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| Dimensional Analysis Sr.East.H.S. ©λ€M|5+rγvisit http://genest.weebly.com | https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcSdMs2QTWREtiC6uPfREWeyEKO1yTwcZbXM_4RLow_QzqAH-ddBWg | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Come for assistance and cheerful encouragement after school Tues, Thurs, every day at lunch |

***Notice there is a helpful data table on the bottom of page 2 for problems marked with an asterisk\****

1. 5.5 x $\left(\frac{8}{ 0.44.}\right)= $
2. 5.5 x $\left(\frac{1.06}{ 76.}\right)x \left(\frac{49}{ 3.}\right) = $

Sports team information (use this for some of the story problems on this worksheet)

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| football/futbol teams start 11 playerssoftball teams start 9 playersbasketball teams start 5 players | golf teams have 4 playerscurling teams have 3 playerschess is competitively played as a team of 1 player |

1. Fill in the blanks to make a true statement
	1. \_\_\_\_ players = \_\_\_\_ football teams
	2. \_\_\_\_ golf teams = \_\_\_\_ players
2. Which of these ratios are 'ONE'? In the box below each if the factor is true write True! if the factor is incorrect rewrite it so it isn't.

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| $$\frac{1 year}{365.25 days}$$ |  | $$\frac{1 player}{4 golf team}$$ |  | $$\frac{6 players}{\begin{array}{c}2 curling \\teams\end{array}}$$ |  | $$\frac{1 inch}{12 feet}$$ |  | $$\frac{1 gram copper\*}{1 mL copper}$$ |
|  |  |  |  |  |  |  |  |  |

1. Finish each **"For every..."** sentence based on what you know about sports teams
	1. For every one basketball team there would be \_\_\_\_\_\_\_\_\_\_\_ players
	2. For every one gram of iron there would be \_\_\_\_\_\_\_\_\_\_\_ grams iron. \*(see the back)
2. Problem: If 3 football teams at a small college needed to switch in the winter to make basketball teams, how many could they make?

3 football teams $x(\frac{}{ …………………..})$x $(\frac{}{ …………………..})$=

1. Problem: If your gym class had 2.25 golf teams and it wanted to form curling teams for the next lesson, how many could they make?

2.25 golf teams $x(\frac{}{ …………………..})$x $(\frac{}{ …………………..})$=

1. Which of these ratios are 'ONE'? In the box below each if the factor is one write One! if the factor is not one rewrite **the ratio in any way you wish** so that it becomes equal to one.

|  |  |  |  |  |  |  |  |  |
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| $$\frac{2x^{2}}{2x}$$ |  | $$\frac{x^{2}-6x+9}{(x-3)(x-3)}$$ |  | $$\frac{6 players}{\begin{array}{c}2 softball \\teams\end{array}}$$ |  | $$\frac{10 grams}{1 kilogram}$$ |  | $$\frac{4.54 mL Aluminum\*}{1 gram Aluminum}$$ |
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1. Problem: If your best friend gave you 1.65 liters of Krazy Glue for your 16th birthday, how many milliliters did they give you? ( remember that there are 1000 mL in a L)

1.65 liters x $\left(\frac{}{ …………………..}\right)= $

1. \*Problem: Tomorrow you might eat lunch in the cafeteria and you might find a 452 gram aluminum object. Assuming it is pure aluminum with no hollow spaces, what is the volume in mL?

452 g Al x $\left(\frac{}{ …………………..}\right)= $

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| use these numbers for the homework problems earlier on this sheet |  |

*Wow, that was a strange and new worksheet. You should consider coming at lunch. Also consider coming after school on Tuesday or Thursday. Also, ask questions during homework check. Learning DOESN’T happen the day before a test, it happens when you figure out homework.*