Math

6th Grade

Primary Text: Core Connections Course 1

Power Standard Details: http://curriculum.4j.lane.edu/math

Trimester 1

Essential Skills:

• Finding Perimeter and Area of Composite Shapes
• Distributive Property via Rectangles (Using Generic Rectangles to Multiply) • Decimals
• Percent
• Finding equivalent Fractions • Fractions

Power Standards:

6.G.1 - Find the area of composite shapes by decomposing into rectangles or other shapes.
6.SP.4 - Display numerical data in plots on a number line, including dot plots, histograms, and box plots
6.EE.3 - Apply the properties of operations to generate equivalent expressions.

Trimester 2

Essential Skills:

• Using variables in mathematical calculations
• Multiplying Fractions and Decimals
• Dividing Fractions and Decimals
• Area of Parallelograms/Triangles/Trapezoids
• Add and subtract mixed numbers

Power Standards:

6.EE.2 - Write, read, and evaluate expressions in which letters stand for numbers.
6.EE.4 - Identify when two expressions are equivalent.
6.EE.6 - Use variables to represent numbers and write expressions when solving a real-world or mathematical problem.
6.RP.1 - Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities

Trimester 3

Essential Skills:

• Measures of Central Tendency
• Box Plots & Histograms Math 6
• Volume & SA of Rectangular Prisms
• Use ratios to solve real-world problems.

Power Standards: Recursive from first two trimesters

7th Grade

Primary Text: Core Connections Course 2

Power Standard Details: http://curriculum.4j.lane.edu/math

Trimester 1

Essential Skills:

•Simple Probability •Operations with Negative Integers •Operations with Negative Rational Numbers

Trimester 2

Essential Skills:

•Ratios & Proportional Relationships
•Similarity & Scale Factors •Compound Probability
•Distribution & Combining Like Terms

Trimester 3

Essential Skills:

•Part-to-Whole Relationships •Data Analysis & Sampling
•3-D Geometry (irregular prisms)•Introduction to

Power Standards: •7.SPC.5-8 (intro): Investigate chance processes and develop, use, and evaluate probability models. •7.NS.2d •7.NS.A1: Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. •7.NS.A2: Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. •7.NS.A3: Solve real-world and mathematical problems involving the four operations with rational numbers.	•Algebraic Notation for Equation Solving **Power Standards**: •7.RP.1: Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. •7.RP.2: Recognize and represent proportional relationships between quantities. •7.G.A.1: Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. •7.SPC.5-8 (continued): Investigate chance processes and develop, use, and evaluate probability models. •7.EE.B: Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	Angles **Power Standards**: •EE.A: Use properties of operations to generate equivalent expressions. •7.RP.3: Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error. •7.G.B: Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. •7.SPA: Use random sampling to draw inferences about a population. •7.SPB: Draw informal comparative inferences about two populations. •7.G.B5: Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.
8th Grade **Primary Text: Core Connections Course 3** *Power Standard Details: http://curriculum.4j.lane.edu/math*		
Trimester 1	**Trimester 2**	**Trimester 3**
Essential Skills: •Simplifying with Variables/Algebra Tiles •Connecting equations/tables/graphs •Solving & Checking Equations •One/None/Infinite Solutions •Distribution **Power Standards:** 8.EE.5 - 7 Understand Connection between proportional relationships, lines and linear equations.	**Essential Skills**: •Linear Equations •Solving systems of Equations •Rigid Transformations & Similarity •Creating linear equations from data **Power Standards:** Geometry 8.G.1 - 4 - Understand congruence and similarity through rotations, reflections, translations and dilations. Statistics 8.SP.1 - 4 Investigate patterns of association in bivariate data 8.EE.8 Analyze and solve pairs of simultaneous linear	**Essential Skills**: •Exponents & Scientific Notation •Angles and Transversals •Pythagorean Theorem •Surface Area & Volume of Cylinders/Pyramids Cones/Spheres **Power Standards**: Geometry 8.G.6- 9 Understand and apply the Pythagorean Theorem and solve real world and mathematical problems involving volume of cylinders, cones, and spheres 8.EE.1- 4 Square roots, cube roots, scientific notation 8.NS. 1-2 Number System - approximation of

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