

## CONCEPT: THE ELECTRON CONFIGURATION: CONDENSED

- **Condensed Electron Configuration:** a faster way to write out electron arrangements for elements or ions.
  - With condensed electron configurations, we start at the last **noble gas** before the desired element.

	1A (1)	2A (2)																3A (13)	4A (14)	5A (15)	6A (16)	7A (17)	8A (18)
1	1s																						He
2	2s																				2p		Ne
3	3s																				3p		Ar
4	4s								3d												4p		Kr
5	5s								4d												5p		Xe
6	6s								5d												6p		Rn
7	7s								6d												7p		Og

  

									4f														
									5f														

- Moving forward this will be the primary method to write electron configurations.

**EXAMPLE:** Provide the condensed electron configuration for the aluminum atom.

**STEP 1:** Find your **element** on the periodic table.

**STEP 2:** Locate the **noble gas** that comes before the **element** and place it inside brackets.

**STEP 3:** Continuing from the **noble gas** in brackets, complete the rest of the electron configuration.

**PRACTICE:** Write the condensed electron configuration and electron orbital diagram for the following element: **Zinc**