

Chapter 3 Test

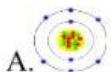
Name _____

True/False: Determine if the statements below are true or false. If the statement is true, choose true, if the statement is false, choose the correct word to make it true.

- _____ 1. An element can be identified by its number of neutrons.
- _____ 2. The atomic number is the number of neutrons.
- _____ 3. Valence electrons are the electrons found closest to the nucleus.
- _____ 4. Elements are made up of one type of atom.
- _____ 5. The periodic table is arranged in order of increasing atomic number.
- _____ 6. A nonmetal has the properties of both a metal and a nonmetal.

Matching

Match the correct scientist with the model of the atom that he discovered. One will be used twice.

_____ 7. Democritus	A. 
_____ 8. Dalton	B. 
_____ 9. Thomson	C. 
_____ 10. Rutherford	D. 
_____ 11. Bohr	E. 
_____ 12. Modern model	

Match the family with its most important characteristic.

_____ 13. Alkali Metal	A. Most reactive non-metals
_____ 14. Alkaline Earth Metal	B. Common metals, high melting points
_____ 15. Transition Metals	C. Do not react
_____ 16. Halogen Family	D. Most reactive metals
_____ 17. Noble Gases	E. 2 nd most reactive metals

18-23. Fill in the chart below.

Work Bank: (Words may be used more than once.)

Negative neutral positive nucleus outside nucleus nucleus

Particle	Charge	Location
Proton		
Electron		
Neutron		

24-28. Using the work bank below, label the families on the periodic table by drawing a line from the word to the correct place on the periodic table.

<i>Transition Metals</i>	<i>Halogens</i>	<i>Alkali Metals</i>
<i>Noble Gases</i>	<i>Alkaline Earth Metals</i>	

Groups →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
↓ Oktet	H	He																	
1	1																2	He	
2	3	4																10	Ne
3	11	12																18	Ar
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	Kr
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	Xe
6	55	56		72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	Rn
7	87	88		104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	Og
Lanthanowce																			
Aktynowce																			
	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71				
	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu				
	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103				
	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr				

Use the word bank below to complete the following definitions.

broken stretched hammered wires sheets
electricity heat reflects shiny

29. Malleable- a substance can be _____ in to _____.
30. Ductile- a substance can be _____ into _____.
31. Luster- how light _____ off a substance; how _____ it is.
32. Brittle- easily _____ into pieces
33. Conductor- a substance that can transport (carry) _____ or _____

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Based on their location on the periodic table, answer the following questions about the elements on the chart:

	Potassium (K)	Xenon (Xe)
Atomic number		
atomic mass		
# protons		
# electrons		
#neutrons		
Is it a metal, nonmetal or metalloid?		
What family does it belong to?		
# of valence electrons		
Period #		
# of energy levels		
Describe its reactivity as: high, medium, low or none.		
Is it a good conductor, semi-conductor or poor conductor.		
Is this element malleable?		
Is it ductile?		
Is it larger or smaller than the element above it?		
Does it have a high or a low melting point?		