

# 6th Grade Math

## 6th Grade Mathematics - Year at a Glance

Course # 1205010, 1205090 (IB)

<u>A Note to Parents</u>: The Florida state standards require math teachers plan lessons that build knowledge of various mathematical concepts, develop the ability to apply these concepts, and engage students in critical thinking and discourse. All standards in the state course description are designed to be learned by the end of the course.

Please note the units of study listed below indicate the course sequence. Instructional pacing may vary. Specific questions regarding when content will be addressed in a specific course are best answered by the individual teacher.

### **Course Description**

In grade 6, instructional time will emphasize five areas: (1) performing all four operations with integers, positive decimals and positive fractions with procedural fluency; (2) exploring and applying concepts of ratios, rates and percent to solve problems; (3) creating, interpreting and using expressions and equations; (4) extending geometric reasoning to plotting points on the coordinate plane, area and volume of geometric figures and (5) extending understanding of statistical thinking.

Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.

IB MYP Notes: The International Baccalaureate® aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. The MYP curriculum framework comprises eight subject groups, providing a broad and balanced education for early adolescents. The MYP requires at least 50 hours of teaching time for each subject group, in each year of the program. The MYP is inclusive by design; students of all interests and academic abilities can benefit from their participation.

#### **CPALMS Link**

Please follow the link below to learn more about the course expectations, the course standards, and to access student resources. The student resources include Florida Department of Education recommended resources that students can use to learn the concepts and skills in this course. After clicking the link, please make sure you are in the "2022 and Beyond" tab on the website. This will ensure you are looking at our new B.E.S.T. Standards.

6<sup>th</sup> Grade: <a href="https://www.cpalms.org/PreviewCourse/Preview/10283">https://www.cpalms.org/PreviewCourse/Preview/10283</a>

6<sup>th</sup> Grade International Baccalaureate (IB: MYP Math 1): https://www.cpalms.org/PreviewCourse/Preview/2934

	Module of Study	Module Sequence
Quarter 1	Module 1:	Multiply multi-digit decimals
Aug 10 – Oct 12	Compute with Decimals and	Divide multi-digit decimals
45 Days	Fractions	Factors and multiples
		<ul> <li>Define Factors and Multiples</li> </ul>
		Multiply fractions
		<ul> <li>Divide whole numbers by fractions</li> </ul>
		<ul> <li>Divide fractions by fractions</li> </ul>
		Divide with whole and mixed numbers
		Whole numbers
		Apply decimal and fraction operations
	Module 2:	<ul> <li>Defining integers and rational numbers</li> </ul>
	Integers and Rational Numbers	Comparing and Ordering Integers
		Compare and order rational numbers
		Absolute value
		Solve problems with absolute value
Quarter 2	Module 3:	Add integers
Oct 13 – Dec 21	Compute with Integers	Subtract integers
46 Days		Multiple integers
		Divide integers
		Apply integer operations
	Module 4:	<ul> <li>Powers and exponents</li> </ul>
	Numerical and Algebraic	<ul> <li>Numerical expressions</li> </ul>
	Expressions	Write algebraic expressions
		Evaluate algebraic expressions
		Use the distributive property
		Equivalent algebraic expressions
	Module 5:	<ul> <li>Use substitution to solve equations</li> </ul>
	One-Step Equations and	<ul> <li>Use addition equations to solve problems</li> </ul>
	Inequalities	Use subtraction equations to solve problems
	·	Use multiplication equations to solve problems
		Use division equations to solve problems
		Equations with rational numbers
		<ul> <li>Inequalities</li> </ul>
		Solve inequalities
Quarter 3	Module 6:	• Ratios
Jan 8 – Mar 7	Ratios and Rates	Tables of equivalent rations
42 Days		Solve ratio problems
		Convert within the metric system
		Rates and unit rates
		Solve rate problems
	Module 7:	• Percents
	Percents	Percents greater that 100% and less than 1%
		Relate fractions, decimals, and percents
		Find the percent of a number
		Estimate the percent of a number
		Find a whole

		Find a percent
	Module 8: Coordinate Geometry	<ul> <li>The coordinate plane</li> <li>Reflections of points</li> <li>Distance on the coordinate plane</li> <li>Perimeter and area on the coordinate plane</li> </ul>
Quarter 4 Mar 18 – May 24 44 Days	Module 9: Area, Volume, and Surface Area	<ul> <li>Area of triangles</li> <li>Area of quadrilaterals</li> <li>Area of composite figures</li> <li>Volume of right rectangular prisms</li> <li>Surface area of right rectangular prisms</li> <li>Surface area of pyramids</li> </ul>
	Module 10: Statistical Measures and Displays	<ul> <li>Statistical questions</li> <li>Biased and unbiased samples</li> <li>Histograms</li> <li>Measures of center</li> <li>Interquartile range and box plots</li> <li>Outliers</li> <li>Interpret Data Distributions</li> <li>Changes in data values</li> </ul>

## **Course Resources**

#### **Core Textbook:**

Florida Reveal Math - Students have online access through My.SarasotaCountySchools.net

#### F.A.S.T. Assessment Information:

https://flfast.org/

https://flfast.org/-/media/project/client-portals/florida-fast/pdf/fast-facts.pdf

#### **Supplemental Resources:**

i-Ready - Students log in through My.SarasotaCountySchools.net

ALEKS – Students log in through My.SarasotaCountySchools.net

Nearpod - Students log in through <u>My.SarasotaCountySchools.net</u>

Khan Academy

For additional supplemental resources, please see your child's course syllabus.