

Mathematics CTS Crosswalk to *Atlas of Science Literacy* Volumes 1&2

CTS Category: Number and Operation

CTS Topic Study Guide	ATLAS - Volume I Maps	Atlas - Volume II Maps
Addition and Subtraction	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Addition and Subtraction of Whole Numbers	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Combinations and Permutations	No maps pertaining to this topic- review <i>PSSM</i> expectations	No maps pertaining to this topic- review <i>PSSM</i> expectations
Comparing and Ordering Numbers	Mathematical Processes page 27, Mathematical Models page 29	Numbers page 65, Computation and Estimation page 107
Computation and Operations	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Counting	Mathematical Processes page 27, Mathematical Models page 29	Numbers page 65, Computation and Estimation page 107
Decimals	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Exponents	See Volume II	Numbers page 65, Computation and Estimation page 107, Scale page 99
Factors and Multiples	No maps pertaining to this topic- review <i>PSSM</i> expectations	No maps pertaining to this topic- review <i>PSSM</i> expectations
Facts	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Fractions	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Fractions, Decimals, and Percents	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Integers	Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Large and Small Numbers	See Volume II	Numbers page 65, Computation and Estimation page 107, Scale
Multiplication and Division	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107

Multiplication and Division of Whole Numbers	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Number Sense	Mathematical Processes page 27	Numbers page 65, Computation and Estimation page 107
Numbers and Number Systems	Mathematical Processes page 27	Numbers page 65
Percent	Mathematical Processes page 27, Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Place Value	No Maps in Volume I	Numbers page 65
Properties of Operations	Mathematical Processes page 27	No Maps in Volume II
Ratio and Proportion	Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107
Rational Numbers	Ratio and Proportionality page 119	Numbers page 65, Computation and Estimation page 107

CTS Category: Algebra

CTS Topic Study Guide	ATLAS Volume I	Atlas Volume II
Algebraic Modeling	Mathematical Models page 29	Models page 93, Nature of Mathematics page 13
Expressions and Equations	Symbolic Representation page 117	Nature of Mathematics page 13, Patterns of Change page 97, Communication Skills page 111
Formulas	Symbolic Representation page 117	See Volume I
Functions	Symbolic Representation page 117	See Volume I
Linear Relationships	Symbolic Representation page 117, Describing Change page 121	Patterns of Change page 97
Nonlinear Relationships	Symbolic Representation page 117	Patterns of Change page 97
Numeric Patterns	Mathematical Processes page 27	See Volume I
Patterns, Relations and Functions	Mathematical Processes page 27, Symbolic Representation page 117, Describing Change page 121	Nature of Mathematics page 13, Communication Skills page 111
Quadratics	Symbolic Representation page 117	See Volume I
Rates of Change	Graphic Representation page 115, Symbolic	Patterns of Change page 97

	Representation page 117, Describing Change page 121, Correlation page 125	
Symbolic Representation	Symbolic Representation page 117	Nature of Mathematics page 13, Communication Skills page 111
Variables	Symbolic Representation page 117	See Volume I

CTS Category: Geometry

CTS Topic Study Guide	ATLAS Volume I	Atlas Volume II
Three Dimensional Geometry	No Maps in Volume I	Shapes page 67
Two Dimensional Geometry	Graphic Representation page 115, Mathematical Models page 27	Shapes page 67
Two and Three Dimensional Geometry	Graphic Representation page 115, Mathematical Models page 27	Shapes page 67
Circles	No Maps in Volume I	Shapes page 67
Congruence and Similarity	Ratio and Proportionality page 119	Shapes page 67
Coordinate Geometry	Graphic Representation page 115	See Volume I
Geometric Modeling	Mathematical processes page 27, Mathematical Models page 29	Models
Geometric Patterns	Mathematical processes page 27	Nature of Mathematics page 13
Geometric Proof	No Maps in Volume I	See Volume I
Geometric Relationships	Mathematical processes page 27, Graphic Representation page 115	Shapes page 67
Geometric Shapes	Graphic Representation page 115, Symbolic Representation page 117	Shapes page 67
Geometric Theorems	No maps pertaining to this topic- review <i>PSSM</i> expectations	No maps pertaining to this topic- review <i>PSSM</i> expectations
Networks	No maps pertaining to this topic- review <i>PSSM</i> expectations	No maps pertaining to this topic- review <i>PSSM</i> expectations
Quadrilaterals	See Volume II	Shapes page 67
Sorting and Classifying	No maps pertaining to this topic- review <i>PSSM</i> expectations	No maps pertaining to this topic- review <i>PSSM</i> expectations
Spatial Visualization	See Volume II	Shapes page 67
Transformations and Symmetry	See Volume II	Shapes page 67
Triangles	See Volume II	Shapes page 67

Trigonometry	See Volume II	Shapes page 67
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CTS Category: Measurement

CTS Topic Study Guide	ATLAS Volume I	Atlas Volume II
Angle Measure	See Volume II	Shapes page 67
Area	Ratio and Proportionality page 119	Shapes page 67, Scale page 99
Customary Measurement	See Volume II	Using Tools and Devices page 109
Length	Ratio and Proportionality page 119	Shapes page 67, Using Tools and Devices page 109
Measurement Systems	See Volume II	Computation and Estimation page 107
Measurement Tools	See Volume II	Using Tools and Devices page 109
Metric System	See Volume II	Using Tools and Devices page 109
Perimeter, Area and Volume	Ratio and Proportionality page 119	Shapes page 67, Scale page 99
Time, Temperature, Weight and Capacity	Ratio and Proportionality page 119	Using Tools and Devices page 109
Volume	Ratio and Proportionality page 119	Shapes page 67, Scale page 99

CTS Category: Data Analysis

CTS Topic Study Guide	ATLAS Volume I	Atlas Volume II
Line Graphs, Bar Graphs, and Histograms	Graphic Representation page 115, Describing Change page 121	Patterns of Change page 97, Communication Skills page 111
Line Plots, Stem and Leaf Plots, Box Plots and Histograms	Averages and Comparisons page 123, Graphic Representation page 115	Patterns of Change page 97, Communication Skills page 111
Measures of Center and Spread	Averages and Comparisons page 123	Patterns of Change page 97
Probability	Statistical Reasoning page 127	Patterns of Change page 97
Sampling	Statistical Reasoning page 127	Detecting Flaws in Arguments page 113
Scatterplots and Correlation	Correlation page 125	Patterns of Change page 97
Simulation	Statistical Reasoning page 127	See Volume I
Statistical Reasoning	Statistical Reasoning page 127, Averages and Comparisons page 123	Reasoning page 69
Summarizing Data	Averages and Comparisons page 123, Correlation page 125	Patterns of Change page 97, Communication Skills page 111

CTS Category: Integrated Topics

CTS Topic Study Guide	ATLAS Volume I	Atlas Volume II
Connections	Graphic Representation page 115	Nature of Mathematics page 13
Connections Outside	See Volume II	Nature of Mathematics page 13
Connections Within	Graphic Representation page 115	See Volume I
Constancy and Change	Graphic Representation page 115, Describing Change page 121, Correlation page 125	Constancy page 95, Patterns of Change page 97
Discrete Mathematics	No maps pertaining to this topic- review <i>PSSM</i> expectations	No maps pertaining to this topic- review <i>PSSM</i> expectations
Equivalence	Mathematical Processes page 27, Symbolic Representation page 117	Constancy page 95, Computation and Estimation page 107
Estimation	Mathematical Processes page 27, Mathematical Models page 29	Computation and Estimation page 107
Graphic Representation	Graphic Representation page 115, Describing Change page 121	Nature of Mathematics page 13, , Patterns of Change page 97, Communication Skills page 111, Detecting Flaws in Arguments page 113
Matrices and Vectors	No maps pertaining to this topic- review <i>PSSM</i> expectations	No maps pertaining to this topic- review <i>PSSM</i> expectations
Proportionality	Ratios and Proportionality page 119, Describing Change page 121	Scale page 99, Computation and Estimation page 107

CTS Category: Problem Solving and Processes

CTS Topic Study Guide	ATLAS Volume I	Atlas Volume II
Communication in Mathematics	See Volume II	Communication Skills page 111
Conjecture, Proof and Justification	Evidence and Reasoning in Inquiry page 17	Reasoning page 69, Detecting Flaws in Arguments page 113
Creating Representations	Mathematical Processes page 27, Mathematical Models page 29	Models page 93, Communication Skills page 111
Modeling	Mathematical Processes page 27, Mathematical Models page 29	Nature of Mathematics page 13, Models page 93
Problem Solving	See Volume II	Nature of Mathematics page 13
Reasoning	Evidence and Reasoning in	Reasoning page 69,

	Inquiry page 17	Detecting Flaws in Arguments page 113
Representations	Mathematical Processes page 27, Mathematical Models page 29	Models page 93, Communication Skills page 111
Technology	See Volume II	Models page 93, Computation and Estimation page 107
Vocabulary	No maps pertaining to this topic	No maps pertaining to this topic