.
- Compare it with the original story.
- Identify the **beam bridge** featured in the illustrations.
- Build simple bridges using classroom materials.

Resources

- Book: *The Three Cabritos* by Eric Kimmel
- Assorted bridge-building materials

Week 4: Exploring Nonfiction

Focus Question: What can nonfiction teach us about how bridges are built?

Learning Activities

- Read *A Bridge Goes Over*.
- Learn how engineers design and build bridges.
- Introduce the **Engineering Design Process**.
- Watch a video showing bridge construction.
- Explore interactive activities from the eBook.

Resources

- Book: *A Bridge Goes Over* by Kylie Burns
- Engineering Design Process Poster
- Chromebooks

Week 5: Research with PebbleGo & Bridge Vocabulary

Focus Question: How can research help engineers solve problems?

Learning Activities

- Introduce the term **research**.
- Explore PebbleGo together.
- Learn about bridges and engineering.
- Introduce bridge vocabulary:
    - Arch
    - Beam
    - Suspension
    - Covered
    - Drawbridge
    - Rope Bridge
    - Abutment
    - Pier
    - Span
    - Roadway
- Watch **What Makes a Bridge So Strong?**

Resources

- PebbleGo Database
- Google Slides
- Chromebooks

Week 6: Planning Like an Engineer

Focus Question: How do engineers plan before they build?

Learning Activities

- Read *Iggy Peck, Architect*.
- Review bridge vocabulary.
- Watch a short video showing how bridges are built.
- Sketch and label an original bridge design.
- Identify which bridge type students will build.

Resources

- Book: *Iggy Peck, Architect* by Andrea Beaty
- Bridge Planning Worksheet

Week 7: Engineering Design Challenge

Focus Question: Which bridge design is the strongest?

Learning Activities

- Build a bridge using provided materials.
- Bridges must:
  - Allow the troll to fit underneath.
  - Hold the weight of three goats (or classroom objects).
- Test and improve bridge designs.
- Discuss how engineers redesign after testing.

Materials

- Assorted building materials
- Small weights, toy goats, or other testing objects

Week 8: Reflection & Showcase

Focus Question: What did we discover about bridges through inquiry?

Learning Activities

- Share bridge designs.
- Compare different engineering solutions.
- Reflect on:
  - Which designs were strongest?
  - What challenges did we overcome?
  - What would we change next time?
- View photographs of bridges from around the world.

Resources

- Student bridge projects
- Bridge photographs

Suggested Inquiry Projects:

Possible collaborative inquiry experiences with classroom teachers include:

- Community Bridges Inquiry: Research a famous bridge (e.g., Golden Gate Bridge, Brooklyn Bridge, Tower Bridge) and create a digital poster explaining its purpose, location, and unique features.
- Engineering Challenge: Design and test bridges made from different materials to determine which supports the most weight. Record observations and explain improvements.
- Animal Habitats & Crossings: Research how bridges and wildlife crossings help animals safely travel through their habitats.
- Transportation Inquiry: Investigate how bridges help people, vehicles, trains, and boats move from place to place. Compare different bridge designs based on their purpose.
- Architecture & Engineering: Read additional books by Andrea Beaty (such as *Rosie Revere, Engineer*) and explore how engineers and architects solve real-world problems through design.

- Communicate with teachers and parents how to access online resources.
- Compare and contrast the elements of the retold and fractured fairy tales read in class comparing events, characters, plot, etc.
- Demonstrate how to access age appropriate pre-selected online resources.
- Explain copyright and plagiarism in an age appropriate way.
- Guide students to locate appropriate books in the nonfiction section of the library media center with the assistance of the OPAC.
- Mini lessons may include: Demonstrate how to utilize OPAC for locating materials, using graphic organizers to model age appropriate note taking, and how to cite their research sources.
- Model how to select an appropriate resource to satisfy a specific informational need.
- Model various ways to record information.
- Ongoing collaboration with teachers regarding units taught within the classroom.
- Preview the essential questions and connect to learning throughout the unit.
- Refer to visual aids displayed in library media center.
- Within a collaborative group, use a variety of technologies to produce a research project.
- Within the library media center have materials available for inquiry activities.

Materials

The materials used in this course allow for integration of a variety of instructional, enrichment, and intervention materials that support student learners at all levels in the school and home environments. Associated web content and media sources are infused into the unit as applicable and available.

Suggested Supplemental Materials:

Select this link to view the second grade Google Folder under media in the Grades K-5 folder.

Video: What Makes A Bridge So Strong? (YouTube)

Google Slide Decks to keep handy:

- Design Plan & Build Challenge & Predictions (Google Doc)
- Inquiry: Three Billy Goats Gruff (Google Slides)
- Inquiry: The Troll Under the Bridge (Google Slides)
- How a Bridge Is Built/Types of Bridges (Google Slides)
- Week One (Google Slides)
- Week Two (Google Slides)
- Week Three (Google Slides)
- Week Four (Google Slides)
- Week Five (Google Slides)

Other Suggested Literature (Please see weekly plans and decide what best fits the needs of classes):

- Book: A Book of Bridges (Cheryl Keely)
- Book: The Three Billy Goats Gruff (George Bridge)
- Book: The Three Billy Goats Fluff (Rachael Mortimer)
- Book: The Three Silly Billies (Margie Palatini)
- Book: The Three Cabritos (Eric Kimmel)
- Book: A Bridge Goes Over (Kylie Burns)
- Book: Iggy Peck, Architect (Andrea Beaty)

- Age appropriate online databases
- Age appropriate websites
- Computer technology (Ipads/Chromebooks/Tablets)
- Interactive board technology
- Presentation software
- Quality library media center collection of print and nonprint relevant resources
- Visual aids

Suggested Strategies for Accommodations and Modifications

Content specific accommodations and modifications as well as Career Ready Practices are listed here for all students, including: Special Education, English Language Learners, At Risk of School Failure, Gifted and Talented, Students with 504.