

CHEMISTRY

REVIEW WORKSHEET 1r.

Name: _____

PRACTICE THESE ON YOUR OWN. ASK FOR HELP IF YOU NEED HELP.

ANSWERS ARE BELOW, BUT DON'T PEEK UNTIL YOU'VE DONE THEM YOURSELF

1. Write each of the following in ordinary decimal notation:

a) 9×10^4

b) 7.426×10^5

c) 3.172×10^{-10}

d) 362×10^{-5}

2. Write each of the following in standard scientific notation:

a) 4,802

c) 6159.04

b) .00000962

d) .000151

3. How many significant figures are there in each of the following?

a. 17852×10^{-10}

d. 36×10^6

b. 7.01×10^{-15}

e. 172.5783

c. 0.00640

f. 27.00

4. Round off each of the following as specified:

0.00063772 to 2 significant figures

6547062 to 3 sig. figs.

8.35962535 to 4 sig. figs.

ANSWERS TO QUESTIONS ON OTHER SIDE (with correct number of significant figures):

5a) 82.0 cm b) 2880 g c) 52.4 cm d) 1150 ft e) 4.94 km 6a) 1190 g b) 12.8 cm^3

1 inch = 2.54 cm 1 mile = 5280 ft 1 lb = 454 g 1 ft = 12 in 100 cm = 1 m

5. Do the following unit conversions, using the conversion factors above:

a) 32.3 inches into cm

b) 6.34 lb into g

c) 1.72 feet into cm

d) 350. m into ft

e) 3.07 miles into km (convert to inches first)

6. If the density of zinc is 7.14 g/cm^3 , find:

a) the mass of $167. \text{ cm}^3$ of zinc

b) the volume of 91.4 g of zinc

ANSWERS TO QUESTIONS ON OTHER SIDE:

1a) 90000 b) 742600 c) .0000000003172 d) .00362 2a) $4.802 * 10^3$ b) $9.62 * 10^{-6}$ c) $6.15904 * 10^3$
2d) $1.51 * 10^{-4}$ 3a) 5 b) 3 c) 3 d) 2 e) 7 f) 4 4a) 0.00064 b) 6550000 or $6.55 * 10^6$ 4c) 8.360