Puzzle: Safe and Secured Puzzlehunts Mathematical Puzzlehunts Puzzle Solution

IBL & Active Learning with Math Puzzles at Lamar University

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At the entrance to his/her secret lair, you find a strange combination lock. Fortunately, Insert Name Here is pretty forgetful, so you also find a post-it note with this hint for the combination:

correct combination uses exactly one of each symbol / letter / character per row and column.



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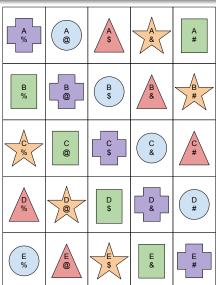
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- MIT Mystery Hunt
- Microsoft College Puzzle Challenge
- DASH (Different Area Same Hunt)

Some puzzlehunts are organized by communities of puzzle solvers, and others are sponsored by companies.

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 - Integration
 - Morse code
- How should I present the problem so it isn't trivial?
 - Ask about area under a curve
 - Embed it as punctuation within a paragrapht
- How do I make sure the player/student doesn't get off-track?
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- Founded in 2012 to adapt Australian IBL math camp format as a daylong MS competition
- HS event spun off as a pure puzzlehunt

LaMP (Lamar Mathematical Puzzle) Challenge

- Combination of AMP'd HS/MS formats
- First event in April 2015

Goal: have students collaborate as a team to solve puzzles by modeling them with matheatics.



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LaMP Format

- Opening Puzzle
 A physical challenge requiring students to run around a green space to collect data required to solve an otherwise quick puzzle.
- Main Puzzles
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 Extensions to the main puzzles, typically optimization puzzles. Teams which submit the best solution earn points.
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- Open source materials for free use in the classroom
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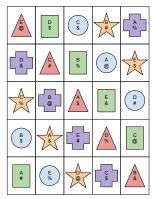
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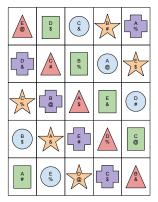
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EXTRA Puzzle: Add numbers 1-5 which appear with each column, row, shape, letter, and symbol exactly once!

This is an example of using *mutually orthogonal Latin squares*, a topic from Design Theory.

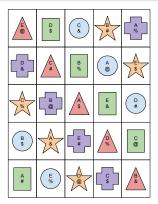




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Questions? Thanks for having me!