

## **Math Board Game**

**Objective:** To create a board game where players must solve Pythagorean Theorem problems to win.

- You are board game designers. Your game can have any theme you choose and you decide how your game is won. You are creating your game board for at least 4 players for your peer classmates to play. It has to be **fun to play**, and it has to be **easy to follow the rules**. You can include some fun questions and chance cards. The game should be decorated.
- You must provide clear, written directions so player will know how to play your game.
- You will need to produce a key to go with your game so the players will be able to check their answers and know if they are correct.
- I will provide paper/poster board but anything else is up to you.
- You will be graded using the rubric on the backside of this sheet.
- At least one of each of the following types of problems:
  - Identifying a right triangle
  - Missing a leg of a right triangle
  - Missing a hypotenuse of a right triangle
  - Real-world application of the Pythagorean Theorem
  - Error Analysis (show a student's incorrect work and identify the mistake)

**Your finished game should include:**

A decorated game board with enough game pieces for at least 4 players,

Dice, cards, or both for determining the moves and the order of play,

Clear complete written instructions for playing the game,

At least 15 math problems must be solved correctly and incorporated into the game.

# BOARD GAME PROJECT RUBRIC

	<b>5 pts</b>	<b>4 pts</b>	<b>2-3pts</b>	<b>0-1 pts</b>	<b>Score</b>
<b>Rules</b>	Clear and detailed explanations of how to play and win the game. The explanations are specific and easy to follow.	Detailed explanations of how to play and win the game. The explanations are not easy to follow.	Explanations of how to play and win the game are not clear, detailed or specific.	Explanations of how to play and win the game are unclear.	
<b>Design</b>	Project is neat, organized, well designed and creative.	Project is neat and organized.	Project is organized but no design.	Project is complete but no organization or design.	
<b>Use of Mathematics</b>	15 Math problems are used throughout the entire game to move spaces, earn or lose points, and win the game. Solutions are presented and correct.	Math problems are used only during certain parts of the game, or less than 15. Solutions are presented and mostly correct	Math problems are not used in the game, or not solved.	Math problems are not evident at all or not incorporated in the game.	
<b>Requirements</b>	Project successfully meets all requirements. The checklist from the project outline was used. The list of materials, the rules, the game pieces and the game board are complete.	Project meets most of the requirements.	Project meets few of the requirements.	Project is done incorrectly and does not meet any of the requirements.	

***Name of Board Game:***

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***Group Names:***

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**Grade: \_\_\_\_\_**

**Comments:**

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