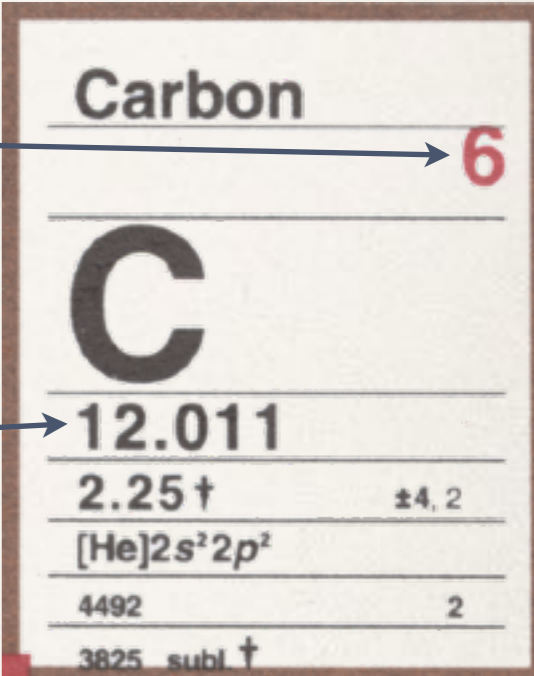


Simple Concepts

- ❖ Atomic Number (Z) The number of protons in the nucleus
- ❖ Atomic Mass (m_a) The number of protons + neutrons
- ❖ Atomic Weight (A_r) The ratio of the average mass per atom of the element to $1/12$ the mass of an atom of ^{12}C
- ❖ Isotopes have the same number of protons but different number of neutrons, eg., ^{12}C , ^{13}C , ^{14}C . The isotopes ^{12}C and ^{13}C are stable, and ^{14}C is radioactive.
- ❖ Ions are charged atoms: anions are negative and cations are positive



The image shows a periodic table entry for Carbon. It includes the element name, symbol, atomic number, atomic mass, and other data. Two blue arrows point from the text in the list to the atomic number and atomic mass in the table.

Carbon	
	6
C	
12.011	
2.25 †	±4, 2
[He]2s ² 2p ²	
4492	2
3825 subl †	