

Key Q's and Vocab: Dimensional analysis

These should be copied by hand into your CHILL

Vocab:

1. Conversion factor – fraction equal to one in which the numerator must be equal to the denominator. It is used to convert units without changing the magnitude of a value
2. Dimensional analysis – method of conversion using conversion factors to cancel out and convert units
3. Numerator – top values and units in a fraction
4. Denominator – bottom values and units in a fraction

Key Questions (answer these in a different color ink):

1. When using dimensional analysis we will basically be multiplying fractions. You have been told that units diagonal from each other cancel out. Justify why. (hint: this is more than just writing two units diagonally and crossing them out)
2. Conversion factors must always be simplify to one but the literal numbers in the numerator and denominator will rarely be the same. Explain how this is possible.
3. Convert 350 seconds to days using dimensional analysis.