

Isotopes of Elements

Name - _____

- 1.) What is the difference between a hydrogen atom and a proton?
- 2.) The neutron was discovered long after the proton and electron. Why was it so hard to discover?
- 3.) Explain the difference between the atomic number and the mass number.
- 4.) Fill the following table:

<u>Isotope Name</u>	<u>Symbol</u>	<u>Number of Protons</u>	<u>Number of Neutrons</u>
Astatine-211	$\frac{211}{85}\text{At}$	85	126
		92	143
Magnesium-25			
	$\frac{209}{86}\text{Rn}$		
Chlorine-37	$\frac{37}{17}\text{Cl}$		
Deuterium			
	$\frac{30}{14}\text{Si}$		
Palladium-102			
		53	74
Tantalum-180			

5.) Write a definition of an isotope in your own words.

6.) Chlorine occurs naturally as either chlorine-35 or chlorine-37. What is the difference between the two isotopes?