

# THE PERIODIC TABLE OF THE ELEMENTS

<b>H</b>	1.0079	<b>He</b>	4.0026
<b>Li</b>	3	<b>B</b>	5
<b>Be</b>	4	<b>C</b>	6
6.941	9.012	<b>N</b>	7
11	12	<b>O</b>	8
<b>Na</b>	<b>Mg</b>	<b>F</b>	9
22.99	24.30	<b>Ne</b>	10
19	20	<b>Al</b>	10.811
<b>K</b>	<b>Ca</b>	<b>Si</b>	12.011
39.10	40.08	<b>P</b>	14.007
<b>Sc</b>	<b>Ti</b>	<b>S</b>	16.00
44.96	47.90	<b>Cl</b>	19.00
<b>V</b>	<b>Cr</b>	<b>Ar</b>	20.179
52.00	54.938	<b>He</b>	
<b>Mn</b>	<b>Fe</b>	<b>B</b>	
55.85	58.93	<b>r</b>	
<b>Co</b>	<b>Ni</b>	<b>Br</b>	
63.55	58.69	<b>K</b>	
<b>Zn</b>	<b>Ga</b>	<b>R</b>	
65.39	69.72	<b>Ge</b>	
<b>Cu</b>	<b>Ag</b>	<b>As</b>	
46	47	<b>Se</b>	
45	44	<b>Br</b>	
<b>Rh</b>	<b>Ru</b>	<b>Br</b>	
101.1	102.91	<b>Kr</b>	
<b>Mo</b>	<b>Tc</b>	<b>Ge</b>	
95.94	(98)	<b>As</b>	
<b>Y</b>	<b>Zr</b>	<b>Sn</b>	
88.91	91.22	<b>Sh</b>	
<b>Nb</b>	<b>Ta</b>	<b>Te</b>	
92.91	73	<b>I</b>	
<b>Re</b>	<b>W</b>	<b>E</b>	
178.49	180.95	<b>Xe</b>	
183.85	186.21	<b>Te</b>	
190.2	192.2	<b>I</b>	
195.08	196.97	<b>Te</b>	
200.59	200.59	<b>Te</b>	
105	106	<b>Bi</b>	
107	108	<b>Po</b>	
<b>Rf</b>	<b>Db</b>	<b>At</b>	
261)	(262)	<b>Rn</b>	
266)	(264)	<b>Ds</b>	
(277)	(276)	<b>Rg</b>	
(271)	(268)	<b>S</b>	
(272)	(277)		

§ Not yet named

<b>Ce</b>	59	60	<b>Pm</b>	<b>Sm</b>	<b>Eu</b>	<b>Gd</b>	<b>Tb</b>	<b>Dy</b>	<b>Ho</b>	<b>Er</b>	<b>Tm</b>	<b>Yb</b>	<b>Lu</b>
140.12	140.91	144.24	(145)	150.4	151.97	157.25	158.93	162.50	164.93	167.26	168.93	173.04	174.97
90	91	92	93	94	95	96	97	98	99	100	101	102	103
<b>Th</b>	<b>Pa</b>	<b>U</b>	<b>Np</b>	<b>Pu</b>	<b>Am</b>	<b>Cm</b>	<b>Bk</b>	<b>Cf</b>	<b>Es</b>	<b>Fm</b>	<b>Md</b>	<b>No</b>	<b>Lr</b>
232.04	231.04	238.03	237.05	(244)	(243)	(247)	(247)	(251)	(252)	(257)	(258)	(259)	(262)

\* Lanthanide Series

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## Practice SAT Chemistry Trial

1. What is an excited state electrons configuration of fluoride ion?
  - A.  $1s^22s^22p^63s^2$
  - B.  $1s^22s^22p^63s^23p^5$
  - C.  $1s^22s^22p^5$
  - D.  $1s^22s^22p^53s^1$
  - E.  $1s^22s^22p^43s^1$
2. The excited electron of sodium atom locates in orbital
  - A. 1s
  - B. 2s
  - C. 2p
  - D. 3s
  - E. 3p
3. A rectangular block of aluminum alloy weighs 20.45 g. The dimensions of the block are 8.4 cm by 5.5 cm by 4.6 cm. From this data, what is the density of this alloy?
  - A. 0.0962 g/cm<sup>3</sup>
  - B. 0.0960 g/cm<sup>3</sup>
  - C. 0.096 g/cm<sup>3</sup>
  - D. 0.09 g/cm<sup>3</sup>
  - E. 0.9 g/cm<sup>3</sup>
4. What is the number of moles in 15.0 g CO<sub>2</sub>?  
(Atomic mass of C = 12.011, O = 16.00 g/mol)
  - A. 0.341
  - B. 0.34
  - C. 0.3
  - D. 0.340
  - E. 0.35

5. What statement is/are true for  $1s^22s^22p^53s^1$
- I. Excited state electrons configuration of neon atom
  - II. Excited state electrons configuration of magnesium ion
  - III. Excited state electrons configuration of oxygen atom
- A. I
  - B. II
  - C. I and II
  - D. I and III
  - E. I, II and III



6. The electrons configuration above represents following EXCEPT
- A. Ground state electrons configuration of sulfide ion
  - B. Ground state electrons configuration of argon atom
  - C. Ground state electrons configuration of calcium ion
  - D. Ground state electrons configuration of potassium ion
  - E. Ground state electrons configuration of potassium atom
7. What is the mass of in gram of 0.031 mol  $\text{NO}_2$ ?  
(Atomic mass of N = 14.00, O = 16.00 g/mol)
- A. 1.426
  - B. 1.43
  - C. 1.4
  - D. 1.40
  - E. 1.42