**Pythagorean Theorem Webquest Activity**

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| **The Challenge** |

**You are on a quest to discover some of the special properties of triangles. By the time you finish, you will know how to classify triangles based on their sides and angles, find the number of degrees in the third angle when given the other two, and use the Pythagorean Theorem to solve problems involving the lengths of sides in a right triangle. In addition, you will learn about some of the forces of nature that contribute to the mystery behind the most famous triangle of all!**

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| **The Task** |

**Your task will be to explore some of the resources listed below to learn about triangles and complete the** [**Webquest worksheet.**](http://mrwersted.com/valleytech/pythagorean%20theorem%20student%20worksheet.htm) **Good Luck!**

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| **The Process** |

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1. **What are some of the special properties and classifications of triangles? Complete the First Quest on your worksheet using the information on triangles located** [**HERE!**](https://www.mathsisfun.com/triangle.html) **(Link #1). Continue to alternate between the Webquest and your worksheet until you complete all the exercises and finish the Third Quest.**
2. **Got it? Practice your skills by clicking on the start button on the orange section located** [**HERE.**](http://www.aaamath.com/g8-513-triangle-angles.html) **(Link #2). After you've practiced, fill in your worksheet for your record times in 60 seconds using the options in the yellow "PLAY" section located at the bottom of the page.**
3. **How many did you correctly identify? Ready to identify by sides? How many can you correctly identify in 60 seconds?** [**GO!**](http://www.aaamath.com/geo318-triangle-sides.html) **(Link #3). Don't forget to fill in your Webquest worksheet!**
4. **Since every triangle has a total of 180o as a sum of the angles, we can easily find out how many degrees are in the third angle if given the number of degrees in the other two. You may want to use this** [**online calculator**](http://www.calculator.com/pantaserv/makecalc) **for this** [**Practice.**](http://www.aaamath.com/geo612x5.htm) **(Link #4). You will enter the number of degrees in the third angle in the box and press "Enter" to see if you are correct. How many did you get correct in 60 seconds?**
5. **Ready to read about the** [**Pythagorean Theorem**](http://www.pbs.org/wgbh/nova/proof/puzzle/)**? (Link #5 Take a look at this section and then practice on your Webquest.**
6. **Solve the** [**Ladder problem**](http://www.pbs.org/wgbh/nova/proof/puzzle/ladder.html) **(Link #6) located here and enter the answer on Third Quest number 3 on your worksheet.**
7. **Ready for another? See what you can do about** [**throwing a baseball!**](http://www.pbs.org/wgbh/nova/proof/puzzle/baseball.html) **(Link #7) Make sure you enter the correct answer on your worksheet!**
8. **Review working with the Pythagorean Theorem. Get a piece of notebook paper and solve problems 2-11 on this link** [**(Review)**](http://www.regentsprep.org/regents/math/algebra/at1/pracpyth.htm)**. Show your work on how you arrived at your answer. Make sure name is on it and turn it in to the teacher when completed. Note: # 1 will be extra credit: leave till last.**
9. **Ready to learn about a really mysterious triangle? Read The Bermuda Triangle Fact Sheet located** [**HERE.**](http://www.english-online.at/places/bermuda-triangle/bermuda-triangle-facts-myths.htm)**(Link #8).**
10. [**Where**](http://www.worldatlas.com/aatlas/infopage/bermudat.htm) **(Link #9) is this place anyway? I don't think I want to go there!**
11. **Ready for some answers? Read this page to find some of the** [**theories**](http://www.bermuda-triangle.org/html/theories.html) **(link#10) suggested for the high number of disappearances in this area.**
12. **Complete your Webquest worksheet by offering your opinion about what really happened to one of the missing** [**ships.**](http://www.bermuda-triangle.org/html/missing_vessels.html) **(Link #11) Your answer must be given in essay form. Be sure to support your answer with evidence and remember that spelling and grammar count!**

*(Resource: http://mrwersted.com/valleytech/pythagorean%20theorem%20webquest.htm)*