Name: $\qquad$ Date: $\qquad$ Period: $\qquad$

## Conversions

is a useful way of completing conversion
problems.
This method of problem solving allows you to solve many problems by using the $\qquad$ of one unit to another. For example,

1 day = $\qquad$
Since these two numbers represent the same value, the fractions


When you multiply a number by the number $\qquad$ , you do not $\qquad$ .

However, you may change its $\qquad$ .

1) Convert $\mathbf{3}$ hours to days using dimensional analysis.

## Rules for completing dimensional analysis problems:

1. Write the original value including the appropriate $\qquad$ .
2. Treat the units as algebraic quantities that can be $\qquad$ .
3. Turn the factor into a unit factor by having $\qquad$ quantities on the top and bottom of each factor.
4. Perform the indicated calculation to determine the value of the $\qquad$ with the new units.
