Uncharted: Day 1

Lesson objectives:		
• Define a right triangle and its parts • Understand the Pythagorean Theorem and apply it • See how the Pythagorean Theorem can be used practically in everyday life		
Assessment:		
• Exit questions • Students will turn in their worksheet		
Key Points:		
• This lesson introduces students to the fundamental concept of the Pythagorean Theorem.		
Component:	**Teacher & Student Actions**	**Materials**
Warm-Up or Hook [5 min]	• Do Now	Day 1 Handouts or blank paper
Introduction of new material [15 min]	• Teacher will introduce the Uncharted initiative and distribute Note to Students • Teacher will review right triangles and introduce the concepts of the Pythagorean Theorem for solving the length of triangle sides	Slides Note to Students
Guided Practice [5 min]	• Pythagorean Theorem Practice	
Independent Practice [20 min]	• Students will work independently or in groups to complete the worksheet on the Pythagorean Theorem	Day 1 Handouts Calculators Answers in slides
Closing [5 min]	• Exit Ticket • Ask students to complete their Daily Learning Log	Day 1 Handouts Daily Learning Logs
Differentiation Considerations:		
• Support during worksheet activity		

Standard(s):

Common Core Standards

- **CCSS.Math.Content.8.G.B.6** Explain a proof of the Pythagorean Theorem and its converse.
- **CCSS.Math.Content.8.G.B.7** Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
- **CCSS.Math.Content.8.G.B.8** Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.
- **CCSS.MATH.PRACTICE.MP1** Make sense of problems and persevere in solving them.
- **CCSS.MATH.PRACTICE.MP2** Reason abstractly and quantitatively.
- **CCSS.MATH.PRACTICE.MP3** Construct viable arguments and critique the reasoning of others.
- **CCSS.MATH.PRACTICE.MP4** Model with mathematics.
- **CCSS.MATH.PRACTICE.MP5** Use appropriate tools strategically.
- **CCSS.MATH.PRACTICE.MP6** Attend to precision.
- **CCSS.MATH.PRACTICE.MP7** Look for and make use of structure.
- **CCSS.MATH.PRACTICE.MP8** Look for and express regularity in repeated reasoning.