equivalence statements		
units you want to convert between		where to get the equivalence statement
unit (e.g., meters)	same unit without	1 km = 1000 m
with metric prefix	metric prefix	100 cm = 1 m
		1000 mm = 1 m
		Consult textbook for the other metric
		prefixes.
molecules	atoms in the same	use the subscripts from the molecular
	molecule	formula
moles of X	individual X's	1 mole X = 6.02×10^{23} individual X's
		It's your job to insert an appropriate term
		for the individuals (e.g., "atoms",
		"molecules", "ions")
atoms or molecules	amus of X	
of X		use masses from the periodic table
moles of X	grams of X	
molecules of X	molecules of Y	use the coefficients from the balanced
moles of X	moles of Y	chemical reaction that involves X and Y