Name:

CHAPTER 2.1 – 2.3 QUIZ

1. **Complete the following chart:**

Power	Base	Exponent	Repeated Multiplication	Standard Form
			$5 \times 5 \times 5 \times 5 \times 5 \times 5$	
	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 <u>powers of 10</u> 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) $90 \div (2^3 \times 5 \div 4)$

____ ÷ (____ x ____ ÷ ____)

____ ÷ (_____ ÷ ____)

____ ÷ (_____)

_____

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

___ x (____ + ___) + ___

___ x (_____) + ___

_____ + ___

_____

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

(___ - ___) + ____ ÷ ____

(_____) + _____

_____

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

(___ x ___) + _____

_____ + _____

_____

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

___ - (___ + ___ ÷ ___)

___ - (___ + _____)

___ - (_____)

_____

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

[_____] + (___ ÷ ___)

(_____) + (_____)

_____ + _____

_____

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

(____ x ____) + [___ + ____]

(_____) + (_____)

_____ + _____

_____