Math Properties and Recording Sheet

Name _____ **Date** _____

Round 1

1. Pick two numbers from the envelope, and add them. Write down the exact sequence in which you added them and the sum. _____

2. Change the order of the two numbers, and write down their sum.
   _____

3. Choose two numbers of your own, and repeat steps 1 and 2.
   _____

4. When you add numbers together, does the order in which you add them matter?
   _____

Round 2

1. Write down the three numbers in the envelope. Put parentheses around two, and add them first. Then, add the third number. Write down the exact sequence, placement of the parentheses, and the sum. _____

2. Keep the three numbers in the exact same sequence, but change the placement of the parentheses. Find the sum. Write this down.
   _____

3. Choose three numbers of your own, and repeat steps 1 and 2.
   _____

4. Does it matter how you group numbers with parentheses when adding?
   _____

Round 3

1. Pick a number from the envelope, and add zero to it.
   _____

2. Repeat this process with another number in the envelope.
   _____

3. Choose a number of your own, and add zero to it.
   _____

4. What happens when you add zero to a number?
   _____

Round 4

   1. Pick two numbers and multiply them. Write down the exact sequence in which they were multiplied and their product.

        _____

   2. Change the order of the two numbers, and write down their product.

        _____

   3. Choose two numbers of your own, and repeat steps 1 and 2.

        _____

   4. When you multiply numbers together, does the order in which you multiply them matter?

        _____

Round 5

   1. Write down the three numbers in the envelope. Put parentheses around two, and multiply them first. Then, multiply the third number. Write down the exact sequence, placement of the parentheses, and the product.

        _____

   2. Keep the three numbers in the exact same sequence, but change the placement of the parentheses. Record the product.

        _____

   3. Choose three numbers of your own, and repeat steps 1 and 2.

        _____

   4. Does it matter how you group numbers with parentheses when multiplying?

        _____

Round 6

   1. Pick a number from the envelope, and multiply it by one. Record the product.

        _____

   2. Repeat this process with another number in the envelope.

        _____

   3. Choose a number of your own, and multiply it by one.

        _____

   4. What happens when you multiply a number by one?

        _____

Round 7

   1. Place the three numbers in the envelope in this expression: _____ (_____ + _____). Add the two numbers in the parentheses. Then, multiply that sum by the outside number. Record your answer. _____

2. Take these same three numbers in the exact same order, and multiply the first number by the second number and record it. _____ Then, multiply the first by the third and record it. _____ Add the two numbers you recorded. _____ What do you notice? _____

3. Use three different numbers, and repeat steps 1 and 2.

_____

4. What do you think is happening?

_____

Round 8
1. Choose a number from the envelope, and add it to its opposite. Record the result.

_____

2. Choose another number from the envelope, and repeat step 1. Record the result.

_____

3. What sum do you get when you add a number and its opposite?

_____

Round 9
1. Choose a fraction from the envelope, and multiply it by its reciprocal. Record the result.

_____

2. Choose another fraction from the envelope, and repeat step 1. Record the result.

_____

3. What product do you get when you multiply a fraction and its reciprocal?

_____

Round 10
1. Choose a number from the envelope, and multiply it by zero. Record the result.

_____

2. Choose another number from the envelope, and repeat step 1. Record the result.

_____

3. What happens when you multiply a number by zero?

_____

Choose the Property below that you believe is being described in each of the rounds; write that property in the box.	
Round 1	**Round 6**
Round 2	**Round 7**
Round 3	**Round 8**
Round 4	**Round 9**
Round 5	**Round 10**

MATH PROPERTIES OF ADDITION AND MULTIPLICTION	
ASSOCIATIVE PROPERTY OF ADDITION	IDENTITY PROPERTY OF ADDITION
ASSOCIATIVE PROPERTY OF MULTIPLICATION	IDENTITY PROPERTY OF MULTIPLICATION
COMMUTATIVE PROPERTY OF ADDITION	ADDITIVE INVERSE PROPERTY
COMMUTATIVE PROPERTY OF MULTIPLICATION	ZERO PROPERTY