Alignment Between the Indiana REPA Educator Standards for Core Academic Skills Assessment (CASA) and state and national student and teacher standards for Core Academic Skills

The alignment notations below indicate the content included in state and national standards that is addressed, in whole or in part, by each of the REPA Educator Standards for Core Academic Skills Assessment (CASA).

Standard 1: Meaning of Words and Phrases **Indiana educators demonstrate the ability to determine the meaning of words and phrases in context.**	
Indiana Academic Standards for English/Language Arts (2014)	Reading: Vocabulary Learning Outcome: 6.RV.1, 7.RV.1, 8.RV.1, 9-10.RV.1, 11-12.RV.1 Vocabulary Building: 6.RV.2.1–2.5, 7.RV.2.1–2.5, 8.RV.2.1, 8.RV.2.3–2.5, 9-10.RV.2.1, 9-10.RV.2.3–2.5, 11-12.RV.2.1, 11-12.RV.2.3–2.5 Vocabulary in Literature and Nonfiction Texts: 6.RV.3.2–3.3, 7.RV.3.2–3.3, 8.RV.3.2–3.3, 9-10.RV.3.2–3.3, 11-12.RV.3.2–3.3
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	LH.3: Structural Elements and Organization (Reading): 6-8.LH.3.1, 9-10.LH.3.1, 11-12.LH.3.1
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.3: Structural Elements and Organization (Reading): 6-8.LST.3.1, 9-10.LST.3.1, 11-12.LST.3.1
Indiana Academic Standards: Mathematics (2014)	
IRA/NCTE Standards for the English Language Arts (2012)	Standard 3 Standard 6
NCTM Principles and Standards for School Mathematics (2000)	
Standard 2: Main Idea, Supporting Details, and Text Structure **Indiana educators demonstrate understanding of the central ideas, supporting details, and structure of a text.**	
Indiana Academic Standards for English/Language Arts (2014)	Reading: Nonfiction Learning Outcome: 6.RN.1, 7.RN.1, 8.RN.1, 9-10.RN.1, 11-12.RN.1 Key Ideas and Textual Support: 6.RN.2.1–2.3, 7.RN.2.1–2.3, 8.RN.2.1–2.3, 9-10.RN.2.1–2.3, 11-12.RN.2.1–2.3 Structural Elements and Organization: 6.RN.3.2, 7.RN.3.2, 8.RN.3.2, 9-10.RN.3.2, 11-12.RN.3.2 Synthesis and Connection of Ideas: 6.RN.4.1, 7.RN.4.1, 8.RN.4.1, 9-10.RN.4.1
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	LH.1: Learning Outcome for Literacy in History/Social Studies: 6-8.LH.1.1, 9-10.LH.1.1, 11-12.LH.1.1 LH.2: Key Ideas and Textual Support (Reading): 6-8.LH.2.1–2.2, 9-10.LH.2.1–2.2, 11-12.LH.2.1–2.2 LH.3: Structural Elements and Organization (Reading): 6-8.LH.3.2, 9-10.LH.3.2, 11-12.LH.3.2
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.1: Learning Outcome for Literacy in Science/Technical Subjects: 6-8.LST.1.1, 9-10.LST.1.1, 11-12.LST.1.1 LST.2: Key Ideas and Textual Support (Reading): 6-8.LST.2.1–2.2, 9-10.LST.2.1–2.2, 11-12.LST.2.1–2.2

Alignment Between the Indiana REPA Educator Standards for Core Academic Skills Assessment (CASA) and state and national student and teacher standards for Core Academic Skills

	LST.3: Structural Elements and Organization (Reading): 6-8.LST.3.2, 9-10.LST.3.2, 11-12.LST.3.2
Indiana Academic Standards: Mathematics (2014)	
IRA/NCTE Standards for the English Language Arts (2012)	Standard 1 Standard 3
NCTM Principles and Standards for School Mathematics (2000)	
Standard 3: Purpose and Point of View **Indiana educators demonstrate understanding of the writer's purpose and point of view.**	
Indiana Academic Standards for English/Language Arts (2014)	Reading: Nonfiction Structural Elements and Organization: 6.RN.3.2–3.3, 7.RN.3.2–3.3, 8.RN.3.2–3.3, 9-10.RN.3.2–3.3, 11-12.RN.3.3 Reading: Vocabulary Vocabulary in Literature and Nonfiction Texts: 6.RV.3.1–3.3, 7.RV.3.1–3.3, 8.RV.3.1–3.3, 9-10.RV. 3.1–3.3, 11-12.RV.3.1–3.3
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	LH.3: Structural Elements and Organization (Reading): 6-8.LH. 3.3, 9-10.LH.3.3, 11-12.LH.3.3
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.3: Structural Elements and Organization (Reading): 6-8.LST.3.3, 9-10.LST.3.3, 11-12.LST.3.3
Indiana Academic Standards: Mathematics (2014)	
IRA/NCTE Standards for the English Language Arts (2012)	Standard 3
NCTM Principles and Standards for School Mathematics (2000)	
Standard 4: Critical Reasoning **Indiana educators use critical-reasoning skills to evaluate texts.**	
Indiana Academic Standards for English/Language Arts (2014)	Reading: Nonfiction Synthesis and Connection of ideas: 6.RN.4.1–4.3, 7.RN.4.1–4.3, 8.RN.4.1–4.3, 9-10.RN.4.1–4.3, 11-12.RN.4.1–4.3
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	LH.2: Key Ideas and Textual Support (Reading): 6-8.LH.2.3, 9-10.LH.2.3, 11-12.LH.2.3 LH.3: Structural Elements and Organization (Reading): 6-8.LH.3.2–3.3, 9-10.LH.3.2–3.3, 11-12.LH.3.2–3.3 LH.4: Synthesis and Connection of Ideas (Reading): 6-8.LH.4.2–4.3, 9-10.LH.4.2–4.3, 11-12.LH.4.1–4.3

Alignment Between the Indiana REPA Educator Standards for Core Academic Skills Assessment (CASA) and state and national student and teacher standards for Core Academic Skills

Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.3: Structural Elements and Organization (Reading): 6-8.LST.3.2–3.3, 9-10.LST.3.2–3.3, 11-12.LST.3.2–3.3 LST.4: Synthesis and Connection of Ideas (Reading): 6-8.LST.4.2–4.3, 9-10.LST.4.2–4.3, 11-12.LST.4.1–4.3
Indiana Academic Standards: Mathematics (2014)	
IRA/NCTE Standards for the English Language Arts (2012)	Standard 1 Standard 3 Standard 7
NCTM Principles and Standards for School Mathematics (2000)	
Standard 5: Clear and Coherent Writing **Indiana educators understand how to produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience.**	
Indiana Academic Standards for English/Language Arts (2014)	Writing Learning Outcome: 6.W.1, 7.W.1, 8.W.1, 9-10.W.1, 11-12.W.1 Writing Genres: 6.W.3.1–3.3, 7.W.3.1–3.3, 8.W.3.1–3.3, 9-10.W.3.1–3.3, 11-12.W.3.1–3.3 The Writing Process: 6.W.4–5. 7.W.4–5, 8.W.4–5, 9-10.W.4–5, 11-2.W.4–5
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	LH.1: Learning Outcome for Literacy in History/Social Studies: 6-8.LH.1.2, 9-10.LH.1.2, 11-12.LH.1.2 L.H.5: Writing Genres (Writing): 6-8.LH.5.1, 9-10.LH.5.1, 11-2.LH.5.1 LH.6: The Writing Process (Writing): 6-8.LH.6.1, 9-10.LH.6.1, 11-12.LH.6.1
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.1: Learning Outcome for Literacy in Science/Technical Subjects: 6-8.LST.1.2, 9-10.LST.1.2, 11-12.LST.1.2 LST.5: Writing Genres (Writing): 6-8.LST.5.1, 9-10.LST.5.1, 11-12.LST.5.1 LST.6: The Writing Process (Writing): 6-8.LST.6.1, 9-10.LST.6.1, 11-12.LST.6.1
Indiana Academic Standards: Mathematics (2014)	
IRA/NCTE Standards for the English Language Arts (2012)	Standard 5 Standard 6
NCTM Principles and Standards for School Mathematics (2000)	
Standard 6: Strong and Developed Writing **Indiana educators understand how to develop and strengthen writing by revising, editing, rewriting, or trying a new approach.**	
Indiana Academic Standards for English/Language Arts (2014)	Writing Writing Genres: 6.W.3.1, 7.W.3.1, 8.W.3.1, 9-10.W.3.1, 11-12.W.3.1 The Writing Process: 6.W.4, 7.W.4, 8.W.4, 9-10.W.4, 11-12.W.4

Alignment Between the Indiana REPA Educator Standards for Core Academic Skills Assessment (CASA) and state and national student and teacher standards for Core Academic Skills

Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	LH.5: Writing Genres: 6-8.LH.5.1, 9-10.LH.5.1, 11-2.LH.5.1 LH.6: The Writing Process: 6-8.LH.6.1, 9-10.LH.6.1, 11-12.LH.6.1 LH.7: The Research Process (Writing): 6-8.LH.7.2–7.3, 9-10.LH.7.1–7.3, 11-12.LH.7.1–7.3
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.5: Writing Genres (Writing): 6-8.LST.5.1, 9-10.LST.5.1, 11-12.LST.5.1 LST.6: The Writing Process: 6-8.LST.6.1, 9-10.LST.6.1, 11-12.LST.6.1 LST.7: The Research Process (Writing): 6-8.LST.7.1–7.3, 9-10.LST.7.1–7.3, 11-12.LST.7.1–7.3
Indiana Academic Standards: Mathematics (2014)	
IRA/NCTE Standards for the English Language Arts (2012)	Standard 4 Standard 5 Standard 6
NCTM Principles and Standards for School Mathematics (2000)	
Standard 7: Grammar, Usage, and Mechanics **Indiana educators demonstrate command of the conventions of standard English grammar, usage, and mechanics.**	
Indiana Academic Standards for English/Language Arts (2014)	Writing Conventions of Standard English: 6.W.6.1a–e, 6.W.6.2a–c, 7.W.7.1a–e, 7.W.2a–c, 8.W.1a–e, 8.W.2a–c, 9-10.W.1a–e, 9-10.W.2a–c, 11-12.W.1a–e, 11-12.W.2a–c
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	LH.6: The Writing Process (Writing): 6-8.LH.6.1, 9-10.LH.6.1, 11-12.LH.6.1
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.6: The Writing Process (Writing): 6-8.LST.6.1, 9-10.LST.6.1, 11-12.LST.6.1
Indiana Academic Standards: Mathematics (2014)	
IRA/NCTE Standards for the English Language Arts (2012)	Standard 4 Standard 6
NCTM Principles and Standards for School Mathematics (2000)	
Standard 8: Writing Assignment **Indiana educators demonstrate the ability to write arguments to support claims in an analysis of substantive topics using valid reasoning and relevant and sufficient evidence.**	
Indiana Academic Standards for English/Language Arts (2014)	Writing Learning Outcome: 6.W.1, 7.W.1, 8.W.1, 9-10.W.1, 11-12.W.1 Writing Genres: 6.W.3.1, 7.W.3.1, 8.W.3.1, 9-10.W.3.1, 11-12.W.3.1 The Writing Process: 6.W.4, 7.W.4, 8.W.4, 9-10.W.4, 11-12.W.4 The Research Process: 6.W.5, 7.W.5, 8.W.5, 9-10.W.5, 11-12.W.5

Alignment Between the Indiana REPA Educator Standards for Core Academic Skills Assessment (CASA) and state and national student and teacher standards for Core Academic Skills

	Conventions of Standard English: 6.W.6.1a–e, 6.W.6.2a–c, 7.W.7.1a–e, 7.W.2a–c, 8.W.1a–e, 8.W.2a–c, 9-10.W.1a–e, 9-10.W.2a–c, 11-12.W.1a–e, 11-12.W.2a–c
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	LH.5: Writing Genres (Writing): 6-8.LH.5.1, 9-10.LH.5.1, 11-12.LH.5.1 LH.6: The Writing Process (Writing): 6-8.LH.6.1, 9-10.LH.6.1, 11-12.LH.6.1 LH.7: The Research Process (Writing): 6-8.LH.7.1–7.3, 9-10.LH.7.1–7.3, 11-12.LH.7.1–7.3
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.5: Writing Genres (Writing): 6-8.LST.5.1, 9-10.LST.5.1, 11-12.LST.5.1 LST.6: The Writing Process (Writing): 6-8.LST.6.1, 9-10.LST.6.1, 11-12.LST.6.1 LST.7: The Research Process (Writing): 6-8.LST.7.1–7.3, 9-10.LST.7.1–7.3, 11-12.LST.7.1–7.3
Indiana Academic Standards: Mathematics (2014)	
IRA/NCTE Standards for the English Language Arts (2012)	Standard 4 Standard 5 Standard 6 Standard 7
NCTM Principles and Standards for School Mathematics (2000)	
Standard 9: Number and Quantity **Indiana educators demonstrate knowledge of number systems, number representations, number operations, and basic number theory.**	
Indiana Academic Standards for English/Language Arts (2014)	
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.2: Key Ideas and Textual Support (Reading): 6-8.LST.2.3, 9-10.LST.2.3, 11-12.LST.2.3 LST.3: Structural Elements and Organization (Reading): 6-8.LST.3.1, 9-10.LST.3.1, 11-12.LST.3.1
Indiana Academic Standards: Mathematics (2014)	Number Sense 6.NS.1-6.NS.10, 7.NS.1- 7.NS.3, 8.NS.1-8.NS.4 Computation 6.C.1- 6.C.6, 7.C.1-7.C.8, 8.C.1, 8.C.2 Algebra and Functions 6.AF.7-6.AF.9 Algebra I: Real Numbers and Expressions AI.RNE.1- AI.RNE.4 Quantitative Reasoning: Numeracy QR.N.1-QR.N.7 Quantitative Reasoning: Ratio and Proportional Reasoning QR.RP.2, QR.RP.3, QR.RP.5

Alignment Between the Indiana REPA Educator Standards for Core Academic Skills Assessment (CASA) and state and national student and teacher standards for Core Academic Skills

IRA/NCTE Standards for the English Language Arts (2012)	
NCTM Principles and Standards for School Mathematics (2000)	Grades 6-8: Number and Operations Understand numbers, ways of representing numbers, relationships among numbers, and number systems Understand meanings of operations and how they relate to one another Compute fluently and make reasonable estimates Grades 6-8: Problem Solving Solve problems that arise in mathematics and in other contexts Grades 6-8: Representation Select, apply, and translate among mathematical representations to solve problems Grades 9-12: Number and Operations Understand numbers, ways of representing numbers, relationships among numbers, and number systems Understand meanings of operations and how they relate to one another Compute fluently and make reasonable estimates Grades 9-12: Problem Solving Solve problems that arise in mathematics and in other contexts Grades 9-12: Representation Select, apply, and translate among mathematical representations to solve problems
Standard 10: Algebra and Functions **Indiana educators demonstrate knowledge of mathematical expressions, basic algebraic techniques, and the use of equations and inequalities to model and solve problems.**	
Indiana Academic Standards for English/Language Arts (2014)	
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.2: Key Ideas and Textual Support (Reading): 6-8.LST.2.3, 9-10.LST.2.3, 11-12.LST.2.3 LST.3: Structural Elements and Organization (Reading): 6-8.LST.3.1, 9-10.LST.3.1, 11-12.LST.3.1 LST.4: Synthesis and Connection of Ideas (Reading): 6-8.LST.4.1, 9-10.LST.4.1, 11-12.LST.4.1
Indiana Academic Standards: Mathematics (2014)	Algebra and Functions 6.AF.1-6.AF.6, 6.AF.10, 7.AF.1-7.AF.9, 8.AF.1-8.AF.8 Algebra I: Real Numbers and Expressions AI.RNE.5-AI.RNE.7 Algebra I: Functions AI.F.2 Algebra I: Linear Equations, Inequalities, and Functions AI.L.1-AI.L.11 Algebra I: Systems of Equations and Inequalities AI.SEI.1-AI.SEI.4 Algebra II: Complex Numbers and Expressions

	AII.CNE.2-AII.CNE.5 Algebra II: Systems of Equations AII.SE.2-AII.SE.3 Precalculus: Functions PC.F.1, PC.F.2 Quantitative Reasoning QR.RP.6, QR.M.4
IRA/NCTE Standards for the English Language Arts (2012)	
NCTM Principles and Standards for School Mathematics (2000)	Grades 6-8: Algebra Understand patterns, relations, and functions Represent and analyze mathematical situations and structures using algebraic symbols Use mathematical models to represent and understand quantitative relationships Analyze change in various contexts Grades 6-8: Problem Solving Solve problems that arise in mathematics and in other contexts Grades 6-8: Representation Select, apply, and translate among mathematical representations to solve problems Use representations to model and interpret physical, social, and mathematical phenomena Grades 9-12: Algebra Understand patterns, relations, and functions Represent and analyze mathematical situations and structures using algebraic symbols Use mathematical models to represent and understand quantitative relationships Analyze change in various contexts Grades 9-12: Problem Solving Solve problems that arise in mathematics and in other contexts Grades 9-12: Representation Select, apply, and translate among mathematical representations to solve problems Use representations to model and interpret physical, social, and mathematical phenomena
Standard 11: Measurement and Geometry **Indiana educators demonstrate knowledge of the principles and procedures of measurement, basic properties of two- and three-dimensional figures, and reasoning in geometry.**	
Indiana Academic Standards for English/Language Arts (2014)	
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	

Alignment Between the Indiana REPA Educator Standards for Core Academic Skills Assessment (CASA) and state and national student and teacher standards for Core Academic Skills

Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.2: Key Ideas and Textual Support (Reading): 6-8.LST.2.3, 9-10.LST.2.3, 11-12.LST.2.3 LST.3: Structural Elements and Organization (Reading): 6-8.LST.3.1, 9-10.LST.3.1, 11-12.LST.3.1 LST.4: Synthesis and Connection of Ideas (Reading): 6-8.LST.4.1, 9-10.LST.4.1, 11-12.LST.4.1 LST.5: Writing Genres (Writing): 6-8.LST.5.1, 9-10.LST.5.1, 11-12.LST.5.1
Indiana Academic Standards: Mathematics (2014)	Geometry and Measurement 6.GM.1-6.GM.6, 7.GM.1-7.GM.7, 8.GM.1-8.GM.2, 8.GM.4-8.GM.5, 8.GM.7-8.GM.9 Geometry: Lines, Angles, and Planes G.PL.3 Geometry: Triangles G.T.1, G.T.2, G.T.4, G.T.5, G.T.8, G.T.9, G.T.11 Geometry: Quadrilaterals and Other Polygons G.QP.3-G.QP.5 Geometry: Circles G. CI.1, G.CI.2, G.CI.4 Geometry: Three-Dimensional Solids G.TS.3, G.TS.5
IRA/NCTE Standards for the English Language Arts (2012)	
NCTM Principles and Standards for School Mathematics (2000)	Grades 6-8: Geometry Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships Specify locations and describe spatial relationships using coordinate geometry and other representational systems Apply transformations and use symmetry to analyze mathematical situations Use visualization, spatial reasoning, and geometric modeling to solve problems Grades 6-8: Measurement Understand measurable attributes of objects and the units, systems, and processes of measurement Apply appropriate techniques, tools, and formulas to determine measurements Grades 6-8: Problem Solving Solve problems that arise in mathematics and in other contexts Grades 6-8: Reasoning and Proof Recognize reasoning and proof as fundamental aspects of mathematics Make and investigate mathematical conjectures Develop and evaluate mathematical arguments and proofs Select and use various types of reasoning and methods of proof Grades 6-8: Representation Select, apply, and translate among mathematical representations to solve problems Use representations to model and interpret physical, social, and mathematical phenomena Grades 9-12: Geometry

	Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships Specify locations and describe spatial relationships using coordinate geometry and other representational systems Apply transformations and use symmetry to analyze mathematical situations Use visualization, spatial reasoning, and geometric modeling to solve problems Grades 9-12: Measurement Understand measurable attributes of objects and the units, systems, and processes of measurement Apply appropriate techniques, tools, and formulas to determine measurements Grades 9-12: Problem Solving Solve problems that arise in mathematics and in other contexts Grades 9-12: Reasoning and Proof Recognize reasoning and proof as fundamental aspects of mathematics Make and investigate mathematical conjectures Develop and evaluate mathematical arguments and proofs Select and use various types of reasoning and methods of proof Grades 9-12: Representation Select, apply, and translate among mathematical representations to solve problems Use representations to model and interpret physical, social, and mathematical phenomena
Standard 12: Statistics and Probability **Indiana educators demonstrate knowledge of the collection, presentation, and interpretation of data, and of the fundamental properties of probability.**	
Indiana Academic Standards for English/Language Arts (2014)	
Indiana Academic Standards Content Area Literacy: History/Social Studies (2014)	
Indiana Academic Standards: Content Area Literacy: Science/Technical Subjects (2014)	LST.2: Key Ideas and Textual Support (Reading): 6-8.LST.2.3, 9-10.LST.2.3, 11-12.LST.2.3 LST.3: Structural Elements and Organization (Reading): 6-8.LST.3.1, 9-10.LST.3.1, 11-12.LST.3.1 LST.4: Synthesis and Connection of Ideas (Reading): 6-8.LST.4.1, 9-10.LST.4.1, 11-12.LST.4.1, 9-10.LST.4.2, 11-12.LST.4.2 LST.7: The Research Process (Writing): 6-8.LST.7.1, 9-10.LST.7.1, 11-12.LST.7.1
Indiana Academic Standards: Mathematics (2014)	Data Analysis and Statistics 6.DS.1-D.DS.4, 7.DSP.1-7.DSP.7, 8.DSP.1-8.DSP.5 Algebra I: Data Analysis and Statistics AI.DS.1-AI.DS.3 Algebra II: Data Analysis, Statistics, and Probability AII.DSP.1, AII.DSP.3, AII.DSP.5 Precalculus: Functions PC.F.2 Finite Math: Probability

Alignment Between the Indiana REPA Educator Standards for Core Academic Skills Assessment (CASA) and state and national student and teacher standards for Core Academic Skills

	FM.P.2, FM.P.3, FM.P.5, FM.P.7 Probability and Statistics: Data Analysis PS.DA.1-PS.DA.2, PS.DA.6, PS.DA.9, PS.DA.11 Probability and Statistics: Probability PS.P.1, PS.P.2, PS.P.4, PS.P.6 Quantitative Reasoning: Modeling QR.M.3 Quantitative Reasoning: Probabilistic Reasoning to Assess Risk QR.P.3, QR.P.4 Quantitative Reasoning: Statistics QR.S.1, QR.S.3-QR.S.7, QR.S.9
IRA/NCTE Standards for the English Language Arts (2012)	
NCTM Principles and Standards for School Mathematics (2000)	Grades 6-8: Data Analysis and Probability Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them Select and use appropriate statistical methods to analyze data Develop and evaluate inferences and predictions that are based on data Understand and apply basic concepts of probability Grades 6-8: Problem Solving Solve problems that arise in mathematics and in other contexts Grades 6-8: Representation Select, apply, and translate among mathematical representations to solve problems Use representations to model and interpret physical, social, and mathematical phenomena Grades 9-12: Data Analysis and Probability Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them Select and use appropriate statistical methods to analyze data Develop and evaluate inferences and predictions that are based on data Understand and apply basic concepts of probability Grades 9-12: Problem Solving Solve problems that arise in mathematics and in other contexts Grades 9-12: Representation Select, apply, and translate among mathematical representations to solve problems Use representations to model and interpret physical, social, and mathematical phenomena