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| #1  Step One: Underline the lonely unit (the unit that is not paired with another unit. Circle pairs of units. Draw a box around the unit the answer should be in.  If the density of iron is 7.87 grams per 1 mL, find the mass in grams of 22.03 liters of iron.  Step Two: Solve below using dimensional analysis. Choose words before numbers. |
| #2  Step One: Underline the lonely unit (the unit that is not paired with another unit. Circle pairs of units. Draw a box around the unit the answer should be in.  If the density of iron is 7.87 grams per 1 mL, find the volume of 22.03 grams of iron.  Step Two: Solve below using dimensional analysis. Choose words before numbers. |

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| Dimensional Analysis IV  East.H.S. ©λ€M|5+rγ  visit http://genest.weebly.com |  | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Come for assistance and cheerful encouragement after school Tues, Thurs, and every day at lunch |

#3 Use and like a true chemist.

EXP

10x

Complete the following problems in your calculator and record the answer in the **proper** **number** of significant figures.

|  |  |
| --- | --- |
| (4.25 x 106 cm)(2.03 x 105 cm) |  |
| (2.8 x 10-2 kg )  (4.003 x 10-7 s ) |  |

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| #3  Step One: Underline the lonely unit (the unit that is not paired with another unit. Circle pairs of units. Draw a box around the unit the answer should be in.  If a beachcomber finds a copper coin with a volume of 66.0 mL, how many atoms of copper did the beachcomber find? Assume that 255 atoms of copper have a mass of 2.69 x 10-20 grams. Also assume that the density of copper is 8.98 grams per mL.  Step Two: Solve below using dimensional analysis. Choose words before numbers. |
| #4  Step One: Underline the lonely unit (the unit that is not paired with another unit. Circle pairs of units. Draw a box around the unit the answer should be in.  If a beachcomber finds one copper penny every 355 minutes, and copper pennies have a mass of 2.48 grams, how many grams of copper will the beachcomber find in 7.25 hours?  Step Two: Solve below using dimensional analysis. Choose words before numbers. |