

Dimensional Analysis Fun

Five Steps to
Success:

5 Easy Steps

1. Write what you KNOW
2. Write where you want to Go
3. What units do you want to get rid of (denominator)
4. Conversion Factor (C F must = 1)
5. Do the Math

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Convert 5250 m to km

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1. Write down what you KNOW.

5250 m

5250 m

1

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2. Write down the units you want to convert to. GO

$$\frac{5250 \text{ m}}{1} \times \frac{\text{km}}{\text{m}}$$


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3. – What units do you want to get rid of?
Put under where you want to GO
(bottom or denominator)

$$\begin{array}{r} \underline{5250 \text{ m}} \\ 1 \end{array} \times \begin{array}{r} \underline{\text{km}} \\ \text{m} \end{array}$$


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4. – Conversion Factors (there will always be 2, but one is easier to use than the other
List possible conversion factors .

*Make sure your conversion factor = 1

$$\frac{\underline{1 \text{ km}}}{1000 \text{ m}} \quad \text{or} \quad \frac{\underline{.001 \text{ km}}}{1 \text{ m}}$$

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4. Write down CONVERSION FACTOR

$$\begin{array}{r} \underline{5250 \text{ m}} \\ 1 \end{array} \times \begin{array}{r} \underline{1 \text{ km}} \\ 1000 \text{ m} \end{array}$$

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5. Do the Math (circle your answer)
(include the correct units)

$$\frac{5250 \text{ m}}{1} \times \frac{1 \text{ km}}{1000 \text{ m}} = 5.25 \text{ km}$$

Awesome