

Additional Resources and Information for Parents

The International Reading Association is an organization that focuses on literacy. Each year, they poll students to learn about their reading interests and compile a list of favorites. The titles of a variety of quality books chosen each year by children can be found at:

<http://www.reading.org/resources/booklists/childrenschoices.aspx>

Sponsored by The Education Resource Center in Cambridge, Massachusetts Mixing In Math offers examples of activities to build the mastery of mathematics concepts into everyday life. Interesting games and activities can be found at:

<http://mixinginmath.terc.edu/materials/actlist.cfm>

The series used to teach mathematics in the Worcester Public Schools, Everyday Math is published by the University of Chicago. Their website offers interesting activities and projects to enhance math learning.

<http://everydaymath.uchicago.edu/>

Houghton Mifflin is the publisher of the reader series used by the Worcester Public Schools. They have an excellent website with suggestions for books to complement schoolwork.

<http://www.eduplace.com/parents/hmr05/>

The University of Wisconsin publishes a list of quality books that feature characters from a range of cultures. Their website is:

<http://www.education.wisc.edu/ccbc/books/detailListBooks.asp?idBookLists=42>

Sources for this publication

Council of Chief State School Officers
National Governor's Association
National Parent Teachers Association
Common Core State Standards Initiative
The Massachusetts Department of Education



Getting There: A Marathon, not a Sprint!

A Parent's Guide to the Curriculum in Grades K-6



Worcester Education Collaborative



Pieces of a puzzle, people coming together around a table, an apple of a different color. The Worcester Education Collaborative's logo makes a statement about who we are, the work we do, and how we do it.

The Worcester Education Collaborative has as its mission *to engage our community in fulfilling its responsibility to ensure that excellence in education is available to all public school students and that they are prepared for success in college, career, and life.* We are an independent advocacy organization that works to ensure that public school students are given the opportunity to succeed at the highest level and to acquire the skills and knowledge to master the challenges of the 21st century. We are non-profit and non-partisan, and our work stems from the belief that excellence in education results from aligned and meaningful partnerships among schools, families, and the community.

We accomplish this work in our multiple roles as

- A *partner* to the public schools
- An *advocate* for and champion of schools, teachers, parents, and students
- A *disseminator* of critical information about our schools and of best and promising practices in education for all children
- A *supportive critic* of our schools and our community in the work to educate children
- A *cultivator* of leaders

A Note to Parents

Dear Parents,

Congratulations!! Your child has embarked on a long, exciting journey, leading from childhood to independence in the world. There will be many twists and turns in the road, a few obstacles to overcome, and some important gateways to pass through. But our mutual goal is to prepare your child for success in college, career, and life.

This booklet focuses on elementary school and will help you to understand the minimum set of skills and knowledge that your child needs to master in grades K-6. Each step along the way is clearly marked so you can see for yourself whether your child is ready to proceed to the next step. It is organized by grade with the key foundation standards in English Language Arts and Mathematics noted. Visit <http://www.doe.mass.edu/frameworks/current.html> for a detailed description of the new frameworks by grade in both subjects. Following that are ideas for activities and outings that will both reinforce and expand upon the skills and knowledge emphasized at each grade level and give your child a sense of the broader world. Many of the activities listed in the earlier grades such as reading everyday, identifying a quiet place for school work or related activities, limiting television and video to quality programs are applicable across all of the grades.

Sincerely,

The Worcester Education Collaborative

About the Core Curriculum and the New Massachusetts Frameworks

Language: Reading, Writing, Speaking, and Listening

Literacy refers to the set of skills necessary to read, to write, to speak and listen attentively. It refers to the ability to take in as well as to pass on both information and ideas from a range of sources to increase knowledge, expand thinking, and to understand a host of ideas.

In each grade in the New Massachusetts Frameworks, coursework is aimed at assuring that students are building the skills in reading, writing, speaking, and listening that are the foundation for expression in language.

The Common Core in reading, writing, and listening was written to assure that students over the course of their years of schooling are

- Developing the ability to master and learn from texts of steadily increasing complexity, to make connections between ideas, to consider broader and more complex evidence and to discern inconsistencies, ambiguities and faulty reasoning in texts
- Developing correct and increasingly sophisticated writing skills
- Developing increasingly sophisticated research skills using a variety of sources
- Developing sound, flexible interpersonal and oral communication skills
- Developing a broad, robust vocabulary and understanding of the rules of formal written and spoken English

Mathematics

Over the past several years, a new word-numeracy has begun to be used to emphasize the important idea that a real understanding of arithmetic and mathematics requires more than just ease with operations and formulas. Numeracy, like literacy, implies a firm understanding of the principles of arithmetic and mathematics, the ability to analyze and see relationships between numbers and formulas, and to see the role that various conventions have in representing both the developing abstract and the concrete. The New Massachusetts Frameworks in Mathematics are designed to provide students with the opportunities to learn and build upon skills over time and to apply them to abstract and real world problems.

The Core Standards/ New Massachusetts Frameworks were developed to assure that over the course of their education students are confident and proficient in:

- Making sense of problems and persevering in solving them
- Abstract and quantitative reasoning
- Using data to construct viable arguments and critique the arguments or findings of others
- Constructing mathematical problems and using mathematics to solve problems in everyday life
- Using the tools of mathematics (calculators, computers, compasses, protractors etc) appropriately and effectively
- Looking for and make use of structure in mathematical formulas
- Looking for, identifying and making use of repeating mathematical patterns

And now let's get on with a description of the basics that your child should know and be proficient in at the end of each grade.

YOUR KINDERGARTNER

The **Kindergartner** is still touched by the magical thinking of childhood: He may wonder, for example, whether Superman or Tooth Fairy is real... Yet children finishing Kindergarten have absorbed all sorts of information about the real world around them, and are curious to learn more!!

What your kindergarten 'graduate' should know and be able to do:

In English and Language Arts: Reading, Writing, Speaking, and Listening

- Listen to a story from beginning to end, and with your help be able to describe the main characters and what the story is about
- With your help, explain how events of the story connect, especially cause-and-effect. For example, in a story if Joey's scrapes his knee, your child should understand why Joey starts to cry
- Ask questions about new and unfamiliar words
- Tell about the pictures in the book and explain how the pictures relate to the story
- Understand and be able to explain the role of the author, the illustrator, and the title of a book
- Retell familiar stories from memory. To retell, your child should refer to characters, setting, and events of the story
- With your help, "read" and understand simple texts that help children begin to match letters and sounds. The Dr. Seuss book *Hop on Pop* is an excellent example of book for a beginner reader
- Read simple non-fiction informational books with help

In Mathematics

- Counting objects to tell how many there are
- Comparing two groups of objects to tell which is larger and which a lesser quantity
- Understanding written numbers and quantities
- Acting out addition and subtraction word problems and drawing diagrams to represent them

- Adding with a sum of 10 or less; subtracting from a number 10 or less; solving addition and subtraction word problems
- Adding and subtracting single digit numbers
- Correctly naming shapes

What you can do to help your child master these skills:

- Limit TV viewing and computer use to high quality material
- Talk with your child about what she sees on television or hears on the radio
- Keep a wide assortment of books available in your home. The Worcester Public Library has a strong collection for children with many choices available for free use.
- Let your child choose some of the books, and talk about his choices before, during, and after reading
- Read with your child daily, and talk about the story
- Help your child learn new words and their meanings
- Work on puzzles
- Play "I Spy Shapes" or other games with your child when on walks or driving
- Count common objects in the home
- Identify numbers in daily activities

Consider a family trip:

- The Higgins Armory Museum, 100 Barber Avenue (Knights Armor!)
- Ecotarium, 222 Harrington Way, (Science and Nature)
- Audubon Society Broad Meadow Brook Sanctuary, 414 Massasoit Road (Science and Nature)

YOUR FIRST GRADER

Your **First Grader** is well on the way to learning one of the most important skills human beings have ever acquired: how to read!

Reading opens up the world to a child, expanding his experience in time and space, stretching his boundaries in many ways. It is of utmost importance that your child learns to read well and fluently by the end of third grade, so that he may access the many opportunities available throughout school. And the important work of a first grader sets a firm foundation for mastery of this skill.

What your first grade 'graduate' should know and be able to do:

In English and Language Arts: Reading, Writing, Speaking, and Listening

- Match letters to their sounds, and begin to understand how letters and sounds form words. This is sometimes called phonics
- Describe the characters, setting, and major events in a story. Understand that stories have beginnings, middles, and ends
- Read basic texts for information, and be able to pull the information from the text. Understand that reading for information does not require reading from beginning to end. Identify parts of an informational text such as the Table of Contents, captions, headings, and subheadings
- For example, a book about winter snow explains that ice is frozen water. An illustration may have a caption to identify it
- Use the information from the text to write simple sentences about the topic
- Work with others in class on a group research project
- Participate in class discussion by taking turns, listening to others, offering comments, asking questions, and responding to what others have said
- Speak in full sentences, describe people, places, things, and events using original observation of detail
- Write several simple sentences on a topic

- Understand the meaning of an unfamiliar word by using clues in the context. For example, Terry found the papayas near the apples and oranges in the grocery store.
- Understand differences between words of similar meaning, and also different meanings of the same word. For example, grin, beam, and smirk, are ways of smiling.

In Mathematics

- Solving addition and subtraction word problems
- Adding with a sum of 20 or less; subtracting from a number of 20 or less
- Understanding place value
- Using place value to add and subtract
- Measuring
- Making composite shapes
- Dividing circles and rectangles into halves or fourths
- Telling and writing time
- Working with money

What you can do to help your child master these skills:

- Identify a quiet place where your child can do homework, special projects, read, or think quietly
- Talk with your child about what she sees in the media
- Let your child choose some of the books, and talk about his choices before, during, and after reading
- Read with your child daily, and talk about the story
- Converse with your child, taking turns talking, about events of the day, extending her vocabulary and her attention span
- Play or make up word games and number games
- Have your child help with simple cooking projects by measuring ingredients
- Work on simple craft or household projects that involves measuring and simple addition or subtraction

Consider a family trip:

- Green Hill Park Farm, Green Hill Parkway
- Bancroft Tower, Bancroft Tower Road

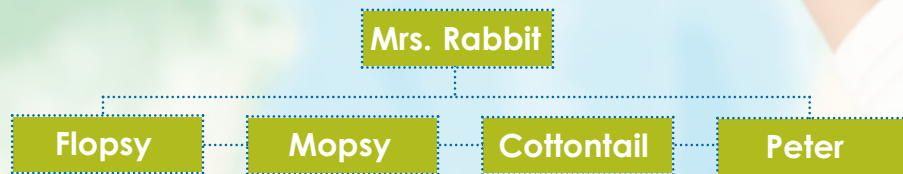
YOUR SECOND GRADER

Your **Second Grader** should be able to navigate skillfully around different kinds of texts, such as stories, informational (non-fiction) texts, and pictures. He no longer needs you to sound out words or to guide him through a story. Enjoy his growing confidence and pride in being a good reader!!

What your second grade 'graduate' should know and be able to do:

In English and Language Arts: Reading, Writing, Speaking, and Listening

- Use details, text layout, font, graphics, and other features of a nonfiction text to locate and understand information in a text. For example:



- Explain who, what, when, where, why and how questions from stories and informational texts
- Explain the moral of a fable or folk tale. For example: from "The Fox and the Grapes:" Those grapes were probably sour anyway!
- In response to a text, form an opinion, explain the opinion, and use details from the text to support the opinion
- Write a brief story with a clear beginning, middle, and end
- Write a brief report using information from several texts
- Participate positively in class discussion
- In response to media or a book read aloud, be able to report main ideas, important information, and events
- Use basic editing skills to produce, expand, and rearrange sentences to make them stronger
- Understand and use prefixes and suffixes to help understand unfamiliar words. For example: **non**-fiction

- Understand differences between words of similar meaning, and also different meanings of the same word. For example, grin, beam, and smirk, are ways of smiling

In Mathematics

- Solving one and two step word problems
- Knowing all sums of one-digit numbers
- Understanding and place value in three digit numbers
- Measuring and estimating
- Building, analyzing, and drawing two and three dimensional shapes

What you can do to help your child master these skills:

- Find simple stories in the newspaper on topics such as sports or science and nature that interest your child to read together and to talk about
- Watch an age-appropriate informative segment of the television news with your child and talk about it
- Take your child to the library every few weeks to choose books and videos. Suggest titles, and talk about choices. Your librarian is happy to help you choose appropriate titles
- Notice when your child shows interest in a topic and support it with trips to the library, field trips, and other resources
- If you notice that your child is struggling with reading, talk with your child's teacher to share your concerns. It is **VERY IMPORTANT** that you understand your child's academic strengths, interests and struggles and how you can help your child overcome their difficulties and develop their gifts
- Help your child to see how mathematics is used in everyday life
- Expose your child to manipulatives like legos, blocks, boxes etc so that they can experience how shapes and sizes relate to each other and to a whole

Consider a family trip:

- Attend some of Worcester's cultural festivals: Juneteenth at Institute Park; St. Spyridon's Greek Festival at Elm Park; The Columbus Day Parade on Shrewsbury Street; the St. Patrick's Day Parade on Main Street, the Latino Festival on the Worcester Common among others.

YOUR THIRD GRADER

By the end of third grade, your child should no longer be **learning to read**; she should be **reading to learn**! This achievement is a most **important gateway** into the wide world opened up by education for your child's future. Your job is to do everything you can to support her growing curiosity and desire to know about the world.

What your third grade 'graduate' should know and be able to do:

In English and Language Arts: Reading, Writing, Speaking, and Listening

- Identify and use main ideas and supporting ideas in a text
- Identify logical connections and cause-and-effect relationships in fiction and non-fiction texts
- Compare and contrast key points and details in different sources on the same topic
- Write a report that uses information from several sources to explain a topic or support an opinion
- Write a story that show the character's thoughts and feelings as well as the character's actions
- Positively participate in class discussion
- Read stories and poems aloud **fluently**. Fluent readers show that they understand the text's meaning because they focus on the meaning 'behind the words,' not on the words themselves.
- Understand the difference between literal and figurative meanings of words. For example: "Your outfit is cool" does not refer to the temperature of the outfit!!
- Know how to find meanings of unfamiliar words by using a dictionary
- Write opinions or explanations that logically group related information and develop topics with main ideas and supporting facts

In Mathematics

- Multiplying and dividing through the ten times table
- Solving word problems using addition, subtraction, multiplication, and addition
- Understanding fractions and relating them to whole numbers
- Measuring and estimating weights and volume
- Reasoning about shapes

What you can do to help your child master these skills:

- Celebrate and be proud of your child's achievements in school
- Make clear that you expect and know your child will be successful in college and/or career, and life. Your child's life and gifts may be very different from your own, and your positive attitude toward that difference gives your child permission to 'reach for the stars'
- Give your child opportunities to 'teach you' about what he is learning in school
- Find afterschool and summer programs that support any interest of your child
- Assure that your child uses summer well and that what was learned during the school year does not melt away
- Share your own interests with your child. For example: Take your child to the auto show in Worcester and invite him to learn with you more about the history of cars and Worcester's role in the development of steel

Consider a family trip:

- Tower Hill Botanic Garden
- Old Sturbridge Village
- The Regional Environmental Council Farm in Main South

YOUR FOURTH GRADER

Fourth graders are inventive and eager to learn as they continuously test their ideas and abilities.

What your fourth grade 'graduate' should know and be able to do:

In English and Language Arts: Reading, Writing, Speaking, and Listening

- Understand the meanings of words such as character, plot, setting, and theme [main idea], and be able to describe in detail these elements in stories
- Skillfully read informational books and articles and be able to identify main ideas, supporting details; compare information; extract information from illustrations, graphs, and layout clues
- Skillfully read stories and myths from cultures around the world, comparing themes, characters, plots, and settings and have an appreciation of cultural similarities and differences
- Write well-written sentences using correct grammar, spelling, and punctuation
- Write a well-written paragraph using a topic sentence, an explanation [elaborate on some aspect of the topic sentence], supporting detail, and concluding sentence either explaining "So what?" or transitioning into the next paragraph of a multiple-paragraph writing piece
- In a well-written paragraph, summarize information about a topic
- In a well-written paragraph or two, express a reasoned opinion logically and persuasively
- Independently research a topic
- Report orally on a non-fiction topic
- Tell a story or anecdote to the class
- Explain the difference between a *synonym* and an *antonym*

In Mathematics

- Solving word problems with remainders and word problems using measurements
- Adding and subtracting whole numbers up to 1 million
- Multiplying and dividing multiple digit numbers
- Understanding and applying equivalent fractions
- Adding, subtracting, and multiplying fractions and solving related word problems
- Understanding simple decimals
- Measuring angles and finding unknown angles in a diagram

What you can do to help your child master these skills:

- Ask a question that you and your fourth grader would both like to know the answer to, and look for the answer together
- Bring your child to your workplace, or tell your child about your work experiences

Consider a family trip:

- Minute Man National Historical Park, Lexington MA (<http://www.nps.gov/mima/index.htm>), where the American Revolution began. Free.
- Southwick's Zoo, Mendon MA (<http://www.southwickszoo.com>)
- Blackstone River Rail Trail, Lincoln RI, which is great for walking, bicycling, fishing, birding, and having fun!

YOUR FIFTH GRADER

Fifth graders are budding scholars whose explorations of the vast world of knowledge will open many doors for them in the future — if they know how to take advantage of their opportunities.

What your fifth grade 'graduate' should know and be able to do:

In English and Language Arts: Reading, Writing, Speaking, and Listening

- Summarize the plot in detail and explain the theme of a work of fiction
- Summarize the main idea and supporting facts of a work of nonfiction
- Identify facts used as evidence to support the main idea of a work of non-fiction
- Evaluate and include evidence from several sources to support the main idea of a work of non-fiction. This skill is critically important because the media exposes children to much unfiltered and inaccurate information
- Write a brief logical and clear essay presenting an original opinion and support it using facts (evidence) and reasons
- Write a story that has a plot (a central conflict that is resolved by means of events in the story and actions of the characters). Include dialog and description
- Participate positively in class discussions, engage others in class discussions
- Make a convincing, well-structured presentation on a topic of genuine interest in formal English (avoiding slang)
- Understand characteristics of good writing and be able to revise his first draft in order to make the writing stronger
- Know how to write, edit, and print a document on a computer

In Mathematics

- Adding and subtracting fractions with unlike denominators and solving related word problems
- Dividing and multiplying fractions and solving related word problems
- Understanding place values in decimals
- Calculating with decimals to the hundredth
- Multiplying and dividing whole numbers quickly
- Graphing
- Understanding volume
- Analyzing mathematical problems and relationships

What you can do to help your child master these skills:

- Converse with your child about what she is learning. Encourage her interest in a topic by arranging a trip to the library, a bookstore, or a historical or scientific site
- Watch a political debate on television or read a political debate in the newspaper or a news magazine together, identifying an issue (a public question about which educated people differ), the candidates' positions on the issue, the line of argument, and facts and reasons used to support the candidates' positions
- Explain how YOU evaluate evidence when for example you are trying to choose between two products
- Show interest and pride in his growing scholarly qualities

Consider a family trip:

- Boston Science Museum
- Plymouth Plantation
- Climb Mt. Wachusett
- Worcester Art Museum, especially collections related to what your child is studying in school

YOUR SIXTH GRADER

Sixth graders are the big kids of elementary school. This final year in elementary school is a time for them to refine and deepen their basic skills before heading off to middle school.

What your sixth grade 'graduate' should know and be able to do:

In English and Language Arts: Reading, Writing, Speaking, and Listening

- Understand the concept of 'structure' in a piece of writing; that is, how the ideas flow clearly and logically from beginning to end
- Use supportive materials such as diagrams graphs etc to convey information and concepts
- Present ideas to others orally in logical sequence, writing arguments that provide clear reasons, relevant and credible evidence
- Writing brief reports that include relevant facts, details, and quotations
- Understand the difference between Standard and non- Standard English and the social contexts in which each may or should be used
- Infer (figure out) word meaning from context clues
- Independently complete short research projects drawing on several sources
- Review and paraphrase ideas from speakers

In Mathematics

- Understanding ratios and rates
- Dividing fractions and solving related problems
- Using positive and negative numbers
- Working with variables and numeric expressions
- Understanding simple equations
- Writing equations to solve word problems
- Reasoning about relationships to determine area, surface area and volume

What you can do to help your child master these skills:

- Read a short scientific or historical essay together and figure out together how the essay 'works'
- Listen to a piece of unfamiliar music together and discuss how the parts of the music fit together
- Offer your child the opportunity to do something new and previously 'forbidden' if he can argue convincingly that he should be able to do it
- Show pride when your child assists younger children to learn or to understand something

Consider a family trip:

- The American Antiquarian Society (Wednesday afternoon tours)
- Wachusett Meadows Audubon Society for hiking and looking for birds and wild animals
- Heifer Project's Overlook Farm in Rutland