



What your child will learn in Grade 5

5

INSIDE

| Math | Reading

Science | Social Studies | Encore Classes

Lower Merion School District ♦ 301 E. Montgomery Ave. ♦ Ardmore, PA 19003



Grade 5 Mathematics

	Concepts	Vocabulary	Numerical Fluency	Problem Solving
What your child will learn	<ul style="list-style-type: none"> •The place value system including powers of 10 and decimals •Operations with multi-digit whole numbers, fractions and with decimals •How to write and interpret numerical expressions •How to analyze patterns and relationships •Characteristics and properties of two- and three dimensional shapes •Conversions of measurements within a given system •Basic concepts of probability or outcomes •Concepts of area, perimeter and volume •Concepts of transformation and symmetry •How to represent data using appropriate scale 	<ul style="list-style-type: none"> • Read and comprehend mathematical vocabulary in isolation and in context. • Use formal and informal language to describe and discuss mathematical concepts and skills • Relate informal language to mathematical language and symbols • Communicate orally and in writing using mathematical language 	<ul style="list-style-type: none"> •Develop mental math strategies to add, subtract, multiply and divide •Mentally round and estimate •Use different strategies fluently to compute answers 	<ul style="list-style-type: none"> •Investigate and solve real world problems •Formulate a plan to solve a given problem •Apply efficient strategies to solve problems •Use logical reasoning •Use mental estimation to determine reasonableness of answers
What your child will do	<ul style="list-style-type: none"> •Use clear and concise notation •Compare quantities or magnitudes of numbers •Express numbers in equivalent forms •Apply estimation strategies to a variety of problems •Use whole numbers, fractions and decimals to compute accurately in various operations •Create, extend and analyze patterns •Organize, display and answer questions based on data, either given or gathered •Use graphs and tables to represent and describe change •Select and use appropriate statistical methods to analyze data (mean, median, mode, range) 	<ul style="list-style-type: none"> • Explore concepts through discussions with partners, small groups and within the class • Translate mathematical symbols into mathematical language • Justify conclusions, communicate them to others and respond to the arguments of others using math vocabulary 	<ul style="list-style-type: none"> •Play games learned in class that require strategy and reinforce basic facts •Engage in mental math exercises •Apply basic facts within the context of story problems •Use various strategies to solve problems in all four operations 	<ul style="list-style-type: none"> •Apply reading comprehension strategies to word problems •Demonstrate fluency with more than one strategy to solve problems accurately and efficiently •Distinguish between one-step and multi-step problem •Show and or explain thinking orally and in writing •Make sense of problems and persevere in solving them

Grade 5 Mathematics

	Concepts	Vocabulary	Numerical Fluency	Problem Solving
What you'll see (Products)	<ul style="list-style-type: none"> An increased enthusiasm for mathematics An increase in opportunities to communicate mathematically Projects that require the application of concepts Homework sheets and games that correlate to concepts being taught 	<ul style="list-style-type: none"> Graphic organizers or journal entries that explain mathematical terms Assignments that require students to use mathematical vocabulary in a variety of contexts 	<ul style="list-style-type: none"> Assignments that include computation Problems solved using a variety of strategies Improvement in basic fact recall 	<ul style="list-style-type: none"> Self-generated story problems Written explanations of solutions Applications of problem-solving strategies outside of the classroom
How you can help	<ul style="list-style-type: none"> Ask your child to explain what was learned in math today Cook with your child and allow them to measure and compare quantities of ingredients Estimate and figure out the amount of time to complete an activity or the elapsed time between activities Point out math in games, sports, music, banking, schedules, shopping, etc. Refer to the District math eBoard for websites that further enhance understanding of concepts and/or provide additional practice 	<ul style="list-style-type: none"> Talk about math and how it is used everyday Encourage your child to explain his or her homework strategies and solutions to you using appropriate mathematical terms Relate vocabulary words to real-world objects and experiences 	<ul style="list-style-type: none"> Assist your child in utilizing websites and/or apps to increase fact recall in all operations Practice fact recall while waiting in line, driving in the car, etc. Encourage the use of First in Math to practice math facts and other important math concepts Ask your child to explain strategies used in computation 	<ul style="list-style-type: none"> Read a variety of material to your child and ask him or her questions pertaining to the content Play board games, card games or other games with your child that require decision making and reinforce reasoning and problem solving skills During homework ask "What do you know that will help you solve the problems?" and "Does the answer makes sense?"

Grade 5 Reading

	Reading Comprehension	Reading Fluency	Vocabulary	Writing
What your child will learn	<ul style="list-style-type: none">• Summarize key ideas and details in literature and informational texts.• Demonstrate understanding of craft and structure in literature and informational texts.• Make connections within, between, and/or among texts.• Identify and judge how authors use reasoning and evidence to support their ideas.• Integrate information from several sources to answer questions.	<ul style="list-style-type: none">• Read with accuracy and fluency to support comprehension	<ul style="list-style-type: none">• Understand vocabulary, figurative language, word relationships, and nuances in word meanings in literature and informational texts.• Determine or clarify the meaning of unknown and multiple-meaning words and phrases, choosing flexibly from a range of strategies.• Build knowledge of academic words	<ul style="list-style-type: none">• Write informative/explanatory and opinion pieces on topics or texts, supporting a point of view with reasons and information.• Write narratives (real or imaginary), using effective technique, descriptive details, and clear event sequences.• Draw evidence from literary or informational texts to support analysis, reflection, and research.• Demonstrate command of grammar and usage, capitalization, punctuation, and spelling.

Grade 5 Reading

	Reading Comprehension	Reading Fluency	Vocabulary	Writing
What your child will do	<ul style="list-style-type: none"> Quote accurately from a text when explicitly explaining, when drawing inferences, and/or making generalizations from the text. Determine a theme of a story or poem from details in the text. Summarize literature and informational texts. Compare and contrast two or more characters, settings, or events drawing on specific details from literature or informational texts. Describe how point of view influences how events are described; describe author's purpose and explain how it is conveyed in literature or informational texts. Compare and contrast stories and their overall structure on their approaches to similar themes and topics. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. Integrate information from several texts on the same topic in order to demonstrate subject knowledge. Interpret text features and/or make connections between text and the content of text features. Take part in conversations by linking his/her comments to the remarks of others and asking and answering questions to gather a deeper understanding of the topic. 	<ul style="list-style-type: none"> Orally read on-level text 124 words per minute (by end of year) Read on-level text with purpose and understanding Read on-level text orally with accuracy, appropriate rate, and expression on successive readings Use context to confirm or self-correct word recognition and understanding, rereading as necessary 	<ul style="list-style-type: none"> Use context as a clue to the meaning of a word or phrase. Use common, grade-appropriate Greek and Latin prefixes, suffixes, and roots as clues to the meaning of a word. Interpret figurative language in context. Distinguish the literal and nonliteral meanings of words and phrases in context. Recognize and explain the meaning of common idioms, adages, and proverbs. Use the relationship between particular words to better understand each of the words. 	<ul style="list-style-type: none"> Introduce a topic or text for the audience, provide a focus, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. Develop the topic with facts, definitions, concrete examples, quotations, or other information related to the topic. Use narrative techniques, such as dialogue, description, and pacing. Use precise language, concrete words and phrases, and sensory details. Link ideas using words, phrases, and clauses. Establish and maintain a formal style. Provide a concluding section. Spell grade-appropriate words correctly. Choose words, phrases, and punctuation to convey ideas precisely.

Grade 5 Reading

	Reading Comprehension	Reading Fluency	Vocabulary	Writing
What you'll see (Products)	<ul style="list-style-type: none"> Oral and/or written responses to reading that show understanding of the story. 	<ul style="list-style-type: none"> Read silently before reading aloud. Repeated readings for fluency. 	<ul style="list-style-type: none"> Vocabulary intertwined with weekly stories Vocabulary word cards/activities 	<ul style="list-style-type: none"> Five-step writing process Variety of products written in different genres (Informational, Persuasive, Narrative) Use of mentor texts to develop author's craft
How you can help	<ul style="list-style-type: none"> Provide a comfortable place to read. Supply/Read with your child more non-fiction text. Read multiple books on the same topic with your child. Ask open-ended questions. Discuss texts and their ideas. Encourage evidence in everyday discussions and disagreements. Take your child to the public library regularly. Check out programs libraries offer. Talk with your child about what s/he is reading. Take your child to bookstores when author visits occur. Let your child see you reading! 	<ul style="list-style-type: none"> Have your child read aloud at home. 	<ul style="list-style-type: none"> Help your child learn new words during everyday activities. Read aloud to your child. Play word games with your child. Make a game out of finding mistakes in signs and ads. Have a "Word of the Day." Discuss/learn as a family. 	<ul style="list-style-type: none"> Encourage your child to write letters to family members. Provide writing materials. Encourage your child to write in a journal. Send postcards if traveling.

Grade 5 Science

What your child will learn	<p>Geology is the study of our planet's earth materials and natural resources. Because they are so ubiquitous and abundant, they are often take for granted. The FOSS Soils, Rocks, and Landforms Module provides students with firsthand experiences with soils, rocks, and minerals, and modeling experiences to study changes to rocks and landforms at Earth's surface.</p> <p>The FOSS Motion, Force, and Models Module has four investigations that focus on the physical science concepts of force and motion and provide students with in-depth experiences with scientific and engineering practices.</p> <p>The FOSS Living Systems Module has four investigations that focus on systems as the unit of study. The idea of a system is one of the grand integrating (cross-cutting) concepts that pervades all of science. Students start by looking at Earth as the interaction of four Earth systems or subsystems the geosphere, the atmosphere, the hydrosphere, and the biosphere. The focus of the module then turns to the biosphere as students explore ecosystems and organisms in terms of their interacting parts.</p>
What your child will do	<p>In the Soils, Rocks and Landforms module, students will:</p> <ul style="list-style-type: none">• Investigate the processes of physical and chemical weathering of rocks and minerals.• Observe and compare the shapes of leaves; compare leaf shapes to geometric shapes.• Investigate the composition of soils from four different locations; observe and compare local soils.• Observe weather by using senses and simple tools.• Use stream tables to investigate how the slow processes of erosion and deposition alter landforms; predict the results of a student-designed stream-table investigation, and then compare actual results to predictions.• Use physical tools and a table of diagnostic properties to make observations and identify minerals in common rocks.• Make observations and interpret them to develop explanations in the way that scientists do.• Observe how earth materials are used in the community around school, and consider the ways people impact natural resources.• Use reading strategies to comprehend nonfiction texts• Write to demonstrate understanding of concepts

Grade 5 Science

What your child will do

In the **Motion, Force and Models** module, students will

- Design and conduct controlled experiments to find out what variables affect the transfer of energy.
- Observe beetles, moths, and butterflies change from larvae to pupae to adult. Observe insect mating and egg laying.
- Use data and logic to construct and communicate reasonable explanations about forces and motion.
- Work with others as scientists and engineers to create conceptual and physical models to explain how something works.
- Compare plant and animal life cycles.
- Make predictions about the moth and butterfly life cycles, based on observations of other insects.
- Plan designs, select materials, construct products, evaluate, and improve ideas to meet specific criteria.
- Use reading strategies to comprehend nonfiction texts
- Write to demonstrate understanding of concepts.

In the **Living Systems** module, students will:

- Analyze everyday systems and subsystems.
- Analyze food chains and food webs as a way to study the biosphere.
- Make and analyze a worm habitat as a decomposition system.
- Investigate nutrient-getting systems of yeast, plants, and animals, including humans.
- Investigate and model transport systems in plants and animals.
- Investigate sensory systems in animals.
- Use reading strategies to comprehend nonfiction texts
- Write to demonstrate understanding of concepts

Grade 5 Science

What you'll see (products)

- Science Readers
- Science Notebooks with recorded observations, drawings, diagrams and predictions
- Science vocabulary
- Math concepts
- Home and School Connection activities
- Family letters for each module
- Safety Rules and Procedures

How you can help

- Use family discussions to review concepts taught in school
- Read the Family Letter that provides suggestions for follow-up activities at home
- Do the Home and School Connection Activities noted in each of the modules
- Read about Science with your child
- Review and discuss the Science Notebook with your child
- Visit FOSSweb with your child for additional engaging activities for parents and students
- Listen to your child and engage him/her on STEM topics that interest him/her
- Visit the library and science museums

Grade 5 Social Studies

What your child will learn	<ul style="list-style-type: none">• Overview of migration & exploration• Colonization• Building a new nation• The Constitution• Geography
What your child will do	<ul style="list-style-type: none">• Participate in whole and small group discussions and collaborative activities• Build specific grade level vocabulary words and concepts• Use maps, globes, and other resources to study geography• Read and discuss texts, primary documents, and other resources related to the topic• Research utilizing both print and digital sources• Use reading strategies to comprehend fiction and nonfiction texts
What you'll see (Products)	<ul style="list-style-type: none">• Presentations of ideas and information• Graphic organizers, timelines, graphs, maps, and charts of information and ideas• Supplemental Reading materials• Readings summarized and restated in his/her own words
How you can help	<ul style="list-style-type: none">• Encourage your child to read books about the topics taught in school• Take your child to visit the library, museums, and historical sites• Encourage map reading on outings• Guide and encourage your child in his/her effort to complete a task• Listen to and engage your child on concepts taught and topics of interest to him/her

Grade 5 Encore Classes

FLES (Foreign Language in the Elementary School)

What your child will learn	What your child will do	What you'll see and hear (products)	How you can help
Review and recycling of basic concepts from previous years.	Greetings, Calendar, Weather, Colors, Shapes, Family, Animals, Basic Directions	<ul style="list-style-type: none"> • Songs • Posters • Dialogues • Technology-based projects • Graphic organizers • Role playing • Games in target language • Activity sheets • Online activities • Mini books • Oral presentations • School-wide activities 	<ul style="list-style-type: none"> • Become knowledgeable about the program. • Encourage your child to speak the target language outside of school. • Look for the target language and its culture in your own community. • Encourage your child to read in the target language. • Expose your child to a variety of media in the target language. • Volunteer and participate in school-wide language events. • Celebrate your child's success.
Food and Nutrition	Identify and describe foods and components of a balanced meal.		
Body Parts	Identify and describe body parts.		
Geography	Label countries, and capital cities where the target language is spoken.		
Verbs	Recognize verbs in the infinitive form and the present tense.		
Subject Pronouns	Identify subject pronouns.		
Time	Ask and tell time using digital and analog clocks.		
Culture	Explore cultural components of countries where the target language is spoken.		

Grade 5 Encore Classes

	Music - Band	Music - Vocal
What your child will learn	<ul style="list-style-type: none"> • Students will learn the fundamentals of music performance. • More specifically that music is organized sound and silence that consists of a steady beat grouped in meter. • Students will learn the proper technique to produce a characteristic tone quality, as well as effective practice strategies and techniques. • Through concert rehearsals and performance students will collaborate with their peers as they work together toward the common goal of a polished musical performance. 	<p>Students will explore rhythmic, melodic, and harmonic elements of music as well as tone color, form, and expressive elements in music. This includes continued study of more complex rhythms and compound meter, modes, countermelody, triads and beginning harmony. Students further explore classroom instruments, music ensembles, expressive elements of conducting, and large forms of music in historical periods (i.e. opera, blues, jazz).</p>
What your child will do	<ul style="list-style-type: none"> • Demonstrate proper assembly, playing position and care of the instrument. • Produce a tone which is characteristic of the instrument • Demonstrate knowledge of rhythmic and tonal notation • Students will learn to listen, analyze and evaluate music and music performances 	<p>Students will sing in harmonic parts including rounds, partner songs, descants, and two-part harmony. They will play classroom instruments and move to music. Students will also read, listen to, and analyze music.</p>
What you'll see (Products)	<ul style="list-style-type: none"> • Music and technical development. • With consistent practice at home students will refine the skills and concepts they learn in school. 	<p>This grade level has the opportunity to perform vocally and instrumentally in concert as well as in classroom performances. They will use music terminology appropriately. Additionally, there are opportunities for students to perform publicly for the school community. Students will sing in harmonic parts including rounds, partner songs, descants, and two-part harmony. They will play classroom instruments and move to music. Students will also read, listen to, and analyze music.</p>
How you can help	<ul style="list-style-type: none"> • Provide a setting at home for your child to practice (music stand, chair, etc.) • Encourage your child to set aside time each week to practice • Be a supportive audience for your young performer • Celebrate your child's success 	<p>Sing a song or share an activity from Music class Foster musical appreciation by attending concerts, recitals, and other live music opportunities Encourage students to study an instrument and join a school music ensemble. Support students in their musical practice and concert preparations.</p>

Grade 5 Encore Classes

	Art
What your child will learn	Your child will build on their prior knowledge of the design elements. They are introduced to perspective, motif patterns, value including light sources and shadows, unity, 3-D geometric forms, volume, movement, analogous colors, radial symmetry, texture within pattern, rhythm, and contrast.
What your child will do	Your child will explore a wide variety of media while creating paintings, drawings and sculptures. They will identify and create texture in an artwork within these media.
What you'll see (Products)	Your child's portfolio will show examples of both 2-dimensional and 3-dimensional artwork.
How you can help	You can help by practicing manipulative skills at home, reinforce key ideas learned and exposing them to art in your community. Contact your school for volunteer opportunities.

Grade 5 Encore Classes

Physical Education	
What your child will learn	<ul style="list-style-type: none"> • conflict resolution • safe practices in physical activity settings • individual responsibility for safety during various activities • engage in physical activities that promote physical activity and health • good sportsmanship • the positive effects of regular participation in moderate to vigorous physical activity • applying ways to monitor and assess body responses during physical activity • factors that affect childhood physical activity practices • reasons why regular participation in physical activities improves motor skills <ul style="list-style-type: none"> • recognize positive and negative interactions of small group activities • how to apply basic movement skills and concepts to create and perform movement sequences and advanced skills • how to identify and apply concepts of motor skill development to a variety of basic skills • the relationship between practice and skill development • how to apply exercise principles to the components of health and skill-related fitness • know and describe scientific principles that affect movement and skills using appropriate vocabulary • how to apply game strategies to basic games and physical activities
What your child will do	<ul style="list-style-type: none"> • participate in all aspects of physical education class to improve physical fitness and health • follow safe practices during physical activities • engage in individual, small group, team and whole group activities • practice skills taught during physical education class • use teacher feedback to improve physical fitness and practice skills taught during physical education class.
What you'll see (Products)	<ul style="list-style-type: none"> • develop motor skills such as running, hopping, jumping, skipping, sliding, galloping • develop confidence • acquire an appreciation for physical activities • develop cooperative skills
How you can help*	<ul style="list-style-type: none"> • promote healthy lifestyle choices in relation to nutrition, fitness, hygiene, sleep etc. • visit your local community centers to become involved in activities • advocate to increase active play time and reduce screen time

Grade 5 Guidance / Holistic Supports

Second Step

What your child will learn	What your child will do	What you'll see and hear (products)	How you can help
Unit 1: Empathy and Skills for Learning	<ol style="list-style-type: none"> Empathy and Respect Listening with Attention Being Assertive Predicting Feelings Taking Others' Perspectives Accepting Differences Disagreeing Respectfully Responding with Compassion 	<ul style="list-style-type: none"> Define <i>empathy</i> Define <i>respect</i> Demonstrate listening-with-attention skills Identify passive, aggressive, and assertive responses Demonstrate assertive responses with their partners Predict how others might feel as a result of their or another's actions State the cause and effects of a given action Demonstrate the ability to take someone else's perspective. Identify similarities and differences between two people Define <i>prejudice</i> Distinguish between respectful and disrespectful ways to disagree Communicate their own perspectives Demonstrate skills for disagreeing respectfully Demonstrate knowledge of how to respond with compassion 	<ul style="list-style-type: none"> Home links are simple, fun activities for you and your child to complete together. They are a great way for you to understand what your child is learning and for your child to show you what they know. Make sure to join www.secondstep.org with activation key for your child's grade level. 5th grade activation key is SSP5 FAMILY75

Grade 5 Guidance / Holistic Supports

Second Step

What your child will learn	What your child will do	What you'll see and hear (products)
Unit 2: Emotion Management	9. Introducing Emotion Management 10. Calming Down 11. Managing Anxiety 12. Managing Frustration 13. Resisting Revenge 14. Handling Put-Downs 15. Avoiding Assumptions	<ul style="list-style-type: none"> • Describe what happens in their brains and bodies when they experience strong emotions • Identify a personal signal • Identify and name strong feelings • Identify situations in which they might need to calm down • Learn the technique for deep, centered breathing • Identify and demonstrate other Calming-Down Strategies (using positive self-talk, counting, taking a break) • Identify social situations that can cause anxiety • Apply what they've learned about calming down in scenarios causing social anxiety • Identify physical signs of frustration • Demonstrate reducing frustration by using the Calming-Down Steps • Identify consequences of revenge • Generate alternatives for seeking revenge • Demonstrate using the Calming-Down Steps • Identify strategies for handling put-downs • Demonstrate what they've learned about the Calming-Down Steps • Demonstrate assertive responses to put-downs • Identify emotion-management strategies • Demonstrate Assertiveness Skills • Identify and use positive self-talk statements to avoid making assumptions

Grade 5 Guidance / Holistic Supports

Second Step

What your child will learn	What your child will do	What you'll see and hear (products)
<p>Until 3: Problem Solving</p>	<ul style="list-style-type: none"> 16. Solving Problems, Part 1 17. Solving Problems, Part 2 18. Making a Plan 19. Seeking Help 20. Dealing with Gossip 21. Dealing with Peer Pressure 22. Reviewing Second Step 	<ul style="list-style-type: none"> • Recall the S: Say the problem step of the Problem-Solving Steps • State the problem without blaming anyone • Generate safe and respectful solutions to a problem • Identify consequences of potential solutions • Select an appropriate solution to a problem • Explain the purpose of making a plan • Create a three-step plan to carry out a solution to a problem • State the Problem-Solving Step • Demonstrate using Assertiveness Skills when seeking help • Identify why some gossip is harmful • Generate ideas for refusing or avoiding harmful gossip • Demonstrate using the Problem-Solving Steps to deal with gossip • Demonstrate using assertiveness skills to resist peer pressure • Demonstrate using the Problem-Solving Steps to figure out ways to resist peer pressure • Identify Second Step skills and concepts and being used in scenarios students might encounter at school • Include Second Step skills in a written script about solving a problem

Grade 5 Guidance / Holistic Supports

	What your child will learn	What your child will do	What you'll see and hear (products)	How you can help
No Place for Hate	<ul style="list-style-type: none"> The No Place for Hate program was developed by the Anti Defamation League to organize communities to participate in projects that encourage an awareness of differences as well as to encourage acceptance 	<ul style="list-style-type: none"> To appreciate individual and group differences. To have honest and respectful conversations and interactions in order to develop connections with other students and school staff 	<ul style="list-style-type: none"> The No Place for Hate® campaign empowers schools to create projects to help children to learn about the differences of others and to work together to build a community where everyone can feel safe and happy at school 	<ul style="list-style-type: none"> At home, you are encouraged to continue the discussion about diversity and to foster a sense of all belonging in the Lower Merion School District