Assignment 9: Arrays and Packages

William Beason and Evan Ott

Due: 2 Apr 2014

For this assignment, you will need to load the `siunitx` and `mhchem` packages.

1 A Table of Formulae

Make a tabular in a table environment with at least 7 rows and 3 columns. Each row should have an element, particle, or molecule; it's mass (in any mass unit); and a reaction involving it. Show uncertainty in the mass. Include column headers and include a caption. Add more columns or rows if you like. For example, the first two rows of the tabular might look as so (feel free to copy my column headers, but choose something other than hafnium).

Element	**Weight**	**Reaction**	**Description**
Hf	(178.49 ± 0.02) amu	$\mathrm{Hf_{(s)} + O_{2(g)} \longrightarrow HfO_{2(s)}}$	Note: do not inhale hafnium dust because it is pyrophoric (it spontaneously combusts).

Table 1: Some elements and reactions involving them.

Remember to use a `p` column if necessary. It takes a required width argument. For example, p{3in}. Recall that if you want the table to appear in a specific location, you can use [h!] as the optional argument when you begin the table environment: \begin{table}[h!]. To get uncertainty to show up as I did, include

```
\sisetup{separate-uncertainty}
```

in the preamble and write the \SI command as below.

```
\SI{178.49(2)}{amu}
```