

Hello 5th Grader!

These are the directions for you to work on math at home. Please use this checklist as a guideline for math. These activities compliment what would have been completed during in school sessions. All of the page numbers below are found in the Home Connections Workbook.

### Unit 6 - Graphing, Geometry & Volume

In this unit, students are formally introduced to several new geometric concepts, including coordinate graphing and the use of hierarchies to classify two-dimensional shapes by their properties. Students also review volume, working from counting the cubes that will fit into a box to measuring prisms in continuous units and using standard formulas ( $V = l \times w \times h$  and  $V = b \times h$ ) to find their volumes. Module 4 features a brief review of fraction and mixed number multiplication, set in the context of making banners and flags.

✓	Pages	Activity/Description
March 2-6		
	11-112	Plotting Points on a Graph
	113-114	More About the Short Tower Sequence
	115-118	The Lemonade Stand
March 9-13		
	119-120	Types of Triangles
	121-122	Classifying Quadrilaterals
March 16-20		
	123-124	Measurement and Multiplication Review
	125-126	Camping Trip
	127-128	Another Camping Trip
March 23-27		
	129-130	Abby's Arrays
	131-132	Unit 6 Review

### Unit 7 - Division & Decimals

In this unit, students continue their study of division, including its relationship to multiplication. In Module 1, students work with problem strings to find partial quotients as they divide 3- and 4-digit dividends by 2-digit divisors. They also investigate scenarios involving rates—cups of fruit per pizza, and minutes it takes to run a mile—which leads to the strategy of finding equivalent ratios to solve division problems, even when the numbers are fractions. Module 2 centers around the sharing and grouping interpretations of division, providing opportunities to review the skills and concepts associated with dividing unit fractions by whole numbers and vice versa. During this module, students also solve and discuss a wide variety of division story problems, including contexts that require decisions about how to handle the remainders. In the last two modules, students review and extend their thinking about the effects of multiplying and dividing by powers of 10, as well as multiplying and dividing decimal numbers.

✓	Pages	Activity/Description
March 30-April 3		
	133-134	More Array Work
	135-136	More Roll Five & Ratio Tables
	137-138	More Division with Fractions

April 6-10		
	139-140	You Choose
	141-142	Related Division Problems
	143-144	More Division Practice
April 13-17		
	145-146	Division Review
	147-148	Reviewing Numbers Small & Large
April 20-24		
	149-150	Olympic Swimmers
	151-152	Olympic Track Star

## Unit 8 -Solar Design

In this final unit of the year, students design and build scaled model houses that incorporate solar energy features. They begin by investigating different aspects of solar energy—reflection, absorption, concentration—and ways to collect and store the sun’s rays. They analyze their data to inform their own design, using both spreadsheet software and paper and pencil methods. While students investigate these science principles, they apply many math skills they’ve learned throughout the year, including work with fractions, decimals, volume, surface area, conversions within measurement systems, and coordinate graphing. Student teams build model houses that incorporate passive and active solar features, and then test the models to see which designs allow the most collection and storage of solar energy. They create scaled side-view drawings and floor plans and use the plans to build the rooms in their model houses. Finally, students reflect on their learning and prepare for a showcase of their work to share with friends and family.

✓	Pages	Activity/Description
April 27-May 1		
	153-154	Looking for Solar Energy in Our Neighborhood
	155-156	Solar Reflection & Absorption Hunt
May 4-8		
	157-158	Volume of Boxes
	159-160	Volume of Earth Materials
	161-162	Windows on a House
	163-164	Buying Materials
May 11-15		
	165-166	Energy in our Homes
	167-168	Drawing a House to Scale
	169-170	Designing a Solar House
May 18-22		
	171-172	Designing Their House

