Scientific Notation and Significant Figure Explore

**Set 1**

 Original Number Re-written Number

1. 1000 = 1 x 103
2. 0.0038 = 3.8 x 10-3
3. 2.98 = 2.98 x 101
4. 0.0000022 = 2.2 x 10-6
5. 655,000 = 6.55 x 105
6. 200.00000008 = 2.0000000008 x 102
7. .0000000000102 = 1.02 x 10-11
8. 1234567890 = 1.23456789 x 109
9. 2000000000 = 2 x 109
10. What happened to the number on the left side of the equal sign when it was re-written on the right side?
11. Explain how the number was converted from the left to the right side.
12. Can you think of any advantages to writing numbers as they appear on the right side as opposed to writing them on the left side?

**Set 2**

 Number Number of Significant Figures

1. 2 1
2. 20 1
3. 21 2
4. 900 1
5. 901 3
6. 8000 1
7. 8001 4
8. 123 3
9. 1234 4
10. 55555 5
11. What pattern can you see with the numbers that only have 1 significant figure?
12. What pattern can you see overall?
13. How do zeros seem to affect the number of significant figures?