Columbus County Schools *Common Core State Standards Curriculum Alignment*		
Subject: Math	**Grade Level**: 8th	**Grading Period:** 1st Nine Weeks
CCSS: 8.EE.5, 8.EE.6, 8.EE.7, 8.EE.8, 8.F.1, 8.F.2, 8.F.3, 8.F.4, 8.F.5	**Time Frame:** Week 10 – Week 18	**Domain (Unit):** Expressions and Equations (Unit 2) and Functions (Unit 3)
Essential Question (Unit 2): How can you communicate mathematical ideas effectively? **Essential Question (Unit 3):** How can you find and use patterns to model real-world situations?		

Chapters:	**Mathematical Practices:**	**Academic Vocabulary:**	**Assessment(s):**	**Additional Resources:**
Chapter 3: Equations in Two Variables **Lessons:** 1 - 8 **Essential Question:** Why are graphs helpful?	1,2, 3,4,5,7	Constant of Proportionality, Constant of Variation, Constant Rate of Change, Direct Variation, Linear Relationships, Point-Slope Form, Rise, Run, Slope, Slope-Intercept Form, Standard Form, Substitution, Systems of Equations, X-Intercept, Y-Intercept	- BellRingers - Observations - Class Discussions - Quizzes - Homework - Guided Practice - Independent Practice - Chapter Tests	-Big Ideas -Websites -8th Grade Notebook
Chapter 4: Functions **Lessons:** 1 - 9 **Essential Question:** How can we model relationships between quantities?	1,2, 3,4,5,7	Continuous Data, Dependent Variable, Discrete Data, Domain, Function, Function Table, Independent Variable, Linear Equation, Linear Function, Nonlinear Function, Quadratic Function, Qualitative Graphs, Range, Relation	- BellRingers - Observations - Class Discussions - Quizzes - Homework - Guided Practice - Independent Practice - Chapter Tests	-Big Ideas -Websites -8th Grade Notebook

Day 1	Day 2	Day 3	Day 4	Day 5
Chapter: 3 **Lesson**: 1	**Chapter:** 3 **Lesson**: Inquiry Lab	**Chapter:** 3 **Lesson**: 2	**Chapter:** 3 **Lesson**: 3	**Chapter:** 3 **Lesson**: 4
Standards: 8.EE.5 **Mathematical Practices**: 1, 3, 4, 5 **Academic Vocabulary**: Linear Relationship, Constant Rate of Change	**Standards**: 8.EE.5 **Mathematical Practices**: 1, 3 **Academic Vocabulary**: None	**Standards**: 8.EE.5 **Mathematical Practices**: 1, 3, 4 **Academic Vocabulary**: Slope, Rise, Run	**Standards**: 8.EE.5, 8.EE.6, 8.F.2, 8.F.4 **Mathematical Practices**: 1, 3, 4 **Academic Vocabulary**: Direct Variation, Constant of Variation, Constant of Proportionality	**Standards**: 8.EE.6, 8.F.3, 8.F.4 **Mathematical Practices**: 1, 3, 4 **Academic Vocabulary**: Y-Intercept, Slope-Intercept Form
Objective: Identify proportional and nonproportional linear relationships by finding a constant rate of change.	**Objective**: Use a graphing calculator to find rates of change.	**Objective**: Find the slope of a line.	**Objective**: Use direct variation to solve problems.	**Objective**: Graph linear equations using the slope and y-intercept.
BellRinger: On Board **Guided Practice**: Page 174 **Independent Practice**: Pages 175 - 176 **Exit Slip**: Ticket Out the Door	**BellRinger**: On Board **Guided Practice**: Page 179 **Independent Practice**: Page 180 **Exit Slip**: Reflect (Page 180)	**BellRinger**: On Board **Guided Practice**: Page 184 **Independent Practice**: Pages 185 - 186 **Exit Slip**: Ticket Out the Door	**BellRinger**: On Board **Guided Practice**: Page 194 **Independent Practice**: Pages 195 - 196 **Exit Slip**: Ticket Out the Door	**BellRinger**: On Board **Guided Practice**: Page 202 **Independent Practice**: Pages 203 - 204 **Exit Slip**: Ticket Out the Door
Assessment: Homework (Pages 177-178)	**Assessment**: Observations and Oral Responses.	**Assessment**: Homework (Pages 187-188)	**Assessment**: Homework (Pages 197-198)	**Assessment**: Homework (Pages 205-206)

Day 6	Day 7	Day 8	Day 9	Day 10
Chapter: 3 **Lesson**: Inquiry Lab	**Chapter:** 3 **Lesson**: Lesson 5	**Chapter:** 3 **Lesson**: Problem-Solving Investigation	**Chapter:** 3 **Lesson**: 6	**Chapter:** 3 **Lesson**: Inquiry Lab
Standards: 8.EE.6 **Mathematical Practices**: 1, 3, 5 **Academic Vocabulary**: None	**Standards**: 8.EE.8c **Mathematical Practices**: 1, 3, 4 **Academic Vocabulary**: X-Intercept, Standard Form	**Standards**: 8.EE.8 **Mathematical Practices**: 1, 3, 4 **Academic Vocabulary**: None	**Standards**: 8.EE.8c **Mathematical Practices**: 1, 2, 3, 4, 5, 7 **Academic Vocabulary**: Point-Slope Form	**Standards**: 8.EE.8, 8.EE.8a, 8.EE.8b, 8.EE.8c **Mathematical Practices**: 1, 3, 5, 7 **Academic Vocabulary**: None
Objective: Graph and analyze slope triangles.	**Objective**: Graph a function using the x- and y-intercepts.	**Objective**: Guess, check, and revise to solve problems.	**Objective**: Write an equation of a line.	**Objective**: Find one solution for a set of two equations.
BellRinger: On Board **Guided Practice**: Page 207 **Independent Practice**: Page 208 **Exit Slip**: Reflect (Page 208)	**BellRinger**: On Board **Guided Practice**: Page 212 **Independent Practice**: Pages 213 -214 **Exit Slip**: Ticket Out the Door	**BellRinger**: On Board **Guided Practice**: Page 217 **Independent Practice**: Page 218 **Exit Slip**: Collaborate (Page 219)	**BellRinger**: On Board **Guided Practice**: Page 224 **Independent Practice**: Pages 225 - 226 **Exit Slip**: Ticket Out the Door	**BellRinger**: On Board **Guided Practice**: Page 231 **Independent Practice**: Page 232 **Exit Slip**: Reflect (Page 232)
Assessment: Observations, Class Discussions, and Oral Responses.	**Assessment**: Homework (Pages 215 - 216)	**Assessment**: Mid-Chapter Check	**Assessment**: Homework (Pages 227-228)	**Assessment**: Observations, Class Discussions, and Oral Responses.

Day 11	Day 12	Day 13	Day 14	Day 15
Chapter: 3 **Lesson**: 7	**Chapter:** 3 **Lesson**: Lesson 8	**Chapter:** 3 **Lesson**: Inquiry Lab	**Chapter:** 3 **Lesson**: Chapter Review	**Chapter:** 3 **Lesson**: Chapter Test
Standards: 8.EE.8, 8.EE.8a, 8.EE.8b, 8.EE.8c **Mathematical Practices**: 1, 3, 4, 7 **Academic Vocabulary**: Systems of Equations	**Standards**: 8.EE.8, 8.EE.8b, 8.EE.8c **Mathematical Practices**: 1, 3, 4, 7 **Academic Vocabulary**: Substitution	**Standards**: 8.EE.8, 8.EE.8a, 8.EE.8b, 8.EE.8c **Mathematical Practices**: 1, 3, 5 **Academic Vocabulary**: None	**Standards**: 8.EE.5, 8.EE.6, 8.EE.8, 8.F.2, 8.F.3, 8.F.4, 8.F.5 **Mathematical Practices**: 1, 3, 5, 7 **Academic Vocabulary**: All	**Standards**:8.EE.5, 8.EE.6, 8.EE.8, 8.F.2, 8.F.3, 8.F.4, 8.F.5 **Mathematical Practices**: 1, 3, 5, 7 **Academic Vocabulary**: All
Objective: Solve systems of equations by graphing.	**Objective**: Solve systems of equations algebraically.	**Objective**: Solve real-world mathematical problems using two linear equations in two variables.	**Objective**: Use graphs to help with solving problems.	**Objective**: Use graphs to help with solving problems.
BellRinger: On Board **Guided Practice**: Page 238 **Independent Practice**: Pages 239 - 240 **Exit Slip**: Ticket Out the Door	**BellRinger**: On Board **Guided Practice**: Page 246 **Independent Practice**: Pages 247 - 248 **Exit Slip**: Ticket Out the Door	**BellRinger**: On Board **Guided Practice**: Page 251 **Independent Practice**: Page 252 **Exit Slip**: Reflect (Page 252)	**BellRinger**: On Board **Guided Practice**: Page 254 **Independent Practice**: Pages 255 - 257 **Exit Slip**: Reflect (Page 258)	**BellRinger**: On Board **Guided Practice**: Answer any questions students may have. **Independent Practice**: Chapter Test **Exit Slip**: Reflect (What did you not understand from the test?)
Assessment: Homework (Pages 241 - 242)	**Assessment**: Homework (Pages 249 – 250)	**Assessment**: Observations, Class Discussions, and Oral Responses.	**Assessment**: Observations, Class Discussions, and Oral Responses.	**Assessment**: Chapter Test

Day 16	Day 17	Day 18	Day 19	Day 20
Chapter: 4 **Lesson**: 1 **Standards**: 8.F.4 **Mathematical Practices**: 1, 2, 4 **Academic Vocabulary**: None **Objective**: Solve problems by making a table. **Objective**: Translate tables and graphs into linear equations. **BellRinger**: On Board **Guided Practice**: Page 272 **Independent Practice**: Pages 273 - 274 **Exit Slip**: Collaborate (Page 307) **Assessment**: Homework (Pages 275-276) **Assessment**: Mid-Chapter Check (Page 308)	**Chapter:** 4 **Lesson**: 2 **Standards**: 8.F.1 **Mathematical Practices**: 1, 3, 4, 7 **Academic Vocabulary**: Relation, Domain, Range **Objective**: Compare properties of functions. **Objective**: Use the coordinate plane to represent relations. **BellRinger**: On Board **Guided Practice**: Page 314 **Independent Practice**: Page 280 Pages 315 - 316 **Exit Slip**: Ticket Out the Door **Assessment**: Homework (Pages 283-284) **Assessment**: Homework (Pages 317 – 318)	**Chapter:** 4 **Lesson**: Inquiry Lab **Standards**: 8.F.1 **Mathematical Practices**: 1, 3, 4 **Academic Vocabulary**: None **Objective**: Determine and interpret the rate of change and initial value of a function. **Objective**: Determine whether a relation is a function. **BellRinger**: On Board **Guided Practice**: Page 322 **Independent Practice**: Page 285 Pages 323 - 324 **Exit Slip**: Reflect (Page 286) **Assessment**: Observation, Oral Response, Class Discussion **Assessment**: Homework (Pages 325 – 326)	**Chapter:** 4 **Lesson**: 3 **Standards**: 8.F.1, 8.F.3, 8.F.5 **Mathematical Practices**: 1, 2, 3, 4 **Academic Vocabulary**: Function, Function Table, Independent Variable, Dependent Variable **Objective**: Determine whether a function is linear or nonlinear. **Objective**: Find function values and complete function tables. **BellRinger**: On Board **Guided Practice**: Page 330 **Independent Practice**: Page 290 Pages 331 - 332 **Exit Slip**: Ticket Out the Door **Assessment**: Homework (Pages 293 – 294) **Assessment**: Homework (Pages 333 – 334)	**Chapter:** 4 **Lesson**: 4 **Standards**: 8.F.3, 8.F.4 **Mathematical Practices**: 1, 3, 4, 7 **Academic Vocabulary**: Quadratic Function **Academic Vocabulary**: Linear Function, Nonlinear Function, Graph, Discrete Data **Objective**: Represent linear functions using function tables and graphs and determine whether a set of data is continuous or discrete. **BellRinger**: On Board **Guided Practice**: Page 338 **Guided Practice**: Page 300 **Independent Practice**: Pages 301 - 302 **Independent Practice**: Pages 339 - 340 **Exit Slip**: Ticket Out the Door **Exit Slip**: Ticket Out the Door **Assessment**: Homework (Pages 303 – 304) **Assessment**: Homework (Pages 341 – 342)

Day 21	Day 22	Day 23	Day 24	Day 25
Chapter: 4 **Lesson**: Problem Solving Investigation **Standards**: 8.F.4 **Mathematical Practices**: 1, 3, 4, 5 **Academic Vocabulary**: Linear Equation **Objective**: Translate tables and graphs into linear equations. **BellRinger**: On Board **Guided Practice**: Page 305 **Independent Practice**: Page 306 **Exit Slip**: Ticket Out the Door	**Chapter:** 4 **Lesson**: 5 **Standards**: 8.F.2, 8.F.4 **Mathematical Practices**: 1, 2, 3, 4 **Academic Vocabulary**: None **Objective**: Use the coordinate plane to represent relations. **BellRinger**: On Board **Guided Practice**: Page 314 **Independent Practice**: Pages 315 - 316 **Exit Slip**: Ticket Out the Door	**Chapter:** 4 **Lesson**: 6 **Standards**: 8.F.1 **Mathematical Practices**: 1, 3, 4 **Academic Vocabulary**: None **Objective**: Determine whether a relation is a function. **BellRinger**: On Board **Guided Practice**: Page 322 **Independent Practice**: Page 286 **Exit Slip**: Reflect (Page 286)	**Chapter:** 4 **Lesson**: 7 **Standards**: 8.F.1, 8.F.4 **Mathematical Practices**: 1, 3, 4, 7 **Academic Vocabulary**: Nonlinear Function **Objective**: Find function values and complete function tables. **BellRinger**: On Board **Guided Practice**: Page 330 **Independent Practice**: Pages 291 - 292 **Exit Slip**: Ticket Out the Door **Assessment**: Homework (Pages 293 – 294) **Assessment**: Homework (Pages 333 – 334)	**Chapter:** 4 **Lesson**: 8 **Standards**: 8.F.3, 8.F.5 **Mathematical Practices**: 1, 3, 4, 7 **Academic Vocabulary**: Quadratic Function **Objective**: Graph quadratic functions. **BellRinger**: On Board **Guided Practice**: Page 300 **Independent Practice**: Pages 301 - 302 **Exit Slip**: Ticket Out the Door **Assessment**: Homework (Pages 303 – 304) **Assessment**: Homework (Pages 341 – 342)

Day 26	**Day 27**	**Day 28**	**Day 29**	
Chapter: 4 **Lesson:** Inquiry Lab	**Chapter:** 4 **Lesson**: 9	**Chapter:** 4 **Lesson**: Chapter Review	**Chapter:** 4 **Lesson**: Chapter Test	
Standards: 8.F.3, 8.F.5 **Mathematical Practices**: 1, 3, 7 **Academic Vocabulary**: None	**Standards**: 8.F.5 **Mathematical Practices**: 1, 2, 3, 4 **Academic Vocabulary**: Qualitative Graphs	**Standards**: 8.F.1, 8.F.2, 8.F.3, 8.F.4, 8.F.5 **Mathematical Practices**: 1, 2, 3, 4, 5, 7 **Academic Vocabulary**: All	**Standards**: 8.F.1, 8.F.2, 8.F.3, 8.F.4, 8.F.5 **Mathematical Practices**: 1, 2, 3, 4, 5, 7 **Academic Vocabulary**: All	
Objective: Use a graphing calculator to graph families of nonlinear functions.	**Objective**: Sketch and describe qualitative graphs.	**Objective**: Model relationships between quantities.	**Objective**: Model relationships between quantities.	
BellRinger: On Board **Guided Practice**: Page 343 **Independent Practice**: Pages 344 - 345 **Exit Slip**: Reflect (Page 346)	**BellRinger**: On Board **Guided Practice**: Page 350 **Independent Practice**: Pages 351 - 352 **Exit Slip**: Ticket Out the Door	**BellRinger**: On Board **Guided Practice**: Pages 355 - 356 **Independent Practice**: Pages 357 - 359 **Exit Slip**: Reflect (Page 360)	**BellRinger**: On Board **Guided Practice**: Answer any questions students may have. **Independent Practice**: Chapter Test **Exit Slip**: Reflect (What did you not understand from the test?)	
Assessment: Homework (Analyze - Page 346)	**Assessment**: Homework (Pages 353 – 354)	**Assessment**: Observation, Oral Response, Class Discussion.	**Assessment**: Chapter Test	