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Madeira Fourth Grader Makes History

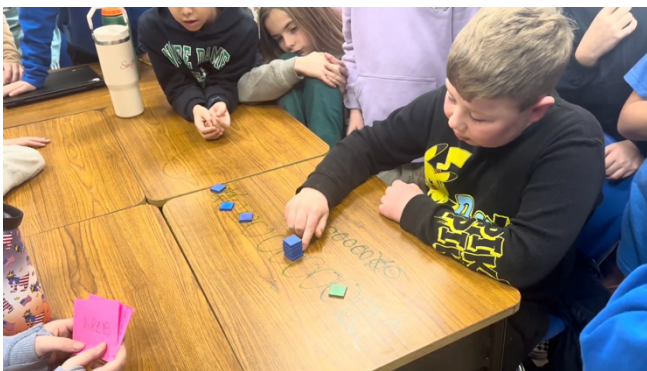
Madeira Elementary School's (MES) fourth-grade teachers recently presented a tricky unsolved math puzzle to their students to help develop mathematical reasoning. Joseph Burke, a student in Megan McKee's class, was the first person in history to solve it.

The problem, Jumping Frogs, came from MathPickle - a free online resource of original mathematical puzzles, and games for K-12 teachers. Started by mathematician Gordon Hamilton in 2010, MathPickle also presents puzzles to elementary math students that have never been solved.

Most students eventually gave up on the problem with the thought that if a mathematician couldn't solve it, it must be impossible – but Joseph Burke kept coming back to it. Eventually, he was pretty sure he had solved it and sent his solution in a letter to Gordon Hamilton, saying, "My name is Joseph Burke. I'm a fourth-grade student at Madeira Elementary, and I am pretty sure I have solved your jumping frogs ..." He went on to say, "My favorite subject is math, and I liked your video because it was challenging, and I love challenges. Do you think I did it? Please write back." They sent Hamilton a video of Joseph's solution and asked him to write back. Gordon replied in a YouTube video, saying, "I tried to solve that one myself for a long time, and I could not do it - so that was epic that you got it. Congratulations!"

Of Joseph's feat, his teacher Megan McKee stated, "After who knows how many failed attempts, he finally reached a beautiful, never-been-done-before solution and proved the whole idea of growth mindset and grit that we've been trying to teach our students all year - nothing is impossible, it just hasn't been found yet."

The following week Gordon Hamilton had a Zoom chat with Joseph's class to celebrate his success and presented their classroom with a brand new puzzle. Hamilton plans to post the video of Joseph's class watching his epic solution on his website.



Pictured above: Joseph solving the Jumping Frogs puzzle with his classmates watching. Pictured right: Class Zoom chat with Gordon Hamilton, Joseph and his classmates, and his teacher Megan McKee