# Chapter 6 Vocabulary

1. **Algebra-** A mathematical language of _____, including _____.
2. **Algebraic Expression-** An expression consisting of a combination of _____, _____, and at_____ one _____.
3. **Associative Property-** The _____ in which three _____ are _____ when they are added or multiplied does not change their _____ or _____.
   For any numbers $a$, $b$, and $c$, $(a + b) + c = a + (b + c)$, and $(ab)c = a(bc)$.
   Example: $(2 + 3) + 4 = 2 + (3 + 4)$ or $(2 \times 3) \times 5 = 2 \times (3 \times 5)$.
4. **Coefficient-** The _____ factor of a _____ that _____ a _____.
5. **Commutative Properties-** The _____ in which two _____ are _____ or _____ does not _____ their _____ or _____. For any numbers $a$ and $b$, $a + b = b + a$ and $ab = ba$.
   Example: $2 + 3 = 3 + 2$ or $2 \times 3 = 3 \times 2$
6. **Constant-** A term _____ a _____.
7. **Distributive Property-** To _____ a sum by a _____, multiply each _____ by the number _____ the _____.
   For any numbers a, b, and c, a(b + c) = ab + ac and a(b - c) = ab - ac.
   Example: 2(5 + 3)=(2 x 5) + (2 x 3) and 2(5 - 3) = (2 x 5) - (2 x 3)
8. **Equivalent Expressions-** _____ that have the same _____.
   Examples: $3 + 2 = 10 - 5$, $2x + 3x = 5x$
9. **Evaluate-** Find the _____ of an _____ expression _____ replacing _____ with _____.
10. **Exponent-** In a _____, the _____ that tells _____ many _____ a number or expression is to be multiplied by itself.
    Example: In the expression $5^3$, the exponent is 3 and is written $5^3 = 5 \times 5 \times 5 = 125$
11. **Identity Property-** The _____ of any number and _____ equals the _____ and that the product of any number and _____ equals the _____.
    The product of a factor and one is the factor. Example: $5 + 0 = 5$ and $5 \times 1 = 5$
12. **Like Terms-** _____ that contain the same _____ raised to the same _____. Example: $5x^2$ and $6x^2$ are like terms.
13. **Numerical Expression-** A mathematical expression that has a _____ of _____ and at least one operation. $4 + 2 \times 3$ is a numerical expression.
14. **Perfect Square-** _____ with square _____ that are _____ numbers. Example: 25 is a *perfect square* since $25 = 5^2$
15. **Powers-** Numbers _____ using _____. Example: $7^4$ is 7 raised to the fourth power, or 7 x 7 x 7 x 7. The number $3^2$ is read three to the second power or three squared.
16. **Property-** A _____ that is _____ for any _____ or variables.
17. **Term –** Each _____ of an _____ expression _____ by a _____ sign or _____ sign.
18. **Variable-** A _____, usually a _____, used to _____ a _____.