

## Preliminary Planning Sheet

### Grade 5 – The Number Game

**Domain(s)**

Number and Operations in Base Ten

**Standard(s)**

5.NBT.A.1

**Mathematical Practices**

MP.1 MP.3 MP.4 MP.6

**Major Underlying Mathematical Concepts**

- Base-10 place value system
- Decimal notation

**Problem Solving Strategies**

- Model (manipulatives)
- Diagram/Key
- Table
- Number line

**Formal Mathematical Language and Symbolic Notation**

- Model
- Diagram/Key
- Table
- Number line
- Multiplication
- Division
- Ones, tens, hundreds, thousands, tenths
- Decimal notation (422.3)
- Place value
- Numbers
- Digit
- Sum/Total/Product/Quotient
- Greater than (>)/Less than (<)
- Equivalent/Equal to
- Fractions  $\frac{1}{10}$ ,  $\frac{50}{10}$ ...

### Possible Solution(s)

- 1). 631.3 and 422.3
- 2). 631.3
- 3). 4,164 and 4,115
- 4). 4,164

Clue	Numbers
A	631.3
A	422.3
B	631.3
C	4164.0
D	4164.0
D	4115.0

$$\begin{array}{r} 100 \\ \times .6 \\ \hline 60.0 \end{array}$$

$$1 \times \frac{1}{3} = .3$$

$$100 \times .6 = 60$$

$$N \times .10 = N \div 10$$

$$\text{So... } 50 \times .10 = \frac{50}{10}$$

$$\begin{array}{r} 5 \\ 10 \overline{) 50} \\ \underline{- 50} \\ 0 \end{array}$$

$$10 \times 100 = \frac{1}{10} \times 1000 \text{ or } 1000 \div 10$$

$$10 \times 10 = \frac{1}{10} \times 100 \text{ or } 100 \div 10$$

### Possible Connections

Below are some examples of mathematical connections. Your students may discover some that are not on this list.

- The number 4,164, is closest to zero.
- The number 422.3, is farthest from zero.
- The difference between the largest and smallest number is 3,741.7.
- The total of all 4 numbers is 9,332.6.
- Relate to a similar task and state a math link.
- Solve more than one way to verify the answer.
- 10 times 631.3 would be 6,313.
- $\frac{1}{10}$  of 4,164 would be 416.4.
- $4,164 > 4,115$ .
- $422.3 < 631.3$ .
- $631.3 = 631 \frac{3}{10}$