## 03/27/2025 – Scientific Notation

Continued Review of Unit 10 for Grade 7 and Unit 8 for Grade 8 (7A & PreAlgebra) – Fun theme: Space Questions to follow along with show. Watch: Math Homework Hotline

1)	Evaluate the expression. (MA.7.NSO.1.1)	2) Which of the following expressions are			
	$(4^3)(4^5)$		equivalent to $\frac{1}{4^3}$ ? (MA.8.NSO.1.3)		
			Expression	Equivalent	Not Equivalent
			$(4)^{-3}$		
			$4^{-4} \cdot 4$		
			$4^{5} \cdot 4^{5}$		
			$(4^2)^3$		
					11
3)	Simplify the expression. (MA.8.AR.1.1)	4)	Find the product of the expression. (MA.8.AR.1.2)		
	$\frac{12xy^{-3}}{2(0)(4)(-3)}$		1.6h(0.1h + 9.7)		
	$360x^{+}y^{-5}$		1		
			·····	<u> </u>	
5)	For the expression shown, determine an	6)	Write the number in standard form or scientific		
	factor multiplied by the sum of two algebraic		(MA.8.NSO.1.4	)	s given.
	expressions. (MA.8.AR.1.3)		(	1	
			Standard Forn	n Scien	tific Notation
	$20x^6 + 44x^3y^5$		0.00017		
			123,456		07 10-2
				9.	$8/x 10^{-3}$
				2.0	7854 X 10°

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7)	Superman is floating near an asteroid with 0.12 pounds of chocolate. Meanwhile, Spider Man is on a distant planet with 1.35×10 <sup>2</sup> pounds of chocolate. How many times more pounds of chocolate does Spider Man have compared to Superman? (MA.8.NSO.1.4)	<ul> <li>8) What is the value of the expression in scientific notation? (MA.8.NSO.1.5)</li> <li>a) (2.17 × 10<sup>-2</sup>) + (6.4 × 10<sup>-3</sup>)</li> </ul>	
		b) $(5 \times 10^{-1}) - (3.7 \times 10^4)$	
9)	What is the value of the expression in scientific notation? (MA.8.NSO.1.5) a) $(2.17 \times 10^{-2})(6.4 \times 10^{-3})$	<ul> <li>0) While visiting Mars, our superheroes chares each other to a race.</li> <li>➤ Superhero Flash can run at a spee 3 × 10<sup>2</sup> miles per hour.</li> <li>➤ Superhero Speedster can run at a of 2 × 10<sup>2</sup> miles per hour.</li> <li>they both start running from the same poin</li> </ul>	llenged ed of speed t and
	b) $\frac{(2.17 \times 10^{-2})(6.4 \times 10^{-3})}{4 \times 10^2}$	ead towards a large rock 400 miles away, ho nuch sooner will Flash reach the rock comp peedster? (MA.8.NSO.1.6)	ow ared to