

Chapter 3 Test

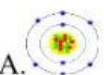




Name _____

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.  | B.  |
| _____ 8. Dalton | | |
| _____ 9. Thomson | C.  | D.  |
| _____ 10. Rutherford | | |
| _____ 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.

Transition Metals	Halogens	Alkali Metals
Noble Gases	Alkaline Earth Metals	

Group →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
↓ Oñres	1	2																2
	1 H												5 B	6 C	7 N	8 O	9 F	10 Ne
2	3 Li	4 Be											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
3	11 Na	12 Mg											31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
6	55 Cs	56 Ba		72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og
7	87 Fr	88 Ra		104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Ch	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og
	Lanthanowce		57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu	
	Aktynowce		89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 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?		