Unit Topic	Calculus Unit 6 - Applications of Differentiation Part 2
Standards	

Unit Essential Question	How do you use calculus to analyze graphs of functions?

Lesson 1 Focus Lesson 6 - A Summary of Curve Sketching **Standards** **Students Will Know… (Key Vocabulary)**	**Students Will Be Able To…** 1. Analyze and sketch the graph of a function	**Lesson Essential Question 1** How do we use all of the information we know about a function in order to sketch it?
Lesson 2 Focus Lesson 7 - Optimization Problems **Standards** **Students Will Know… (Key Vocabulary)**	**Students Will Be Able To…** 1. Solve applied minimum and maximum problems	**Lesson Essential Question 2** How do we find the maximum or minimum in a real-life problem?
Lesson 3 Focus Lesson 8 - Newton's Method **Standards** **Students Will Know… (Key Vocabulary)**	**Students Will Be Able To…** 1. Approximate a zero of a function using Newton's Method	**Lesson Essential Question 3** What does Newton's Method find for us in Calculus?
Lesson 4 Focus Lesson 9 - Differentials **Standards** **Students Will Know… (Key Vocabulary)**	**Students Will Be Able To…** 1. Understand the concept of a tangent line approximation 2. Compare the value of the differential, dy, with the actual change in y 3. Estimate a propagated error using a differential 4. Find the differential of a function using differentiation formulas	**Lesson Essential Question 4** How can we find a tangent line approximation?
Lesson 5 Focus **Standards** **Students Will Know… (Key Vocabulary)**	**Students Will Be Able To…**	**Lesson Essential Question 5**

Major Unit Assignment	