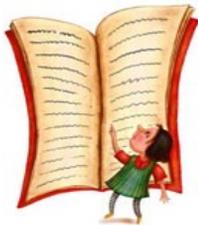


## MATHEMATICAL PRACTICES

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Attend to precision.
- Model with mathematics.
- Use appropriate tools strategically.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.



PRAIRIE-HILLS ELEMENTARY SCHOOL DISTRICT 144  
3015 W. 163RD STREET      PHONE: (708) 210-2888  
MARKHAM, IL 60428      FAX: (708) 210-9925  
WWW.PHSD144.NET

*Dear Parents/Guardians:*

*The goal of Prairie-Hills Elementary School District 144 is to provide an enriching and rigorous academic program that ensures the success of all students. The summarized expectations listed in this pamphlet embodies our collective belief that all PHESD144 students will become effective, strategic readers and mathematical thinkers so that they can succeed academically, pursue higher education, find challenging and rewarding work, participate in our democracy as informed citizens, appreciate and contribute to our society, and pursue their own personal goals and interests throughout their lives.*

*Working in partnership with our educational staff, our parents are becoming familiar with the Common Core standards to better understand district and state expectations in reading in math. It is our desire that this summarized version of the expectations will help you converse with the educational staff and enable you in your endeavors to help your child succeed academically.*

***This snapshot of the standards does not encompass all of the Common Core standards that are reviewed by the staff of PHESD144 for the school year. For detailed information regarding the Common Core standards, please visit the [www.corestandards.org](http://www.corestandards.org) website or visit [phsd144.net](http://phsd144.net) to review our curriculum maps.***

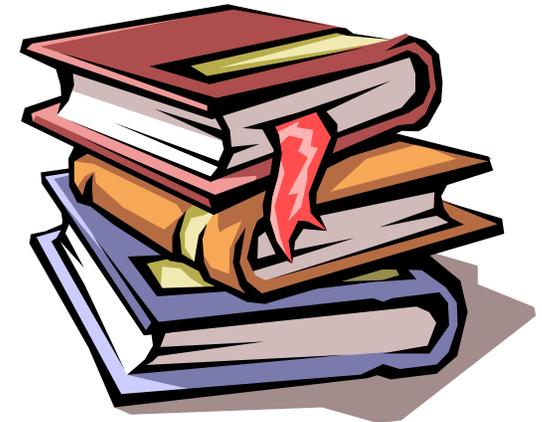
PRAIRIE-HILLS ELEMENTARY  
SCHOOL DISTRICT 144



Today's Students.....

Tomorrow's Leaders

## A SNAPSHOT OVERVIEW of Eighth Grade Grade Level Expectations



## ENGLISH LANGUAGE ARTS

In grade eight, students will read major works of fiction and nonfiction from all over the world and from different time periods. They will continue to learn how to understand what they read and evaluate an author's assumptions and claims. They will also conduct research that will require the analysis of resources and accurate interpretation of literary and informational text. Here are just a few examples of how your child will develop important reading skills across grade levels.

### LITERATURE

- Students determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot. Students also provide an objective summary of the text.
- Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.

### INFORMATIONAL TEXT

- Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).
- 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.
- Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.
- By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6-8 text complexity band independently and proficiently.

### LITERACY IN HISTORY/SOCIAL STUDIES

- Students will identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered).

- Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- Distinguish among fact, opinion, and reasoned judgment in a text.

### LITERACY IN SCIENCE/TECHNICAL SUBJECTS

- Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
- 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*.
- 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).
- Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
- Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

### WRITING

- Write arguments to support claims with clear reasons and relevant evidence.
- Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
- Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.
- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

- Draw evidence from literary or informational texts to support analysis, reflection, and research.
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

## MATHEMATICS THE NUMBER SYSTEM

- Know that there are numbers that are not rational, and approximate them by rational numbers.

## EXPRESSIONS and EQUATIONS

- Work with radicals and integer exponents.
- Understand the connections between proportional relationships, lines, and linear equations.
- Analyze and solve linear equations and pairs of simultaneous linear equations.

## FUNCTIONS

- Define, evaluate, and compare functions.
- Use functions to model relationships between quantities.

## GEOMETRY

- Understand congruence and similarity using physical models, transparencies, or geometry software.
- Understand and apply the Pythagorean Theorem.
- Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.

## STATISTICS and PROBABILITY

- Investigate patterns of association in bivariate data.