

Name: _____ Block: _____

Rules for Significant Figures

- ALL non-zero digits are significant.
The digits 1, 2, 3, 4, 5, 6, 7, 8, and 9 are significant digits.
 - 123** **3 sigfigs**
 - 78** **2 sigfigs**
 - 5.32** **3 sigfigs**
- Leading zeros are NEVER significant.
 - 0.5** **1 sigfig**
 - 0.05** **1 sigfig**
 - 0.007** **1 sigfig**
- Embedded zeros are ALWAYS significant.
 - 307** **3 sigfigs**
 - 3005** **4 sigfigs**
 - 20507** **5 sigfigs**
- Trailing zeros are ONLY significant IF the number contains a decimal place.
 - 20** **1 sigfig**
 - 20.** **2 sigfigs**
 - 200** **1 sigfig**
 - 200.** **3 sigfigs**
 - 20.0** **3 sigfigs**
 - 17.0** **3 sigfigs**
 - 1.000** **4 sigfigs**
 - 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.

- 100** _____
- 100.** _____
- 20.0** _____
- 0.20** _____
- 0.02** _____
- 2002** _____
- 30030** _____
- .0505** _____
- 55** _____
- 570** _____
- 808.00** _____
- .0080** _____
- 10** _____
- 2307** _____
- 43050** _____
- 0.000900** _____
- .1** _____
- .60** _____
- 18** _____
- 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 |