

MA 3140 : Mathematics 6

Mathematics 6 is a course for sixth grade students who are transitioning from the emphasis placed on whole number arithmetic in elementary school to a more in-depth study of rational numbers and the primary foundations of algebra. The course focuses on the development of problem-solving skills and the acquisition of mathematical vocabulary and symbols. The active engagement of students along with the use of manipulatives (i.e. number lines, fractions circles, algebra tiles, and two-color counters) and technology, such as the Desmos calculator and Chromebooks, will allow students to develop an understanding of the mathematical principles they are learning. Facility in the use of technology will not be a substitute for students' understanding of quantitative concepts and proficiency in basic computations.

Subject Area

Mathematics

Level

Middle School

Parent Docs

[Mathematics 6 Parent Doc 2021-2022](#)

Storyboard

Essential Question: How do I become a mathematical problem solver to better understand the world around me? In what ways can I communicate and represent my mathematical thinking?

Number Sense: Navigating the Negatives

Unit 1 & 2 (12 weeks)



Title

Patterns & Functions: Power of Proportion

Unit 3 (4 weeks)



Focus of the Story	<i>How do I use mathematics on a daily basis?</i> We begin our journey by becoming effective consumers and navigators through building number sense and computational skills of integers.
Transfer Goals	<ul style="list-style-type: none"> • Apply: Utilize efficient strategies, processes, and tools to model new situations and/or real world experiences. • Explain: Communicate mathematical thinking by justifying solutions using multiple representations while attending to precision.
Learning Targets	<p>I can represent and perform all operations with integers in practical situations.</p> <p>I can represent and compare numbers written in various forms.</p> <p>I can simplify expressions.</p>

<i>How do I use mathematical relationships to...</i>	utilize number sense and computational skills to identify and represent patterns and proportional relationships in real-world situations.
• Explain: Communicate mathematical thinking by justifying solutions using multiple representations while attending to precision.	
I can identify and represent proportional relationships in real-world situations.	
I can determine and use the unit rate to find an unknown in a proportional relationship.	