Name: _____ Date: _____ **Unit 1 Class Work**

Exploring Numbers Class Work

★ Look at the number on your desk. Record it, and answer each question. Be sure to provide a reason for your answers. ☺

Number: _____

Do you think your number is a **real** number?	Do you think your number is a **rational** number?	Do you think your number is an **irrational** number?
Do you think your number is a **whole** number?	Do you think your number is an **integer**?	Do you think your number is a **natural** number?

★ ***Types of Numbers***

Real Numbers **Non-Real Numbers**

✍ ***Practice!***

1. *Name the set(s) to which each real number belongs. (rational, irrational, integer, whole, natural)*

a. 3.82 b. -23 c. 11 d. 0

e. π f. -201 g. $\sqrt{5}$

2. *Write any number that meets each classification:*

a. rational, but not an integer:

b. whole, but not natural

c. an integer, but not a whole number

3. *What types of numbers are best to use for each variable?*
(rational, irrational, integers, whole) ***Support your answer.*** ☺

a. The price, p, of a ticket to a concert.

b. The number of friends, n, you are inviting to a party.

c. The temperature, t, anywhere in the world on the Weather Channel App.

d. The exact area, A, of a circular field.

4. Sonja says that all rational numbers are whole, but Jimmy says that all natural numbers are whole. Who do you agree with, and why?

5. Is the statement always, sometimes, or never true? Explain your answer.

a. A negative number is an integer.

b. The number 0.3333333… is irrational.

~ What does each word mean to you? Can you provide a real life example?

Commute **Associate** **Identity** **Inverse**

Name: _____ Date: _____ **Unit 1 Class Work**

★ *Properties of Numbers*

★ **COMMUTATIVE PROPERTY**:

★ **ASSOCIATIVE PROPERTY**:

★ **IDENTITY PROPERTIES**:

★ **INVERSE PROPERTIES**:

PRACTICE:

1. State which property is demonstrated in each equation.

a. $1234 + 0 = 1234$

b. $3 * (5 * 9) = (3 * 5) * 9$

c. $4 * \frac{1}{4} = 1$

d. $2 + 3 + 4 = 3 + 4 + 2$

2. a. Does the commutative property also hold for subtraction and/or division? If so, explain. If not, provide counter-examples to support your claim.

b. Does the associative property also hold for subtraction and/or division? If so, explain. If not, provide counter-examples to support your claim.

Exit Activity:

On a post-it note, Write a "Tweet" about anything you learned today! (40 characters or less!)

Post it on the board when you are done, and draw a star on your "favorite!"