| Standard(s) | MGSE6.EE. 1 Write and evaluate expressions involving whole-number exponents. MGSE6.EE. 2 Write, read, and evaluate expressions in which letters stand for numbers. MGSE6.EE.2a Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5 " as $5-\mathrm{y}$. MGSE6.EE.2b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression $2(8+7)$ as a product of two factors; view $(8+7)$ as both a single entity and a sum of two terms. MGSE6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). MGSE6.EE. 3 Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3(2+x)$ to produce the equivalent expression $6+3 x$; apply the distributive property to the expression $24 x+18 y$ to produce the equivalent expression $6(4 x+3 y)$; apply properties of operations to $y+y$ $+y$ to produce the equivalent expression 3y. MGSE6.EE. 4 Identify when two expressions are equivalent. For example, the expressions $y+$ $y+y$ and $3 y$ are equivalent because they name the same number regardless of which number $y$ stands for. |  |  |  |  |
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| Essential questions Or "I Can..." statements | Monday <br> I can evaluate expressions containing exponents to solve mathematical and real world problems. How is the order of operations used to evaluate expressions? | Tuesday <br> How is the order of operations used to evaluate expressions? | Wednesday <br> How are the properties (Identify, Associative and Commutative) used to evaluate, simplify and expand expressions? | Thursday <br> How do the properties help you solve problems mentally? | Friday |
| Warm-up | \#45 | \#46 | \#47 | \#48 | \#49 |
| Opening | Show two different responses to the same problem and ask class which followed order of operations. | Discuss why we "lost limbs" yesterday? Why is PEMDAS not a good way to remember the order of operations? | https://www.youtube.c om/watch? $\mathrm{v}=-00 \mathrm{t} 7 \mathrm{KC}$ ADM | Discuss misconceptions from yesterday...like () mean it's associative. |  |
| Work Session | -Dr. Math activity Need ....body copied, scissors, bandaids, markers | Cell phone sheet of order of operations <br> Could also do the extra activity below -time permitting | -Discuss properties of addition and multiplication -Robots don't panic | -cut and paste properties (this can be edited to differentiate, I suggest making the same number of expressions for each property for lower level learners) | -write an expression from words <br> -combine like terms <br> https://www.youtube.co <br> m/watch?v=pYkRfzXi80Y <br> P 40 \#12-20 <br> P 44 \#7-10 |
| Homework | Weekly sheet (week 11) |  |  |  | none |
| Closing | Why is order of operations important? |  | Have students restate the standards covered today. | https://my.hrw.com/ma th06 07/nsmedia/lesso n videos/msm1/player. html?contentSrc=5991/ 5991.xml |  |
| Assessment for understanding | Formative-students work, how the "body" looks | Formative-calling on students, walking around to check for accuracy | Formative-check robots don't panic to see if they understand properties | Formative-check cut \& paste for accuracy |  |

Do nows \#45,46,and 48 have good stuff we should go back and do at some point.
Unit 3 plan: https://www.georgiastandards.org/Georgia-Standards/Frameworks/6th-Math-Unit-3.pdf
Extra: p69 from interactive notebook: evaluate expressions...cut \& solve \& paste in order!

