CURRICULUM MAP ALGEBRA 2
North Smithfield School Department

UNIT	COMMON CORE CLUSTERS AND STANDARDS Curriculum Common Core Math Algebra2.docx	MATHEMATICAL PRACTICE
UNIT: 1 Polynomial Functions	• Solve quadratic equation in one variable. A-REI.4 • Perform arithmetic operations with complex numbers. N,CN. 1,2 • Use complex numbers in polynomial identities and equations. N,CN. 7, (+)8, (+)9 • Interpret the structure of expressions. A.SSE.1a, 1b, 2 • Write expressions in equivalent forms to solve problems. A.SSE.3a,3b • Perform arithmetic operations on polynomials. A.APR.1 • Understand the relationship between zeros and factors of polynomials. A.APR.2,3 • Use polynomial identities to solve problems. A.APR.4, (+)5 • Represent and solve equations and inequalities graphically. A.REI.11 • Analyze functions using different representations. F.IF.7a, 7c	▫ Make sense of problems and persevere in solving them. MP.1
UNIT: 2 Rational and Radical Functions	• Interpret the structure of expressions. A.SSE.1a, 1b • Rewrite rational expressions. A.APR.6, (+)7 • Understand solving equations as a process of reasoning and explain the reasoning. A.REI.2 • Represent and solve equations and inequalities graphically. A.REI.11 • Analyze functions using different representations. F.IF.7b, 7d(+), 8a, 9	▫ Reason abstractly and quantitatively. MP.2 ▫ Construct viable arguments and critique the reasoning of others. MP.3
UNIT: 3 Exponential and Logarithmic Functions	• Write expressions in equivalent forms to solve problems A.SSE.3c,4 • Understand solving equations as a process of reasoning and explain the reasoning. A.REI.2 • Represent and solve equations and inequalities graphically. A.REI.11 • Construct and compare linear, quadratic, and exponential models and solve problems. F.LE.4 • Analyze functions using different representations. F.IF. 7e, 8b, 9	▫ **Model with mathematics**. ★ MP.4
UNIT: 4 Trigonometric Functions	• Extend the domain of trigonometric functions using the unit circle. F.TF.1,2 • Model periodic phenomena with trigonometric function. F.TF.5 • Prove and apply trigonometric identities. F.TF.8 • Analyze functions using different representations. F.IF. 7e, 9	▫ Use appropriate tools strategically. MP.5 ▫ Attend to precision. MP.6
UNIT: 5 Modeling with Functions	• Create equations that describe numbers or relationships. A.CED.1,2,3,4 • Interpret functions that arise in applications in terms of a context. F.IF.4,5,6 • Analyze functions using different representations. F.IF.7, 7c, 7e, 8, 9 • Build a function that models a relationship between two quantities. F.BF.1b • Build new functions from existing functions. F.BF.3,4a • Construct and compare linear, quadratic, and exponential models and solve problems. F.LE.4	▫ Look for and make use of structure. MP.7 ▫ Look for and express regularity in repeated reasoning. MP.8
UNIT: 6 Inferences and Conclusions from Data	• Summarize, represent, and interpret data on single count or measurement variable. S.ID.4 • Understand and evaluate random processes underlying statistical experiments. S.IC.1,2 • Make inferences and justify conclusions from sample surveys, experiments and observational studies. S.IC.3,4,5,6 • Use probability to evaluate outcomes of decisions. S.MD.(+)6,7	

Major Content   Supporting Content   Additional Content