

Isotope Practice
Chemistry
2 points

Name: _____

Date: _____ Hour: _____

1. Identify the parts of a periodic table entry:

_____	hydrogen	_____
_____	1.008	_____
_____	1	_____
_____	H	_____

2. How can an atom's identity (name) be determined? _____

3. How can an atom's mass number be determined? _____

4. How can an atom's number of protons be determined? _____

5. How can an atom's number of electrons be determined? _____

6. How can an atom's number of neutrons be determined? _____

Isotope	Number of Neutrons	Mass Number	Number of Protons
cadmium-116			
		113	49
		103	45
¹⁹⁷ Au			
xenon-136			
	40	71	
	106	180	
	42		33
mercury-204			
³ H			
	35		35

Isotope	Number of Protons	Number of Electrons	Number of Neutrons	Mass Number
copper-63				
	6			14
^{13}C				
potassium-41				
	47		62	

10. Write the following isotopes using the notation ^A_ZX :

- | | | | |
|---------------|-------|-----------------|-------|
| (a) tin-124 | _____ | (e) krypton-78 | _____ |
| (b) sulfur-32 | _____ | (f) titanium-48 | _____ |
| (c) lead-204 | _____ | (g) cadmium-114 | _____ |
| (d) iron-58 | _____ | (h) thorium-232 | _____ |

11. Write the following isotopes using the notation ^A_ZX :

- (a) has 59 protons and 82 neutrons: _____
- (b) has a mass number of 172 and 102 neutrons: _____
- (c) has 2 protons and 2 neutrons: _____

12. What is the function of each of the following:

- (a) electron: _____
- (b) neutron: _____
- (c) proton: _____

Isotope Using ^A_ZX	Number of Neutrons	Number of Protons	Mass Number	Number of Electrons
		110	271	
	157			101
^{183}Ta				
^{170}Yb				