

Name: _____

CHAPTER 2.1 – 2.3 QUIZ

1. Complete the following chart:

Power	Base	Exponent	Repeated Multiplication	Standard Form
			$5 \times 5 \times 5 \times 5 \times 5$	
	6	5		
				-81
-2^5				
$(-4)^3$				

2. Use repeated multiplication to show that 6^4 is not the same as 4^6 .

3. Evaluate each power:

a) 50^0 _____

b) $(-6)^0$ _____

c) -11^0 _____

d) $-(-2)^0$ _____

4. Evaluate each power of 10:

a) 10^4 _____

b) 10^9 _____

c) -10^2 _____

d) $(-10)^2$ _____

5. Write each number in standard form:

a) 6×10^7 _____

b) $(3 \times 10^4) + (9 \times 10^3) + (5 \times 10^2) + (2 \times 10^1) + (7 \times 10^0)$ _____

c) $(8 \times 10^8) + (5 \times 10^5) + (2 \times 10^2)$ _____

d) $(4 \times 10^3) + (1 \times 10^0) + (9 \times 10^5) + (3 \times 10^1)$ _____

6. Use powers of 10 to write each number in expanded form.

a) 5 000 000 000 _____

b) 415 _____

c) 702 008 _____

d) 53 125 _____

7. Use scientific notation to write each number.

- a) Street trees have an estimated value of over \$550 million. _____
- b) In the past decade, over 42000 street trees have been planted. _____
- c) There are 130000 trees lining the streets of Vancouver. _____
- d) There are nearly 590 different types of trees. _____

8. Evaluate using BEDMAS.

a) $(7^2 + 2^3 - 6)$

(____ + ____ - ____)
(____ - ____)

b) $90 \div (2^3 \times 5 \div 4)$

____ $\div$ (____ $\times$ ____ $\div$ ____)
____ $\div$ (____ $\div$ ____)
____ $\div$ (____)

c) $3 \times (2^3 + 5) + 2$

____ $\times$ (____ + ____) + ____
____ $\times$ (____) + ____
_____ + ____

d) $(4 - 3^2) + 2^2 \div 2$

(____ - ____) + ____ $\div$ ____
(____) + ____

e) $(3 \times 2^3) + 5 - 2$

(____ $\times$ ____) + ____
_____ + ____

f) $4 - (9 + 2^2 \div 2)$

____ - (____ + ____ $\div$ ____)
____ - (____ + ____)
____ - (____)

i) $[2 - (-3)]^2 + (2^2 \div 2)^3$

[____] + (____ $\div$ ____)
(____) + (____)
_____ + ____

j) $(2 \times 2^3)^3 + [5 + (-2)^2]^2$

(____ $\times$ ____) + [____ + ____]
(____) + (____)
_____ + ____
