

Significant figures

EHS CA3MIS+ry

Mr. Genest



Name _____

Date _____

visit <http://genest.weebly.com>

- 1) Convert 788 Mg to grams: 788000000.
 2) Convert 911.77 kg to mg: 911770000

3) In the measurement 34000 g, which digit is estimated?



4) An object is known to have a mass of 3.145 g. A student makes three measurements and obtains the results: 3.102 g, 3.105 g, and 3.101 g. Are the student's measurements accurate or precise?

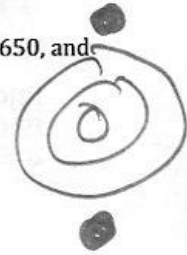
NOT ACCURATE, YES PRECISE

5) In the measurement 0.3341 g, which digit is estimated?



6) A rock is known to have a mass of 12.650 g. A student obtains the results; 12.650, 13.650, and 11.650. Are the measurements accurate or precise?

YES ACCURATE, NOT PRECISE



Determine the number of significant figures in the following measurements.

7) 100.1 g 4

15) 842.0 cm 4

8) 473 mL 3

16) 640,002 m 6

9) 0.002 m 1

17) 10,000 s 1

10) 4200 km 2

18) 190.60 g 5

11) 0.11010 L 5

19) 1.0004230 g 8

12) 104.20 g 5

20) 0.004200 m 4

13) 1,700,000 km 2

21) 7000.07 mm 6

14) 0.00020 g 2

22) 35,000 km 2

the only thing you don't count is the ocean you're walking towards

Round each of the following to 3 significant figures.

1) 2.396 g 2.40

2) 6.333 g 6.33

3) 2.500 g 2.50

4) 3.805 g 3.81

5) 23.15 g 23.2

6) 16.2455 m 16.2

7) 93.45 cm 93.5

8) 21.15 cm 21.2

9) 1.2793 kg 1.28

10) 0.10625 kPa 0.106

11) 0.0037486 m 0.00375

12) 0.01245 s 0.0125

13) 0.10652 g 0.107

14) 0.048449 ns ~~0.0484~~ 0.0484

15) 0.20000 L 0.200

16) 101.00 fs 101

17) 0.112453 g 0.112

39) 0.010010 L 0.0100 E

18) Convert 45.66 mL to μL : 45660. ~~4566~~

19) Convert 0.00456 kg to cg: 456

20) Convert 23000 mm to meters: 23.000

Name KEY

Date _____ Period _____

Mr. Genest, Chemistry: Quiz 2

1. The symbol for nitrogen is N

2. The symbol for Zinc is Zn

3. The symbol for silver is Ag

4. The symbol I stands for Iodine

5. The symbol Cu stands for copper

6. The symbol Pb stands for lead

7. If you have 7030. kg, how many Gg do you have?

.007030

8. If you have 0.005011. kiloliters, how many microliters do you have?

5011000.

9. Give an example of something that is a open system:
Anything where matter can enter or leave
(many answers possible)

10. If you are absent, you must make up which of the following? (Circle one or more answers):

Quizzes Tests Labs

11. The three big hazards in lab are fire, eyes, and cuts.

12. Round each to the tenths place:

• 12.30500 is 12.3 ← one pt each

• 1.150009 is 1.2 ←