| Name: | Date: |
| :--- | :--- |
| RSCS | Standard: |
| 6. EE.1 Exponents <br> Homework_Day 1 |  |
| Write each expression in exponential form.  <br> 1. $5 \times 5 \times 5 \times 5 \times 5=$  <br> Write each expression in expanded form. $2.3 \cdot 3 \cdot 3 \cdot 3=$ <br> 3. $8^{3}=$ 4. $10^{6}=$ <br> 5. $g^{3}=$ $6 .\left(\frac{1}{4}\right)^{2}=$ |  |

7. What is the difference between 3 g and $\mathrm{g}^{3}$ ?
8. Write the expression in expanded form and evaluate.
***Remember evaluate means to determine the solution(value).
$\left(\frac{1}{3}\right)^{4}=$
9. Write the expression in exponential form and evaluate. WITHOUT using a calculator. $2.1 \times 2.1$
10. Write the expression in exponential form, label the power, exponent and base. $\quad 0.75 \times 0.75 \times 0.75$
11. Write the expression in exponential form, and then evaluate.
$\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$
12. Write the expression in expanded form, and then evaluate. $\left(\frac{2}{3}\right)^{2}$
13. Fill in the missing expressions for each row.

| Exponential Form | Expanded Form | Standard Form |
| :--- | :---: | :--- |
| $3^{2}$ |  | 9 |
|  | $2 \times 2 \times 2 \times 2 \times 2 \times 2$ |  |
| $4^{5}$ |  |  |
|  | $\frac{3}{4} \times \frac{3}{4}$ |  |
|  | $1.5 \times 1.5$ |  |

14. Write five cubed in all three forms:

| Exponential: |  |
| :--- | :--- |
| Expanded: |  |
| Standard: |  |

15. Write fourteen squared in all three forms:

| Exponential: |  |
| :--- | :--- |
| Expanded: |  |
| Standard: |  |

16. One student though two to the third power was equal to six. What mistake do you think he made, and how would you help him fix his mistake?
