



## Future Problem Solving Skills Aligned with Indiana ELA and Content Literacy Standards

These standards can be found at <https://www.doe.in.gov/standards/englishlanguage-arts>

### Abbreviations Used

- **RN**- Reading Non-Fiction, **RH**-Reading History, **RST**-Reading Science and Technical Subjects
- **LH**- Literacy History (reading and writing), **LST**- Literacy Science and Technology (reading and writing)
- **W**-Writing;
- **SL**-Speaking and Listening
- **V**-Vocabulary. **RV** Reading Vocabulary

### 4TH GRADE STANDARDS

- **RN 2.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RN 4.2** Combine information from two texts on the same topic in order to demonstrate knowledge about the subject.
- **RV 2.3** Determine the meanings of general academic and content-specific words and phrases in a nonfiction text relevant to a fourth grade topic or subject area.
- **W 5** Conduct short research on a topic.
  - Identify a specific question to address (e.g., *What is the history of the Indy 500?*).
  - Use organizational features of print and digital sources to efficiently to locate further information.
  - Determine the reliability of the sources.
  - Summarize and organize information in their own words, giving credit to the source.
  - Present the research information, choosing from a variety of formats.
- **SL 2.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) on grade-appropriate topics and texts, building on others' ideas and expressing personal ideas clearly.
- **SL 2.2** Explore ideas under discussion by drawing on readings and other information.
- **SL 2.3** Demonstrate knowledge and use of agreed-upon rules for discussions and carry out assigned roles.
- **SL 4.2** Create oral presentations that maintain a clear focus, using multimedia to enhance the development of main ideas and themes that engage the audience.

## 5TH GRADE STANDARDS

- **RN 2.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RN 3.1** Apply knowledge of text features in multiple print and digital sources to locate information, gain meaning from a text, or solve a problem.
- **RN 4.2** Combine information from several texts or digital sources on the same topic in order to demonstrate knowledge about the subject.
- **SL 2.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) on grade-appropriate topics and texts, building on others' ideas and expressing personal ideas clearly.
- **SL 2.2** Reflect on and contribute to ideas under discussion by drawing on readings and other resources.
- **SL 2.3** Establish and follow agreed-upon rules for discussion.
- **SL 2.4** Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
- **SL 2.5** Review the key ideas expressed and draw conclusions in reference to information and knowledge gained from the discussions.
- **W 3.1** Write persuasive compositions in a variety of forms that –
  - Clearly present a position in an introductory statement to an identified audience.
  - Support the position with qualitative and quantitative facts and details from various sources, including texts.
  - Use an organizational structure to group related ideas that support the purpose.
  - Use language appropriate for the identified audience.
  - Connect reasons to the position using words, phrases, and clauses.
  - Provide a concluding statement or section related to the position presented.
- **W 5** Conduct short research assignments and tasks on a topic.
  - With support, formulate a research question (e.g., *What were John Wooden's greatest contributions to college basketball?*).
  - Identify and acquire information through reliable primary and secondary sources.
  - Summarize and paraphrase important ideas and supporting details, and include direct quotations where appropriate, citing the source of information.
  - Avoid plagiarism and follow copyright guidelines for use of images, pictures, etc.
  - Present the research information, choosing from a variety of sources.

## MIDDLE SCHOOL STANDARDS (GRADES 6-8)

### ELA STANDARDS (based on 8<sup>th</sup> Grade)

- **RN 4.1** Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.
- **SL 2.1** Engage effectively in a range of collaborative discussions (one on one, in groups, and teacher led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and personal ideas clearly.
- **SL 4.1** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
- **SL 4.2** Create engaging presentations that integrate multimedia components and visual displays to clarify information, strengthen claims and evidence, and add interest.

### CONTENT LITERACY STANDARDS: SCIENCE AND TECHNOLOGY

- **LST 2.1** Cite specific textual evidence to support analysis of science and technical texts.
- **LST 2.2** Determine the central ideas or conclusions of a text; provide an accurate, objective summary of the text.
- **LST 3.1** Determine the meaning of symbols, key terms, and other domain specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
- **LST 4.1** Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
- **LST 4.2** Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.

### CONTENT LITERACY STANDARDS: HISTORY AND SOCIAL STUDIES

- **LH 7.3** Write arguments to support claims with clear reasons and relevant evidence.
- **LH 7.1** Conduct short research projects to answer a question (including a self-generated question), drawing on several source sand generating additional related, focused questions that allow for multiple avenues of exploration.
- **LH 7.2** Gather relevant information from multiple print and digital sources, using research terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while a voiding plagiarism and following a standard format for citation.
- **LH 7.3** Draw evidence from informational texts to support analysis, reflection, and research.

## HIGH SCHOOL STANDARDS (GRADES 9-12)

### ELA STANDARDS (based on grades 11-12)

- **SL 2.1** Initiate and participate effectively in a range of collaborative discussions (one-on one, in groups, and teacher-led) with diverse partners on *grades 9-12 topics, texts, and issues*, building on others' ideas and expressing their own clearly and persuasively.
- **SL 2.2** Stimulate a thoughtful, well-reasoned debate and exchange of ideas by referring to specific evidence from materials under study and additional research and resources.
- **SL 2.3** Work with peers to promote collegial discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.
- **SL 2.4** Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.
- **SL 2.5** Conduct debate and discussion to allow all views to be presented; allow for a dissenting view, in addition to group compromise; and determine what additional information or research is required to deepen the investigation or complete the task.
- **SL 3.1** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.
- **SL 4.1** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks
- **RV 1** Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase to be important to comprehension or expression.

### CONTENT STANDARDS: SCIENCE AND TECHNOLOGY

- **LST 2.1** Cite specific textual evidence to support analysis of science and technical texts.
- **LST 2.2** Determine the central ideas or conclusions of a text; provide an accurate, objective summary of the text.
- **LST 4.1** Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., *in a flowchart, diagram, model, graph, or table*).

### CONTENT STANDARDS: HISTORY AND SOCIAL STUDIES

- **LH 2.1** Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
- **LH 2.2** Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
- **LH 3.3** Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.

- **LH 4.1** Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
- **LH 4.2** Evaluate an author’s premises, claims, and evidence by corroborating or challenging them with other information.
- **LH 5.1** Write arguments focused on discipline-specific content.
- **LH 5.2** Write informative texts, including analysis of historical events.
- **LH 6.1** Plan and develop; draft; revise using appropriate reference materials; rewrite; try a new approach, focusing on addressing what is most significant for a specific purpose and audience and edit to produce and strengthen writing that is clear and coherent.
- **LH 6.2** Use technology to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
- **LH 7.1** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- **LH 7.3** Draw evidence from informational texts to support analysis, reflection, and research.