

O'MALEY INNOVATION MIDDLE SCHOOL - SCOPE & SEQUENCE CHART: INTENDED UNITS OF STUDY, 2016-2017

CONTENT AREA: Math - GRADE LEVEL: 7

UNIT/ ESSENTIAL QUESTION	APPROXIMATE TIME FRAME	TEXT(S)/RESOURCES	TARGETED UNDERSTANDING (PURPOSE)	CONTENT STANDARD(S) (CCSS for Mass.)
Integers	<p align="center">TERM 1</p> <p align="center">16 days</p>	Big Ideas! Math	<ul style="list-style-type: none"> • Use and justify rules for addition, subtraction, multiplication, and division of integers. • Find the absolute values of integers. • Add, subtract, multiply, and divide integers. 	<p>6.EE.3</p> <p>7.NS.1, 7.NS.2, 7.NS.3</p> <p>7.NS.1a, 7.NS.1b,</p> <p>7.NS.1c, 7.NS.1d,</p> <p>7.NS.2a, 7.NS.2b</p>
Rational Numbers	<p align="center">TERM 1</p> <p align="center">12 days</p>	Big Ideas! Math	<ul style="list-style-type: none"> • Add, subtract, multiply, and divide rational numbers. • Apply properties of operations as strategies to perform operations with rational numbers. • Convert a rational number to a decimal using long division. 	<p>4.NF.6</p> <p>5.NF.1, 5.NF.4</p> <p>6.NS.1</p> <p>7.NS.1a, 7.NS.1b,</p> <p>7.NS.1c, 7.NS.1d,</p> <p>7.NS.2a, 7.NS.2b,</p> <p>7.NS.2c, 7.NS.2d</p> <p>7.NS.3</p>
Expressions & Equations	<p align="center">TERM 2</p> <p align="center">15 days</p>	Big Ideas! Math	<ul style="list-style-type: none"> • Add, subtract, factor, and expand linear expressions with rational coefficients. • Understand that rewriting expressions in different forms can show how the quantities are related. • Write, graph, and solve one-step equations (includes negative numbers). • Solve two-step equations. • Compare algebraic solutions to arithmetic solutions. 	<p>6.EE.2a</p> <p>7.NS.3</p> <p>7.EE.1, 7.EE.2, 7.EE.4,</p> <p>7.EE.4a</p>
Inequalities	<p align="center">TERM 2</p> <p align="center">12 days</p>	Big Ideas! Math	<ul style="list-style-type: none"> • Solve one-step inequalities involving integers and rational numbers. • Solve two-step inequalities. 	<p>6.EE.8, 6.NS.7a</p> <p>7.EE.4b</p>

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Ratios & Proportions	TERM 2-3 18 days	Big Ideas! Math		4.NF.1, 6.EE.7 7.RP.1, 7.RP.3 7.RP.2a, 7.RP.2b, 7.RP.2c, 7.RP.2d
Percents	TERM 3 18 days	Big Ideas! Math	<ul style="list-style-type: none"> • Compare fractions, decimals, and percents. • Use proportionality to solve percent problems. • Use the percent equation. • Solve percent problems involving percents of increase and decrease, and simple interest. 	6.RP.3c 7.EE.3 7.RP.3
Constructions & Scale Drawings	TERM 3 - TERM 4 18 days	Big Ideas! Math	<ul style="list-style-type: none"> • Use supplementary, complementary, vertical, and adjacent angles. • Draw geometric shapes with given conditions, focusing on triangles and quadrilaterals. • Reproduce a scale drawing at a different scale. • Represent proportional relationships with equations. • Use proportionality to solve ratio problems. • Use scale drawings to compute actual lengths and areas. 	4.MD.6, 4.G.1 7.G.1, 7.G.2, 7.G.5
Circles	TERM 4 13 days	Big Ideas! Math	<ul style="list-style-type: none"> • Understand pi and its estimates. • Use values of pi to estimate and calculate the circumference and area of circles. • Find perimeters and areas of composite two-dimensional figures, including semi-circles. 	4.G.2, 6.EE.1 7.G.4, 7.G.6

UNIT/ ESSENTIAL QUESTION	APPROXIMATE TIME FRAME	TEXT(S)/RESOURCES	TARGETED UNDERSTANDING (PURPOSE)	CONTENT STANDARD(S) (CCSS for Mass.)
Surface Area & Volume	TERM 4 16 days	Big Ideas! Math	<ul style="list-style-type: none"> • Solve real-world problems involving surface areas and volumes of objects composed of prisms, pyramids, and cylinders. • Describe the cross sections that result from slicing three-dimensional figures. 	4.MD.3, 5.NF.4b, 6.G.1 7.G.3, 7.G.4, 7.G.6
Probability & Statistics	TERM 4 21 days	Big Ideas! Math	<ul style="list-style-type: none"> • Understand representative samples (random sampling) and populations. • Use samples to draw inferences about populations. • Compare two populations from random samples using measures of center and variability. • Understand that probability is the likelihood of an event occurring, expressed as a number from 0 to 1. • Develop probability models and use them to find probabilities. • Find the probabilities of compound events. 	6.RP.1, 7.SP.1, 7.SP.2, 7.SP.3, 7.SP.4, 7.SP.5, 7.SP.6, 7.SP.7a, 7.SP.7b, 7.SP.8a, 7.SP.8b, 7.SP.8c

Total: 159 days
Variance: 21 days