



# ARKANSAS REFRIGERATOR CURRICULUM FOR SEVENTH GRADE



## ENGLISH LANGUAGE ARTS \*

*Aligned to Common Core State Standards*

- Analyze how the form or structure of a play or poem contributes to its meaning
- Analyze how particular elements of a story or play interact (e.g., how the setting shapes the characters or plot)
- Determine how an author develops and contrasts the points of view of different characters or narrators in a text
- Conduct short research projects, drawing on several sources and identifying related questions for further research and investigation
- Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words)
- Engage in a range of discussions on topics and texts, expressing ideas clearly and building on the ideas of others
- Identify a speaker's argument and specific claims and evaluate the reasoning and evidence behind these claims
- Introduce a topic clearly, previewing what is to follow, and develop the topic with relevant facts, definitions, concrete details, quotations, or other information and provide a concluding statement when writing informative texts
- Write for a range of purposes and audiences

- Use precise language and subject-specific vocabulary to inform or explain the topic

## MATHEMATICS \*

*Aligned to Common Core State Standards*

- Analyze proportional relationships and use them to solve real-world problems in various ways, including using tables, graphs, and equations
- Identify the unit rate of change (the constant rate at which the value of a variable changes) in tables, graphs, equations, and verbal descriptions
- Determine whether two quantities are in a proportional relationship and use knowledge of rates, ratios, proportions, and percentages to solve multi-step problems (e.g., simple interest, tax, markups and markdowns)
- Solve problems using equations to find the value of one missing variable
- Describe situations in which positive and negative quantities combine to make 0 and understand that numbers cannot be divided by 0
- Solve multi-step word problems by adding, subtracting, multiplying, and dividing positive and negative rational numbers in any form (e.g., whole numbers, fractions, or decimals)
- Use variables to represent quantities and construct simple equations and inequalities (for example,  $5x + 2 > 10$ ) to solve problems

- Use properties of operations (add, subtract, factor, and expand linear expressions with rational coefficients) to generate equivalent expressions
- Draw, construct, and describe geometrical figures and describe their relationships
- Solve problems involving angle measure, area of two-dimensional objects, formula for circumference of a circle, and volume and surface area of three-dimensional objects

**You are your child's first and most important teacher. We value your support in building a solid foundation to prepare your child for school. This is a list of concepts and skills that will help your child be successful in seventh grade. This list is only a sample and does not include everything that will be taught throughout the year.**

\* Adapted from the Council of the Great City Schools Parent Roadmaps to Common Core Standards: <http://www.cgcs.org/domain/36>  
Additional resource: National PTA <http://www.pta.org/4446.htm>

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- Use random sampling to draw inferences about a population
- Draw informal comparative inferences about two populations
- Investigate chance processes and develop, use, and evaluate probability models

## SCIENCE

*Aligned to Arkansas Curriculum Frameworks*

- Discover how science explains the world around us
  - Research a science topic of interest
  - Plan and design a research project around the topic
  - Collect data about the topic
  - Use mean, median, and mode to analyze data
  - Create charts and graphs which accurately show the data
- Use a microscope for scientific observations
- Classify plants and animals into major groups
- Observe the life cycle of a butterfly or other common animal
- Identify the systems of the human body and their major functions
- Learn about the effects of heredity and the environment
- Identify natural resources used to supply energy needs
- Create models of common compounds: water, carbon dioxide, salt, iron oxide ammonia

- Identify various climate regions on a world map
- Study the career of a scientist, such as a climatologist or geneticist

## SOCIAL STUDIES

*Aligned to Arkansas Curriculum Frameworks*

- Compare the influence of geographic locations on early civilizations
- Interpret the information on specific types of charts, maps, and graphs
- Use maps and pictures from different periods to illustrate changes in a place due to migration
- Demonstrate examples of cultural exchange throughout history
- Explain how, in different regions of the world, belief systems influence traditional attitudes toward land use
- Examine how regional differences or similarities may lead to cooperation or conflict
- Investigate the infrastructure of population centers
- Discuss different forms of executive leadership in civilizations
- Discuss individuals and their changing contributions to governments

- Investigate the significance of icons, artifacts, and symbols of civilizations using primary and secondary sources
- Examine ways in which viewpoints expressed in primary and secondary source documents have changed over time
- Sequence significant historical events on a timeline to make predictions

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