

**Weed Science, PLS 4601c Section 7644
and Grad. – Prin. Of Weed Science AGR 6932 Section 9212
University of Florida - Davie**

<http://grove.ufl.edu/~turf/weedscience/>

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Quiz 1 –Natural sciences and mathematics (Review)

1. Using the table of periodic elements below, what is the atomic number of iron?
 - a) 26
 - b) 53
 - c) 56
 - d) 77
 - e) None of the above

Period	1																18	
1	1 H 1.008	2										13	14	15	16	17	2 He 4.003	
2	3 Li 6.941	4 Be 9.012	Group										5 B 10.81	6 C 12.01	7 N 14.01	8 O 16.00	9 F 19.00	10 Ne 20.18
3	11 Na 22.99	12 Mg 24.31	3	4	5	6	7	8	9	10	11	12	13 Al 26.98	14 Si 28.09	15 P 30.97	16 S 32.07	17 Cl 35.45	18 Ar 39.95
4	19 K 39.10	20 Ca 40.08	21 Sc 44.96	22 Ti 47.88	23 V 50.94	24 Cr 52.00	25 Mn 54.94	26 Fe 55.85	27 Co 58.93	28 Ni 58.69	29 Cu 63.55	30 Zn 65.39	31 Ga 69.72	32 Ge 72.59	33 As 74.92	34 Se 78.96	35 Br 79.90	36 Kr 83.80
5	37 Rb 85.47	38 Sr 87.62	39 Y 88.91	40 Zr 91.22	41 Nb 92.91	42 Mo 95.94	43 Tc (98)	44 Ru 101.1	45 Rh 102.9	46 Pd 106.4	47 Ag 107.9	48 Cd 112.4	49 In 114.8	50 Sn 118.7	51 Sb 121.8	52 Te 127.6	53 I 126.9	54 Xe 131.3
6	55 Cs 132.9	56 Ba 137.3	57 La *138.9	72 Hf 178.5	73 Ta 180.9	74 W 183.9	75 Re 186.2	76 Os 190.2	77 Ir 192.2	78 Pt 195.1	79 Au 197.0	80 Hg 200.5	81 Tl 204.4	82 Pb 207.2	83 Bi 209.0	84 Po (210)	85 At (210)	86 Rn (222)
7	87 Fr (223)	88 Ra (226)	89 Ac ~(227)	104 Rf (257)	105 Db (260)	106 Sg (263)	107 Bh (262)	108 Hs (265)	109 Mt (266)	110 Ds (271)	111 Uuu (272)	112 Uub (277)	114 Uuq (296)		116 Uuh (298)		118 Uuo (?)	
Lanthanide Series			58 Ce 140.1	59 Pr 140.9	60 Nd 144.2	61 Pm (147)	62 Sm 150.4	63 Eu 152.0	64 Gd 157.3	65 Tb 158.9	66 Dy 162.5	67 Ho 164.9	68 Er 167.3	69 Tm 168.9	71 Lu 175.0			
Actinide Series			90 Th 232.0	91 Pa (231)	92 U (238)	93 Np (237)	94 Pu (242)	95 Am (243)	96 Cm (247)	97 Bk (247)	98 Cf (249)	99 Es (254)	100 Fm (253)	101 Md (256)	102 No (254)	103 Lr (257)		

2. Which elements are halogens?
- a) H – Li – Na - K
 - b) Be – Mg – Ca - Sr
 - c) F – Cl – Br - I
 - d) He – Ne – Ar - Kr
 - e) None of the above
3. What is the approximate atomic weight of sodium chloride?
- a) 23
 - b) 28
 - c) 37
 - d) 58
 - e) None of the above
4. What is the molecular weight of the herbicide MSMA (monosodium methanearsenate) which has the molecular formula $\text{CH}_4\text{AsNaO}_3$?
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5. What type of bonding holds the atoms of methane together?
- a) covalent
 - b) ionic
 - c) metallic
 - d) van der Waals forces
 - e) None of the above
6. Aromatic hydrocarbons are derived from a simple 6-carbon molecule which has a strong ring:
- a) benzene
 - b) deoxyribonucleic acid
 - c) glucose
 - d) hexane
 - e) None of the above

7. What organelle is involved with respiration in plants?
 - a) chloroplast
 - b) mitochondrion
 - c) nucleus
 - d) ribosome
 - e) None of the above
8. What factor is most determining of the rate of evapotranspiration?
 - a) absolute temperature
 - b) radiant energy
 - c) vapor pressure deficit (e.g., dryness in the air)
 - d) wind
 - e) None of the above
9. What is the name of a mature plant ovary?
 - a) fruit
 - b) ovule
 - c) seed
 - d) spikelet
 - e) None of the above
10. What is the name for a horizontal underground plant stem?
 - a) corm
 - b) rhizome
 - c) stolon
 - d) tuber
 - e) None of the above
11. Exponential growth (and decay) can be interpreted with:
 - a) addition
 - b) harmonics
 - c) logarithms
 - d) polynomials
 - e) None of the above

12. The stalk holding a leaf to a stem:
 - a) pedicle
 - b) peduncle
 - c) pericycle
 - d) petiole
 - e) None of the above
13. In algebra the identity element of multiplication is:
 - a) 0
 - b) 1
 - c) false
 - d) true
 - e) None of the above
14. Which is an essential characteristic of a scientific paper:
 - a) accessibility
 - b) novelty
 - c) peer review
 - d) repeatability
 - e) All of the above
15. The process in which the rate of a chemical reaction is either increased or decreased by means of a chemical substance:
 - a) antagonism
 - b) catalysis
 - c) denaturation
 - d) synergism
 - e) None of the above
16. Cell division involving reductional division of the number of chromosomes:
 - a) disjunction
 - b) meiosis
 - c) mitosis
 - d) replication
 - e) None of the above

17. Shift in plant species composition over time is:
 - a) adaptation
 - b) evolution
 - c) migration
 - d) succession
 - e) None of the above
18. A fully subdivided leaf with leaflets:
 - a) compound
 - b) decussate
 - c) pinnatifid
 - d) simple
 - e) None of the above
19. German World War I chemist who first solved the problem of synthetically fixing nitrogen from the air:
 - a) Fritz Haber
 - b) James Watson
 - c) John Dalton
 - d) Rachel Carson
 - e) None of the above
20. Cool season plants that should do well with elevated CO₂:
 - a) bermudagrass
 - b) C₃
 - c) C₄
 - d) torpedograss
 - e) spikelet