



Math Curriculum Guide: Third Accelerated

Revised for 2008-2009

INTRODUCTION:

This Curriculum Guide has been newly expanded to include additional resources beyond the textbook to address the grade level Standards of Learning. The Harcourt Math Center Mega Math software which is accessible through the LCS computers provides a variety of interactive activities for exploring concepts and practicing skills. Also noted in the Curriculum Guide are sets of manipulatives that are available in each school's library for teaching math topics in a concrete manner. The combination of textbooks, manipulatives, and software resources related to the particular SOL being taught will provide a powerful learning tool for the variety of learning styles that students have. We look forward to your comments and suggestions for improvement as we work together to provide the best possible educational experience for children in the Lynchburg City Schools.

When one views a curriculum sequence like this one, it is critical that the listing not be interpreted to mean that each topic should be taught only once. Rather, the introduction of that topic should occur before or within the given six weeks, and a major focus during that time would be to address those specific SOL.

As educators, we recognize that it is unrealistic to think that these topics can be taught and mastered in a day or even a week. A sound educational approach involves weaving the math SOL throughout the school year and into other subject matter as well. To truly understand and be able to demonstrate mastery of the math SOL, students need to experience the SOL content spiraled throughout the curriculum at appropriate cognitive levels during the entire school year.

As you use this guide, periodically send your comments and suggestions for improvement to Patty West at westpl@lcsedu.net.

Thank you for all that you do for our children and for your fellow educators.

2008-2009 Third Accelerated Math Sequence (page 1 of 3)

1 st Six Weeks	SOL Objectives	Resources
		Textbook Chapters & *Harcourt Math Center Activities
4.1	Identify place value through millions, compare two whole numbers using symbols (< > =), and round to the nearest thousand, ten thousand and hundred thousand.	Ch. 1- Place Value and Number Sense *HMC/NumberGames/Tiny'sThinkTank/A Ch. 2- Compare and Order Whole Numbers
4.5	Estimate whole number sums and differences, & refine estimates (closer to, more than, between)	Ch. 3- Add and Subtract Whole Numbers HMC/NumberGames/Tiny'sThinkTank/B-C
4.6	Adding and subtracting whole numbers in vertical and horizontal forms	Ch. 4- Use Addition and Subtraction HMC/Ice Station/Arctic Algebra/A-B
4.22	Understanding equality in numbers and operations.	
4.21	Extend given patterns, and solve problems involving identifying and completing patterns.	Ch. 4.4- Patterns-Find a Rule
4.18	Identify and locate ordered pairs on the first quadrant of a coordinate plane.	Ch 20.6 – Graphing on a coordinate plane HMC/CountryCountdown/WWGraph/I (Sign on to Country Countdown as a 3 rd grade guest) HMC/NumberGames/ArachnaGraph/G
NOTES: *Harcourt Math Center Mega Math is on a CD that should be loaded on the computers in your school. If you can not find it please see your Technology Specialist.		
2 nd Six Weeks	SOL Objectives	Resources
	Review SOL 3.15 and 3.16 telling time, and understanding calendars	Ch.5 – Understanding Time, Calendars*
BEGIN	4.7 Multiplication: by a single digit and by 10s	Ch. 8- Practice Mult. and Div. Facts HMC/Number Games/ UpUp Array /A-C, I-J Ch. 9- Use Multiplication and Division Facts Ch. 10- Multiply by 1-Digit Numbers Ch. 11- Multiply by 10s HMC/Fraction Action/ Number Line/D
4.21	Extend given patterns, and solve problems involving identifying and completing patterns.	Ch. 9.6 – Patterns-Find a Rule Ch. 10.1- Multiplication Patterns Ch 11.1- Multiplication Patterns HMC/Ice Station/Arctic Algebra/C
4.11	Estimate and measure length	^M Ch. 24- Customary Measurement* HMC/Number Games /Think Tank /M, N, O HMC/Ice Station/ Linear Lab/A-F
4.10	Estimate and measure weight and mass	
4.12	Estimate and measure liquid volume	
4.13	Identify situations that use perimeter or area; find the perimeter in standard and non-standard units of measure	Ch. 28- Perimeter of Plane Figures Ch. 29- Area of Plane Figures Ch.29.3- Relate Area and Perimeter HMC/Ice Station/Polar Planes/P-S
NOTES: *Time is not addressed in the fourth grade SOL, therefore a review will be helpful. ^M A set of Customary Units for measuring liquid volume is in your library. ^M A class set of balances and weights for measuring mass is in your library.		

2008-2009 Third Accelerated Math Sequence (page 2 of 3)

3 rd Six Weeks SOL Objectives	Resources Textbook Chapters & Harcourt Math Center Activities
CONTINUE 4.7 Multiplication: less than two digits by three digits will be completed without a calculator, two by three will be estimated or computed with a calculator	Ch. 12- Multiplying 2-Digit Numbers HMC/NumberGames/Tiny's Think Tank/F HMC/NumberGames/UpUpArray/J-K
4.8 Division: estimate and find the quotient of two whole numbers given a one-digit divisor	Ch.13- Understand Division Ch 13.5- Division Patterns Ch. 14- Divide by 1-Digit Divisors HMC/NumberGames/UpUpArray/E-G,M,N
4.21 Extend given patterns, and solve problems involving identifying and completing patterns.	Ch. 16- Number Theory
Notes: Chapter 15 is division with a 2-digit divisor which is not a fourth grade SOL. However, the activities may be used as an extension for those students who need an additional challenge.	
4 th Six Weeks SOL Objectives	Resources
4.3 Compare fractions with denominators of 12 or less 4.9 Add and subtract fractions with like and unlike denominators of 12 or less; solve problems involving the addition or subtraction of fractions	^M Ch. 21- Understand Fractions HMC/Fraction Action/Fraction/D-K HMC/Fraction Action/NumberLine/E-I ^M Ch. 22- Add and Subtract Fractions and Mixed Numbers http://www.explorelarning.com/ (Teaching with Gizmos Demo Model)
4.19 Predict the likelihood of an event using the terms <i>certain, likely, unlikely and impossible</i> ; Determine the probability of a simple event	Ch. 23- Outcomes and Probability HMC/Fraction Action/Last Chance/A-F
4.2 Identify and represent equivalent fractions and relate fractions to decimals	^M Ch. 26- Understand Decimals ^M Ch. 26.1- Relating Fractions and Decimals HMC/Fraction Action/Fraction/L-N
4.4 Decimals through thousandths; and round to the nearest whole number, tenth or hundredth	HMC/Fraction Action/NumberLine/M-R
4.9 Add and subtract decimals through thousandths; solve problems involving decimals through thousandths	Ch. 27- Add and Subtract Decimals Ch. 27.5- Add and Subtract Money HMC/NumberGames/Buggy Bargains/E-I
4.7 Review multiplication facts	HMC/Ice Station/Arctic Algebra/C-D
NOTES: ^M Class sets of Fraction and Decimal Towers are in your library. ^M Fraction and Decimal Squares manipulatives are in your library.	

2008-2009 Third Accelerated Math Sequence (page 3 of 3)

5 th Six Weeks	SOL Objectives	Resources Textbook Chapters & Harcourt Math Center Activities
	4.20 Collect, organize, display data in line and bar graphs, interpret the results and make predictions.	Ch. 6- Collect and Organize Data Ch. 7- Analyze and graph Data HMC/CountryCountdown/WGraph/F,J,K(Sign on to Country Countdown as a 3 rd grade guest) HMC/NumberGames/Ar.Graph/B-F, I, J
4.11 Measurement: length		^M Ch. 25- Metric Measurement
4.10 Measurement: weight and mass		HMC/Ice Station/Linear Lab/H,I
4.12 Measurement: volume		Ch. 20.1-20.2 Temperature* HMC/NumberGames/ThinkTank/P
4.14 Describe the relationships among points, lines, line segments, and rays		
4.15 Identify and draw points, lines, line segments, rays, and angles		^M Ch. 17- Lines, Rays and Angles HMC/Ice Station/Polar Planes/A-C
4.16 Identify lines that illustrate intersection, parallelism, and perpendicularity		
4.17 Compare 2-D and 3-D geometric figures, congruent and non-congruent shapes, and plane figures after flips, slides and turns.		^M Ch. 18- Plane Figures HMC/Ice Station/Polar Planes/E-F, H-M
4.21 Recognize, create and extend numerical and geometric patterns, and solve problems involving identifying and completing patterns.		^M Ch.19- Motion Geometry Ch.19.6- Geometric Patterns
4.17 Compare 2-D and 3-D geometric figures		^M Ch. 30- Solid Figures and Volume HMC/IceStationExploration/FrozenSolids/A-H
4.7 Review multiplication facts		HMC/IceStationExploration/ArcticAlgebra/E-F
Notes: * Review temperature SOL 3.17. Temperature is not covered in the 4 th grade SOL. ^M A class set of balances and weights for measuring mass is in your library. ^M A class set of Angleg Manipulatives are in your library. ^M A class set of Geo-Reflector Manipulatives are in your library. ^M Solid Geometric Shapes are in your library.		
6 th Six Weeks	SOL Objectives	Resources
4.7 Review multiplication facts		HMC/IceStation/Arctic Algebra/H-K, T
Review for SOL TEST		

