

History of the Atom Quiz Review

- 1) How did the early Greek model of the atom differ than that of Dalton?
- 2) Which of Dalton's beliefs about the atom are wrong? Explain why.
- 3) Sketch Thomson's cathode ray apparatus and explain what it proved.
- 4) Why were alpha particles deflected in Rutherford's gold foil experiment?
- 5) Which element has 45 protons? _____
- 6) Why would it be unreasonable for me to ask "Which element has 45 neutrons?" on a quiz?

7) When writing atomic symbols, why don't we usually write the atomic number?

8) Why are neutrons present in the nucleus?

9) Fill in the blanks with the appropriate numbers/symbols:

Element	Atomic number	Atomic mass	Protons	Neutrons	Electrons
Al				13	
^{14}Mg					
	20	40			
			43	57	
		106			46
^{185}W					
	65			93	
Es		253			

10) Element A has three isotopes. ^{225}A has an abundance of 20.04% and a mass of 225.11 amu. ^{226}A has an abundance of 45.23% and a mass of 226.10 amu. ^{228}A has an abundance of 34.73% and a mass of 228.11 amu. What is the average atomic mass of element A?