Math, a Four Letter Word By Lisa Harp

Jacob walked into my office, shoulders slumped heavy with a backpack full of 8th grade text books. With a thud it dropped to the ground. As he turned to me, clad in his blue basketball uniform, I couldn't help but notice the panic in his eyes. I asked him if I could help him with some school work, which was not part of our usual routine, but he just seemed so overwhelmed. He stopped dead in his tracks and stared at me with absolute horror. Then a four letter word spewed from his mouth. "Math."

Jacob is a bright boy, hard working and a good student. But he is struggling in math. He certainly isn't the only one. Students have become so desperate for help in math that they are turning to YouTube for help. YouTube? Certainly as a powerhouse nation we can do better than this. America currently has math achievement scores equal to Denmark, Germany and Lithuania.

Shouldn't we be embarrassed by this low level of math achievement, as both a city and a nation? Every day kids show up to class and receive instruction that just isn't working. But what changes have we made? As far as I know the primary change has been to increase the standards, which is equivalent to giving a drunk more alcohol. Walk into any given classroom in our city or state and most likely you will find a lesson being presented in the same manner as it was in the 1960's. Yet, students 50 years ago were not expected to do algebra in grade school.

So, as parents, we need to take the bull by the horns. Just sending our kids to school does not mean they are getting an adequate education. Math papers need to be checked. Discussion needs to take place. And yes, sometimes we do need to look back in the book and refresh our own memories or learn something new so that we can help them.

Below are some ideas I use with my own kids and students to break the ice with math and make it a fun and productive learning activity.

- Make sure that emotion is taken out of the equation. Take the fear and pressure off of students by staying calm and keeping them relaxed.
- Kids need a strong number sense. Counting out loud, counting by three's, four's, etc. can help build a useful foundation.
- For long division to accomplished students must know multiplication facts. Traditional flashcards may not work. Have them write their facts in sand or shaving cream. "Feeling" math facts can help them stick.

- Break the math into small chunks. Assign five problems, allow a break, and then have them do five more.
- Use colored pencils or markers on a blank page of white paper. Color keeps the creative right side of the brain busy so the analytical left side can be accessed. Lobby the teachers to allow problems to be done in rainbow colors. The goal is to learn and understand math, not just to be able to do it in pencil.
- Some students do better while listening to music. Just be sure the music is calm.