

Key.

Yet Another Atomic Review:

Suggestions to help you prepare for the test tomorrow:

Have another go at all of your definitions.

Make sure you can outline the observations and interpretations of both Thomson and Rutherford

Practice:

Fill in the table (remember to only fill in either Atomic Mass OR Mass Number)

Symbol	Atomic Mass	Mass Number	Number of Protons	Number of Neutrons	Number of Electrons	Charge	Type of Ion
$\text{Ru}^{3+}$	101.07	/	44	57	41	+3	cation
$^{197}\text{Ir}$	/	197	77	120	77	0	atom.
$^{32}\text{P}^{2-}$	/	32	15	17	17	-2	anion
$^{120}\text{Cd}$	/	120	48	72	44	+4	cation
$\text{O}^{2-}$	15.9994	/	8	8	10	-2	anion
$^{198}\text{Hg}$	/	198	80	118	80	0	atom
Pm	147	/	61	86	61	0	atom.

Calculate the average atomic mass of Nickel based on the data below. SHOW YOUR WORK.

Nickel-58 = 68.08%, Nickel-60 = 26.22%, Nickel-61 = 1.14%, Nickel-62 = 3.63%, Nickel-64 = 0.93%

$$= \frac{68.08(58) + 26.22(60) + 1.14(61) + 3.63(62) + 0.93(64)}{100 \text{ atoms}}$$

100 atoms

$$= 58.7596$$