

**SECTION**  
**1**
**Enrichment**

## How do isotopes differ?

**Directions:** Most elements exist in nature as isotopes. Isotopes of an element are almost identical in their chemical properties and reactions. However, the nuclear properties of isotopes are different. Not only do isotopes differ in mass, but some may be radioactive. Using a periodic table, complete the information in the chart below.

	Symbol	Atomic number	Number of protons	Mass number	Number of neutrons
1.	${}^1_1\text{H}$			1	
2.	${}^2_1\text{H}$	1			1
3.	${}^3_1\text{H}$			3	
4.	${}^4_2\text{He}$		2		2
5.	${}^{12}_6\text{C}$			12	
6.	${}^{14}_6\text{C}$			14	
7.	${}^{18}_8\text{O}$			18	
8.	${}^{49}_{21}\text{Sc}$		21		28
9.	${}^{63}_{27}\text{Co}$			63	
10.	${}^{212}_{82}\text{Pb}$			212	
11.	${}^{222}_{88}\text{Ra}$			222	
12.	${}^{226}_{88}\text{Ra}$			226	
13.	${}^{235}_{92}\text{U}$			235	
14.	${}^{238}_{92}\text{U}$			238	