Name: _____

Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet
Cube of a Binomial

A. Read the items carefully. Circle the letter of the correct answer.

1. In finding the cube of a binomial, how will you determine the first term?
   a. Cube of the second term
   b. Cube of the middle term
   c. Cube of the last term
   d. Cube of the first term
2. What is the cube of the binomial $(3x + 4)^3$?
   a. $27x^3 + 108x^2 + 144x + 64$
   b. $27x^3 + 108x^2 - 144x + 64$
   c. $27x^3 - 108x^2 + 144x + 64$
   d. $27x^3 + 108x^2 + 144x - 64$
3. Multiply the cube of $(x + y)$ to $2x^3$, the result is?
   a. $27x^3 + 108x^2 + 144x + 64$
   b. $27x^3 + 108x^2 - 144x + 64$
   c. $27x^3 - 108x^2 + 144x + 64$
   d. $27x^3 + 108x^2 + 144x - 64$
4. In finding the cube of a binomial, the last term is equal to the cube of _____?
   a. the first term
   b. the last term
   c. the second term
   d. the last term
5. What is the cube of the binomial $(x + 5)^3$
   a. $x^3 + 15x^2 + 75x - 125$
   b. $x^3 + 15x^2 - 75x + 125$
   c. $x^3 + 15x^2 + 75x + 125$
   d. $x^3 - 15x^2 + 75x + 125$

B. Find the product using the cube of a binomial pattern.

1. $(x + 2)^3$ = _____
2. $(x - 5)^3$ = _____
3. $(2x + 3y)^3$ = _____
4. $(2x - y)^3$ = _____
5. $(y + 3z)^3$ = _____