

## **Eighth Grade Math**

Math				
Timeline (# of days)	Topic	Standards	Key Vocabulary	Connections
20	<ul><li>Reasoning about</li><li>Similarity and</li><li>Transformations Cluster</li></ul>	NC.8.G.3 NC.8.G.2 NC.8.G.4	<ul> <li>Dilation, translations, rotations about origin, reflection across x and y axis, congruence, rotation, two-dimensional figure</li> </ul>	Supports standards:  • 7th grade standards on similarity and ratio  • NC.7.G.1  • NC.8.G.5
30-40	Functional Reasoning Cluster	NC.8.F.1 NC.8.F.2 NC.8.F.3 NC.8.F.4 NC.8.F.5 NC.8.EE.8	<ul> <li>Function, (x, y) pair, slope intercept, rate of change, linear, non-linear</li> </ul>	Supports standards:  • Builds on grade 7 equations  • 7.RP.2 • 7.EE.4 • 6.EE.2 • 6.RP.3 • 6.EE.9
30	<ul><li>Reasoning about Equations and Angles Cluster</li></ul>	NC.8.EE.7 NC.8.G.5	<ul> <li>Equation, Inequality, linear equation, infinite solutions, variable, angle relationship, interior angle, exterior angle, parallel</li> </ul>	Supports standards:  • NC.8.G.4  • NC.7.EE.4  • NC.7.G.2
20	Statistical Reasoning Cluster	NC.8.SP.1 NC.8.SP.2 NC.8.SP.3 NC.8.SP.4	<ul> <li>Scatter Plot, bivariate data, clustering, outlier, positive or negative association, linear association, nonlinear</li> </ul>	Supports standards:  • NC.8.EE.7  • NC.7.EE.4  • NC.6.RP.4  • NC.7.RP.2

			association, slope and y-intercept, frequency, relative frequency	• NC.6.EE.9
40	Reasoning with Rational/Irrational Numbers (and Pythagorean Theorem) Cluster	NC.8.NS.1 NC.8.NS.2 NC.8.EE.2 NC.8.G.6 NC.8.G.7 NC.8.G.8 NC.8.G.9	<ul> <li>Irrational number, rational number, square roots, cube roots, Pi, Pythagorean Theorem, volume of cones, cylinder, and sphere</li> </ul>	Supports standards  NC.8.EE.7  NC.6.EE.1  NC.6.NS.8  NC.7.G.6
15	<ul><li>Reasoning about Exponents/Scientific Notation Cluster</li></ul>	NC.8.EE.1 NC.8.EE.3 NC.8.EE4	<ul> <li>Integer exponents, equivalent expression, scientific notation</li> </ul>	Supports standards: • NC.6.EE.1

	NC Check-Ins Assessed Standards	
Check-In 1	Check-In 2	Check-In 3
8.EE.7	8.EE.8	8.F.2
8.G.3*	8.F.1	8.F.5
8.G.5	8.F.3	8.SP.1
	8.F.4	8.SP.2
6.3 will also incorporate skills ted in standards 8.G.2 and 8.G.4.		8.SP.3

## Standards/I Can Statements

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## Resources

NCDPI Unpacking Documents

http://www.dpi.state.nc.us/docs/curriculum/mathematics/scos/current/6th-unpacking.pdf

Illustrative Mathematics

https://www.illustrativemathematics.org/curriculum

Open-Up Resources

https://im.openupresources.org/6/teachers/index.html

Jo Boaler's Week of Inspiration Math - YouCubed

Jo Boaler's Week of Inspirational Math - Week 2

There are many other tasks from Boaler's website Youcubed, that can be used to address the mathematics practices and content of 6th grade.

## 6th EOG Math Weight Distribution

Domain	Grade 6
Ratios and Proportional Relationships	_
The Number System	-
Expressions and Equations	_
The Number System, Expressions and Equations	24-28%
Functions	28-32%
Geometry	24-28%
Statistics and Probability	16-20%
Total	100%