

Atoms and Elements Guided Notes

- Atoms are incredibly small
- 1. An _____ is the smallest identifiable unit of an element.
- 2. An _____ is a substance that cannot be broken down into simpler substances.
- 3. _____ called atoms “atomos” which means indivisible.
-first scientist to postulate that matter is composed of atoms.

Dalton's Atomic Theory:

1. Each element is composed of tiny, indestructible particles called atoms.
2. All atoms of a given element have the same mass and other properties that distinguish them from the atoms of other elements.
3. Atoms combine in simple, whole-number ratios to form compounds.

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4. Who is given credit for discovering the electron? _____
 5. Thomson used the _____ to describe his discovery mentioned above.
 6. Who is given credit for discovering the atomic nucleus? _____
 7. Rutherford used the _____ to describe his discovery mentioned above
 8. _____ and _____ have charge

Protons	Neutrons	Electrons

9. Like charges _____
10. Opposite charges _____
11. _____ organized the periodic table
12. The elements in the periodic table can be broadly classified as _____, _____, and _____

Metals	Metalloids	Nonmetals

Alkali metals												Noble gases					
↓												↓					
1A												8A					
1	2											3	4				
H	He											Li	Be				
3	4											11	12				
Li	Be											Na	Mg				
Transition metals												13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
55	56	57	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
87	88	89	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
Fr	Ra	Ac	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og
Lanthanides																	
Actinides																	
Group numbers																	
↓																	
Halogens																	