Title: Math Tricks & Riddles

Objectives: Students will be able to complete math related riddles and questions using their knowledge of mathematics.

Standards: Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.

Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, data analysis, probability, and trigonometry.

Materials: Pen or pencil, worksheets, paper, & a calculator if needed.

Procedure: Once students come in for a lesson they will be given a choice of five different math riddles. The riddle I will give first is the penny a day or $1,000,000 in which students read the riddle which takes would you a $1,000,000 right now or a penny a day doubled each day for one month. After they make their decision they will perform the math for a penny a day and discover if after 30 days their original decision was correct. After this students will get a simple riddle, what is heavier, a pound of bricks or a pound of feathers? Once we are done discussing that riddle, they will get the birthday trick. In the birthday trick students start of by using the day they were born and then will go through a variety of steps in which they must perform addition, subtraction, multiplication and division, and in the end the answer will be their birth date. If we
Students will try the calendar trick. In this trick they pick any 3 X 3 box on the calendar consisting of 9 days, they add up all the days and divide by 9 and they will always get the same answer no matter what days they picked. Students will do all of the work on paper but on certain steps they are allowed to use a calculator to calculate big numbers.

Assessment: Student work will be observed and if they perform the steps correctly they will always reach the correct answer.