

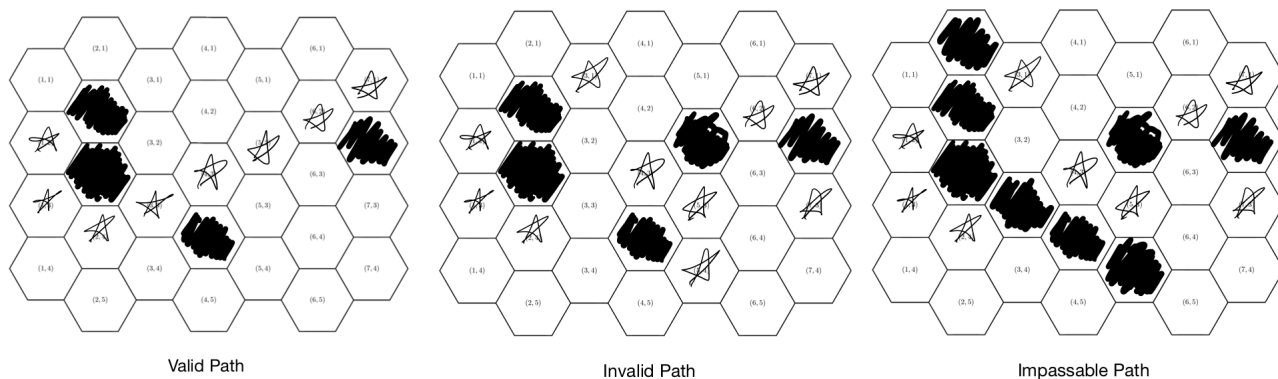


Math Block Busters: School Rules

The boards will update LIVE online. To find your school's boards just go to:

<http://people.math.sc.edu/robertv/block.html>

The Object of Blockbusters: Your team of mathletes must work together to create a horizontal path across the Blockbusters board. Your team earns blocks by answering questions successfully.



Setup: Grab at least one paper copy of the game board and a pencil, or find the live-updated electronic version of your team's game board at the link above. Designate one of your teammates to be the Map Keeper and one to be the Knower of Rules. The Map Keeper will be tasked with keeping the game board up to date. The Knower of Rules's duty is self-explanatory.

Gameplay: Each team will travel from table to table attempting to earn blocks by answering the corresponding questions.

Order of Play: Each team will act autonomously. On every turn, the team will do the following five things in order. Every time your team answers a question successfully, you will earn one of the thirty-one hexagonal game pieces (or blocks). But beware! You only get two attempts at each block before it is blacked out!

1. Choose a block that your team has not yet attempted.
2. Send a representative from your team to the designated table for that block and ask for a question.
3. Return to your team and attempt the question
4. Once your team has answered the question send a representative of your team back to the table to grade your answer and possibly earn a block.
5. Notify your team's Map Keeper of your progress.

Each team will then start a new turn. The parts of each turn are described in detail on the next page.

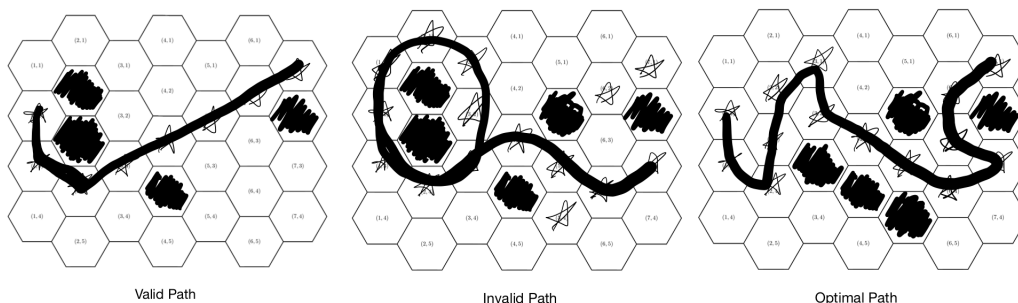
NOTE: A Calculator is STRONGLY recommended.

- 1. Choose a New Block.** The columns on the game board are represented by tables around Gambrell Hall. Choose a block that your team has not yet earned
- 2. Collect the Question** Send a representative to the corresponding table and ask the volunteer for the question corresponding the block you have chosen in step 1.
- 3. Work on the Question** Bring the question back to your team, and attempt the question. (If you are having trouble with a question you can return to step 1. at any time.)
- 4. Earn the Block** Once you have an answer write the answer, your team name and your school name on the question paper. Then send a representative back to the table corresponding to the block you are attempting, hand the sheet to the volunteer. If you question is correct the volunteer will tell you so and your team has earned the block. If you get the question wrong the first attempt you will be given another question to try again, if it is your second try then the block is now blacked out for your team and can only be attempted again using a lifeline (see below).
- 5. Update your map** If you earned a block or blacked out a block you should now update your map keeper so that you can keep track of your progress as a team. Also you can check your teams progress by following the link given on page 1.

Lifelines. The Knower of Rules has the additional duty of distributing lifelines to her or his team. There are three lifelines.

- 1. Change Difficulty.** Before collecting the question, the team representative must present this lifeline to the question-asker (but they may ask for the difficulty of a question before presenting it). This lifeline can be useful in two key instances:
 - (i) If you need a certain block to complete a path, you may reduce the difficulty of that block to make it easier to attain.
 - (ii) If you want to increase the possible number of points your team will earn, you may increase the difficulty of a block. (See winning the game below.)
- 2. Double Points.** Before collecting the question, the team representative must present this lifeline to the question-asker (but they may ask for the difficulty of the question before presenting it). This lifeline will double the points of the block. (See winning the game below.)
- 3. Teacher, Teacher 🍷.** Present this lifeline to your teacher to have them recover an impassible block. Your teacher will be asked a difficult question from that block's column. If your teacher answers correctly, she will earn you that block with a value of 5 points!

Winning the Game. Your team will win the game of Blockbusters if you are able to earn enough blocks to form a horizontal path across the game board. However, just like Highlander, there can only be one ultimate winner. Your team should try to earn as many blocks as possible and, in the end, your team must decide on an *optimal path* across the game board¹. A viable path must start on the left-hand side of the board and end on the right-hand side of the board, but may not pass through any block twice. The optimal path will be the one which earns the most points. (See below for examples.)



¹If there is a tie when your team votes on the optimal path, the Map Keeper acts as tie-breaker.

