4th Grade Indiana Academic Standards

(At-A-Glance)

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| **SCIENCE**Physical Science* Investigate transportation systems and describe the forces affecting their motion.
* Understand relationship of speed and energy.
* Investigate simple and compound machines.
* Investigate how to generate and convert energy into its different types, as well as how it moves from place to place with light, heat, sound, and electricity.

Earth & Space Science* Investigate the phases and movement of the moon and its effects on the planet.
* Investigate natural resources and various sources of energy, including fossil fuels.
* Describe how geological forces change the shape of the land suddenly and over time.
* Develop solutions for problems that arise from human-environment interactions.

Life Science* Understand basic genetics, adaptations, and evolution.
* Investigate how changes in the environment affect the populations of different species.
* Investigate different ecosystems and how species are adapted to survive in them.

Engineering* Identify problems with designs that reflect needs or wants. Include criteria for success, time, cost of materials, etc.
* Construct, compare, and evaluate multiple solutions to problems.
* Construct and perform fair investigations that control variables, then identify areas for improvement.

**HEALTH**Health & Wellness * Comprehend health promotion and disease prevention.
* Analyze influence of family, peers, culture, media, technology, and more on health behaviors.
* Access and apply valid health information.
* Use interpersonal skills to enhance health, including refusal skills and conflict resolution.
* Use decision-making skills to enhance health.
* Set health goals and monitor progress.
* Use health-enhancing behaviors to prevent injuries and diseases.
* Advocate for personal, family, & community health.

**LANGUAGE ARTS**Reading: Literature* Refer to details from text when making inferences.
* Paraphrase or retell main events in a story. Identify theme and provide evidence.
* Describe a character, setting, or event in a story or play, and describe how they impact the plot.
* Explain major differences between poems, plays, and prose, referring to their structural elements.
* Compare and contrast the points of view of stories.
* Describe how visual/multimedia representations can enhance the meaning of a text.
* Compare and contrast the treatment of similar themes, topics, and patterns of events in stories.

Reading: Nonfiction* Determine main idea and details of nonfiction texts, and explore/explain relationships of terms & ideas.
* Use text features to quickly locate information.
* Compare & contrast primary and secondary sources.
* Distinguish between fact and opinion.
* Combine information from multiple sources to better understand the topic.

Reading: Vocabulary* Use context clues to understand unfamiliar words.
* Identify relationships among words.
* Use prefixes, suffixes, roots to understand words.
* Consult reference materials to clarify & pronounce new words.
* Study homophones, homographs, synonyms, antonyms, multiple meaning words, and figurative speech (similes, metaphors, hyperbole, idioms, proverbs, adages, etc.) and how they enhance a work.

Writing* Write legibly in cursive and print.
* Write persuasive compositions in a variety of forms.
* Write informative compositions on many topics.
* Write narrative compositions in a variety of forms.
* Apply the writing process to generate drafts, revise and edit, interact & collaborate, and publish info.
* Conduct short research on topics.
* Demonstrate command of English spelling, grammar, punctuation, and usage. Correctly write simple, compound, and complex sentences.

Speaking & Listening* Listen and speak effectively for a variety of audiences and purposes. Create focused, organized, clear multimedia oral presentations.
* Engage in grade-appropriate collaborative discussions, including carrying out assigned roles.
* Pose and respond to questions and discussions.
* Review and summarize key ideas from discussions and presentations.

Media Literacy* Identify the purpose and reliability of information found in electronic, print, and mass media.
* Recognize claims and evidence presented in media.
 | **SOCIAL STUDIES**Geography* Use latitude & longitude as well as other map features to identify Indiana cities & features.
* Map and describe the regions of Indiana as well as resources and crop regions.
* Explain how glaciers shaped Indiana’s surface.
* Understand the seasons & climate of Indiana.
* Describe how geography has and continues to present challenges to the people of Indiana.
* Understand trade routes and their importance on the settlement of Indiana.
* Investigate immigration patterns and Indiana’s cultural diversity, as well as its relationship with the rest of the world.
* Read and compare maps and other texts of IN.

History* Investigate and analyze historical events in Hoosier history, including:
	+ Pre-European influence and Native Americans
	+ American Revolution & Indiana Territory
	+ Early Statehood & Growth
	+ Indiana’s place in the Civil War
	+ Indiana’s agricultural, industrial, transportation, and political growth and influence
	+ Indiana’s current businesses & technologies
	+ Create timelines, investigate primary resources, construct narratives, and research major places, people, and events of Indiana.

Civics and Government* Explain the purpose of Indiana’s Constitution and the rights people have according to Article I.
* Understand the three branches of state government, as well as other major state offices and how they are chosen.
* Explain civic responsibilities and virtues.
* Use resources to take a position on a public issue.

Economics* Identify Indiana goods and services over time, including emerging global connections.
* Define productivity and explain how technology and education have improved the productivity of Indiana.
* Understand how both parties benefit from trade and the functions of money. Develop a savings plan and create a budget.
* Understand the relationship between supply, demand, and prices. Define profit.
* Identify Indiana entrepreneurs.
* Identify goods and services provided by the state.

**MATH**Number Sense* Read, write, compare, and round whole numbers up to 1,000,000 in different forms.
* Express whole numbers as fractions.
* Convert mixed numbers to improper fractions (and vice versa).
* Understand equivalent fractions.
* Compare fractions with different denominators.
* Understand that you can only compare and manipulate two or more fractions if they refer to the same whole.
* Write tenths and hundredths as decimals & fractions in various ways, using words, numbers, and visual models.
* Compare decimals to hundredths.
* Find factor pairs and multiples for numbers and determine rules of divisibility.

Computation* Add and subtract multi-digit numbers fluently.
* Multiply 2x2 digit and up to 4x1 digit numbers.
* Divide, including with remainders in the quotients.
* Multiply fluently within 100. Understand the different properties of multiplication.
* Add and subtract fractions and mixed numbers.

Algebraic Thinking* Solve real-world problems with operations.
* Understand equations as comparisons and represent comparisons as equations.
* Solve SIMPLE problems with a variable, such as completing a function table. Understand and generate number patterns that follow rules.

Geometry* Identify, describe, and draw different quadrilaterals.
* Identify lines of symmetry.
* Identify, describe, understand, and draw specific rays, angles, lines, and polygons.
* Classify triangles and quadrilaterals according to sides and angles.

Measurement* Measure length to nearest ⅛ inch and millimeter.
* Understand and estimate measurements in various systems of units. Convert units.
* Use all four operations in solving word problems that deal with time, distance, money, etc.
* Understand and demonstrate how to measure angles using specified tools.

Data Analysis* Ask questions that can be addressed with data. Use observations, surveys, and experiments to collect data, then represent data using tables and graphs. Interpret data from various types of graphs.
* Make a line plot to display data in fractional increments. Use data from the line plot to answer questions.
* Interpret data displayed in a circle graph.
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