

SIGNIFICANT FIGURES WORKSHEET

Name: _____

1. How many significant figures are there in the following numbers?

0.0056 1.00 5000 5001 1.02 10

14.6101000 0.00105 9.511 0.005 0.5000

2. Round each of the following numbers to the number of significant figures in the parenthesis.

5651 (3 SF) 15.001 (4 SF) 0.0051 (2 SF) 8.5554396 (6 SF)

54342 (1 SF) 0.13468 (2 SF) 1.01200 (3 SF) 0.19800 (2 SF)

3. Write the rule for each type of operation, perform the operation, and round to the appropriate number of significant figures

a) Rule for Multiplication and Division:

$$56.2 / 10 =$$

$$17.01 \times 0.0056 =$$

$$.005 / 150 =$$

$$.04400 \times 100.5 =$$

$$750 / 0.0130 =$$

$$5.651 \times 0.051 =$$

b) Rule for Addition and Subtraction:

$$5.661 + 11.32 =$$

$$5.00 + 7 =$$

$$0.005 + 10.569 =$$

$$10.53 - 9.86 =$$

$$100 - 2.54 =$$

$$16.00 + 0.059$$

SIGNIFICANT FIGURES WORKSHEET

Name: KEY

1. How many significant figures are there in the following numbers?

0.0056

2

1.00

3

5000

1

5001

4

1.02

3

10

1

14.6101000

9

0.00105

3

9.511

4

0.005

1

0.5000

4

2. Round each of the following numbers to the number of significant figures in the parenthesis.

5651 (3 SF)

5650

15.001 (4 SF)

15.00

0.0051 (2 SF)

0.005

8.5554396 (6 SF)

8.55544

54342 (1 SF)

50000

0.13468 (2 SF)

0.13

1.01200 (3 SF)

1.01

0.19800 (2 SF)

0.20

3. Write the rule for each type of operation, perform the operation, and round to the appropriate number of significant figures

a) Rule for Multiplication and Division:

$$56.2 / 10 =$$

$$\text{Calc} = 5.62$$

$$\text{Report} = \underline{6}$$

$$17.01 \times 0.0056 =$$

$$\text{Calc} = 0.095256$$

$$\underline{0.095}$$

$$.005 / 150 =$$

$$\text{Calc} = 3.33\bar{3} \times 10^{-5}$$

$$\underline{3 \times 10^{-5}}$$

$$.04400 \times 100.5 =$$

$$\text{Calc} = 4.422$$

$$\underline{4.422}$$

$$750 / 0.0130 =$$

$$\text{Calc} = 57692.30769$$

$$\underline{58000}$$

$$5.651 \times 0.051 =$$

$$\text{Calc} = 0.288201$$

$$\underline{0.29}$$

b) Rule for Addition and Subtraction:

$$5.661 + 11.32 =$$

$$\text{Calc} = 16.981$$

$$\underline{16.98}$$

$$5.00 + 7 =$$

$$\text{Calc} = 12.00$$

$$\underline{12}$$

$$0.005 + 10.569 =$$

$$\text{Calc} = 10.574$$

$$\underline{10.574}$$

$$10.53 - 9.86 =$$

$$\text{Calc} = 0.67$$

$$\underline{0.67}$$

$$100 - 2.54 =$$

$$\text{Calc} = 97.46$$

$$\underline{100}$$

$$16.00 + 0.059 =$$

$$\text{Calc} = 16.059$$

$$\underline{16.06}$$

