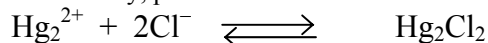


HOW TO CUSTOMIZE THE MICROSOFT WORD KEYBOARD TO FIT THE CHEMIST

Do you often need to go between subscript, superscript and full script? Do you often need to put in arrows for chemical equations? Do you often need to put in equilibrium arrows? If you are frustrated with having to switch between keyboard and mouse, back and forth, to type the chemical equation below, this is for you. Of course, if you know of a better way, please let me know!



SUBSCRIPT AND SUPERSCRIPIT

I have found it most useful to customize my keyboard to get

subscript with Ctrl-N

superscript with Ctrl-M

Note that originally the keystrokes were something like Ctrl+- and Ctrl++ , respectively, which are awkward keys to reach for. I find the N and M keys much easier to use once I get used to them. If you are interested in doing this, here are the directions:

1. Click on **Tools**.
2. Click on **Customize**.
3. Click on **Keyboard** (at bottom right hand corner).
4. Under **Categories**, select **Format**.
5. Under **Commands**, select **Subscript**.
6. Position cursor inside **Press new shortcut key** window and click.
7. Examine what it says under **Current keys**. If you don't mind losing that function (I didn't mind), continue.
8. Press **Ctrl** and **M** keys simultaneously. [**Ctrl+N** is now programmed to give you **subscript**.]
9. Under **Commands**, select **Superscript**.
10. Repeat steps 6 and 7.
11. Press **Ctrl** and **M** keys simultaneously. [**Ctrl+M** is now programmed to give you **superscript**.]

ARROWS FOR IRREVERSIBLE REACTIONS → or → or → or →

Currently you can get these from the **Insert, Symbols**, or from the **Drawing** menu, but I found it *most* helpful to customize my keyboard thus:

Ctrl+. for →

Ctrl+. for — (The arrow is easily extended by keeping **Ctrl** down and pressing comma key repeatedly.)

12. Click on **Insert**.
13. Click on **Symbols**.
14. Select the **Symbols** folder.
15. Under **Font**, select **Symbol**.
16. Highlight the → symbol in the table.
17. Click on **Shortcut key** button (near bottom of screen).
18. Position cursor inside **Press new shortcut key** window and click.
19. Examine what it says under **Current keys**. If you don't mind losing that function, continue.
20. Press **Ctrl** and . (period key) simultaneously. [**Ctrl+.** is now programmed to give you →].
21. Highlight the — symbol in the table. Note this is *not* the hyphen symbol, which is too small and in the wrong position. This symbol appears as a horizontal line that goes across the whole length of the box. In my symbol table, it is in the 6th row down, 19th square from the left.
22. Repeat steps 17 through 19. Press **Ctrl** and , (comma key) simultaneously. [**Ctrl+.** is now programmed to give you — , which is used to extend the arrow as long as you want it.].

NEGATIVE SIGN IN THE SUPERSCRIPIT (NEGATIVE CHARGE OF AN ION)

I have found the hyphen to be too small as a negative charge when placed in the superscript mode. Instead I use the negative sign in the **Insert, Symbol** table: I prefer SO_4^{2-} over SO_4^{2-} .

I have found it most useful to customize **Ctrl+7** to give me that negative charge. Just highlight the negative symbol at step 16 and press **Ctrl+7** at step 20.

OTHER HELPFUL CUSTOMIZED KEYS

I have also found the following useful to customize in the same manner:


Ctrl+6 for ° (degree)

Ctrl+8 for Δ

NOW COMES THE BIG QUESTION ABOUT EQUILIBRIUM ARROWS \rightleftharpoons

First I created these arrows by using the **Drawing** menu and grouping them together so that they can move together *in tandem*. Then I highlight the double arrows, then on the Toolbar click on **Insert**, then **Autotext, New**, and then type in some nickname such as “eq arrows”. Every time I need these arrow, all I have to do is type the nickname (eq arrow) and hit the key **F3**. *Note that it is important you don't put a space after the nickname.*

If you are unfamiliar with how to draw and position the two arrows close together or how to group them together, follow these directions:

23. Click on the **Drawing** menu on the **standard toolbar**. (If you don't see it, click on **Tools**, select **Customize**, select the **Commands** folder, and under **Categories**, select **Drawing**. Under **Commands**, click and drag **Drawing** to the **standard toolbar**.)
24. Create two arrows, adjusting the direction and type of arrow head as you wish:

25. If the second arrow no longer includes the white boxes at the head and tail (indicating that you are still in the **Drawing** mode), place the cursor on the arrow and click. Next, position the second arrow under the first arrow by using the **arrow keys**. You can “nudge” these arrows into position by keeping the **Ctrl** key down while you using the **arrow keys**. This nudging action works with all 4 **arrow keys**.
26. To tie these arrows in tandem, while keeping the **Shift** key down, click on both arrows one at a time. There should now be white boxes on the head and tail of both arrows.
27. Now click on **Draw** on the **Drawing toolbar**, and click on **Group**. You should now see four white boxes, one at each corner of the picture you have created, to show that the two arrows are now in tandem. If you press **Ctrl+C** at this point, you would have copied both arrows together.
28. Save this document under a name such as “eq arrows” and save it in every folder that you expect to need equilibrium arrows.

Cut along the dotted line if you want a summary of what the keystrokes are (to keep handy until you have memorized them from usage). Included are some other preprogrammed shortcut keys that I have found useful.

Ctrl+N	subscript	Ctrl+Shift+.	increase font size one point at a time
Ctrl+M	superscript	Ctrl+Shift+,	decrease font size one point at a time
Ctrl+,	—	Ctrl+#+C	¢
Ctrl+.	→	Ctrl+Enter	begin new page (page break)
Ctrl+6	°	Ctrl+Spacebar	cancel Symbol, Bold, Italics, etc.
Ctrl+7	- (negative charge)	Ctrl+Shift+A	toggles Caps mode
Ctrl+8	Δ	Ctrl+Shift+Spacebar	nonbreaking space