

Name: _____ Block: _____

Rules for Significant Figures

1. ALL non-zero digits are significant.
The digits 1, 2, 3, 4, 5, 6, 7, 8, and 9 are significant digits.

- a. **123** **3 sigfigs**
b. **78** **2 sigfigs**
c. **5.32** **3 sigfigs**

2. Leading zeros are NEVER significant.

- a. **0.5** **1 sigfig**
b. **0.05** **1 sigfig**
c. **0.007** **1 sigfig**

3. Embedded zeros are ALWAYS significant.

- a. **307** **3 sigfigs**
b. **3005** **4 sigfigs**
c. **20507** **5 sigfigs**

4. Trailing zeros are ONLY significant IF the number contains a decimal place.

- a. **20** **1 sigfig**
b. **20.** **2 sigfigs**
c. **200** **1 sigfig**
d. **200.** **3 sigfigs**
e. **20.0** **3 sigfigs**
f. **17.0** **3 sigfigs**
g. **1.000** **4 sigfigs**
h. **1000** **1 sigfigs**

Now it is your turn. Use the rules to determine the number of significant digits. Write the number of sigfigs in the space provided.

1) **100** _____

2) **100.** _____

3) **20.0** _____

4) **0.20** _____

5) **0.02** _____

6) **2002** _____

7) **30030** _____

8) **.0505** _____

9) **55** _____

10) **570** _____

11) **808.00** _____

12) **.0080** _____

13) **10** _____

14) **2307** _____

15) **43050** _____

16) **0.000900** _____

17) **.1** _____

18) **.60** _____

19) **18** _____

20) **450020** _____

Combine all the rules:

101.0 **4 sigfigs**
1010 **3 sigfigs**
0.0010 **2 sigfigs**
0.0005 **1 sigfig**
0.0020 **2 sigfig**
20000 **1 sigfig**