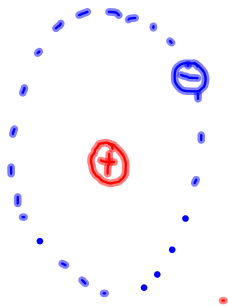


H has 3 isotopes:

99.98%

Protium



At.# 1

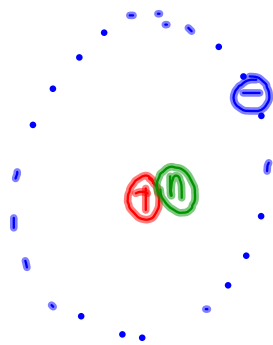
Mass# 1

hydrogen-1



.0002%

Deuterium



1

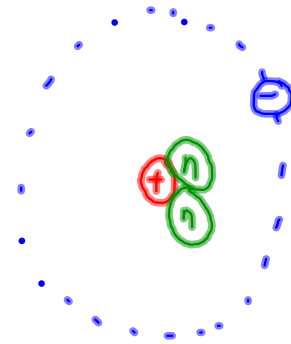
2

hydrogen-2



$4 \times 10^{-17}\%$

Tritium



1

3

hydrogen-3



<u>Mass #</u>		<u>Abundance</u>	
1	x	.9998	= 0.9998
2	x	.0002	= .0004
3	x	4E-17	= $\frac{1.2E-16}{1.0002}$
			1.00794

<u>Mass #</u>	<u>Abundance</u>	
151	$\times 48.03\%$	$= 72.5253$
153	$\times 51.97\%$	$= 79.5141$
		<u>152.0394</u>

$$84 \times \underbrace{0.507}_{50.7\%} = .42$$

$$86 \times \underbrace{0.99}_{9.9\%} = 8.514$$

$$87 \times \underbrace{0.709}_{7.09\%} = 6.09$$

$$88 \times \underbrace{82.6\%}_{82.6\%} = 72.688$$

$$87.712$$

Mass #'s are always whole #'s

Average atomic mass is a weighted average of the mass #'s.

1. Both have the same number of protons (92). They are different because uranium-235 has 143 neutrons and uranium-238 has 146 neutrons.
2. An isotope is an atom that has the same number of protons but a different number of neutrons in its nucleus.
3. atomic number
4. protons
5. protons and neutrons
6. a) mass number b) atomic number c) 8 neutrons

6 protons 7 neutrons



magnesium - 24

*carbon - 13



gold - 196

*phosphorus - 32
15p⁺ + 17 neutrons



copper - 63

iodine - 125

MP 1	$\underbrace{-20\%}$	$\times 89$	$= 17.8$	20
MP 2	$\underbrace{-20\%}$	74	$= 14.8$	20
MidTerm	$\underbrace{-10\%}$	83	$= 8.3$	10
MP 3	$\underbrace{-20\%}$	90	$= 18$	20
MP 4	$\underbrace{-20\%}$	93	$= \frac{18.6}{77.5\%}$	20
Final	$\underbrace{-10\%}$	75		<u>10</u>
				<u>100</u>

$$\text{Max grade} = 87.5 \rightarrow 88B$$

$$85 - 77.5 = 7.5$$

Student A

95	- 10%	=	9.5
74	- 10%	=	7.4
82	- 10%	=	8.2
92	- 30%	=	27.6
81	- 40%	=	32.4
	<hr/>		
	100%		85.1