

# Inventive Thinking

Essential Question

This six week unit introduces the research process, as well as the creative and critical thinking used by writers, inventors and famous people from the Renaissance and beyond.

**How has inventive thinking as revealed by fiction and nonfiction, changed our world?**

CCSS standards	Resources, materials, activities and assessments
<p><b>Reading Standards for Literature</b></p> <p><b>RL.5.1</b> Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p><b>RL.5.2</b> Determine a theme of a story, drama or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.</p> <p><b>RL.5.3</b> Compare and contrast two or more characters, settings or events in a story or drama, drawing on specific details in the text (e.g. how characters interact).</p> <p><b>RL.5.9</b> Compare and contrast stories in the same genre (e.g. mysteries and adventure stories) on their approaches to similar themes and topics.</p> <p><b>Reading Standards for Informational Text</b></p> <p><b>RI.5.2</b> Determine two or more main ideas of a text and explain how they are supported by key details: summarize the text.</p> <p><b>RI.5.3</b> Explain the relationships or interactions between two or more individuals, events, ideas or concepts in a historical, scientific or technical text based on specific information in the text.</p> <p><b>RI.5.6</b> Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.</p> <p><b>RI.5.9</b> integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</p>	<p>Books:</p> <p>Activities: <b>invent something (Rube Goldberg), inventors and inventions scavenger hunt, Inventor’s Fair</b></p> <p><b>Assessments: journals, open response, group discussion, multiple choice quizzes, observations, graphic organizers, chart/graph/tables, create a powerpoint that demonstrates your knowledge of and important invention or idea based on research you have collected and analyzed. Wear clothes that reflect the inventor .</b></p>

# Inventive Thinking

**Reading Standards: Foundational Skills K-5**

**RF. 5.4** Read with sufficient accuracy and fluency to support comprehension.

b. Read on-level prose and poetry orally with accuracy, appropriate rate and expression on successive readings.

**Writing Standards**

**W.5.1** Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

a. Introduce a topic or text clearly, state an opinion and create an organizational structure in which ideas are logically grouped to support the writer’s purpose.

b. Provide logically ordered reasons that are supported by facts and details.

c. Link opinion and reasons using words, phrases and clauses (e.g. consequently, specifically).

d. Provide a concluding statement or section related to the opinion presented.

**W.5.2** Write informative/ explanatory texts to examine a topic and convey ideas and information clearly.

a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; including formatting (e.g. headings), illustrations and multimedia when useful to aiding comprehension.

b. Develop the topic with facts, definitions, concrete details, quotations or other information and examples related to the topic.

c. Link ideas within and across categories of information using words, phrases and clauses (e.g. in contrast, especially).

d. Use precise language and domain-specific vocabulary to inform about or explain the topic.

e. Provide a concluding statement or section related to the information or explanation presented.

**W.5.5** With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting or trying a new approach.

**W.5.7** Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

**Cont.**

# Inventive Thinking

**W.5.9** Draw evidence from literary or informational texts to support analysis, reflection and research.

- a. Apply grade 5 Reading standards to literature (e.g. compare and contrast two or more characters, settings or events in a story or a drama, drawing on specific details in the text).
- b. apply grade 5 Reading standards to informational text (e.g. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s)).

## **Speaking and Listening Standards**

**SL.5.1** Engage effectively in a range of collaborative discussions (one on one, in groups, teacher led) with diverse partners on grade 5 topics and texts, building on others’ ideas and expressing their own clearly.

- a. Come to discussions prepared, having read or studied required material, explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
- b. Follow agreed-upon rules for discussions and carry out assigned roles.
- c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
- d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

**SL.5.4** Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

**SL.5.5** Include multimedia components (e.g. graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.

## **Language Standards**

**L.5.1** Demonstrate command of the conventions of standards English grammar and usage when writing or speaking.

- a. Explain the function of conjunctions, prepositions and interjections in general and their function in particular sentences. **Cont.**

## Inventive Thinking

- |  |  |
|--|--|
| <p>b. Form and use the perfect (e.g. I had walked; I have walked; I will have walked) verb tenses.</p> <p>c. Use context (e.g. cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.</p> |  |
|--|--|