

**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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May 21, 2009

Quiz 2 –Natural sciences and mathematics (ANSWERS)

1. Using the table of periodic elements below, what is the atomic weight of water, H₂O?
 - a) 1
 - b) 3
 - c) 32
 - d) 33
 - e) **None of the above – the atomic weight of water is 18 <<<<<<<<**

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 inert and do not generally react chemically)?
- a) H – Li – Na - K
 - b) Be – Mg – Ca - Sr
 - c) F – Cl – Br - I
 - d) He – Ne – Ar – Kr are colorless, odorless, monatomic gases with very low chemical activity, the “noble gases,” not strictly inert because compounds are formed. Also in this Group 18 of the periodic table is Xe (xenon) and Rn (radon), the latter important because of its high radioactivity and short half life. It is created naturally by decay of radium and uranium in rock and the gas can accumulate in buildings and is probably the largest source of exposure to ionizing radiation. Ar (argon) is a large component of the atmosphere. <<<<<<<<**
 - e) None of the above
3. What is the approximate atomic weight of methane CH₄?
- a) 5
 - b) 12
 - c) 16 <<<<<<<<**
 - d) 32
 - e) None of the above
4. The molecular weight is about 162 for the herbicide MSMA (monosodium methanearsenate) which has the molecular formula CH₄AsNaO₃. What percent arsenic (As) is MSMA?
- a) 100%
 - b) about 162%
 - c) about 46% - divide atomic weight of As (arsenic), 75, by 162 <<<<**
 - d) about 75%
 - e) None of the above
5. What supports weeds as “plants that are adapted to disturbed habitats”?
- a) the desirable characteristics of weeds
 - b) the effect of chemicals on weeds
 - c) the participation of weeds in old field succession <<<<<<<<**
 - d) the undesirable characteristics of weeds
 - e) None of the above

6. The chemical characteristics of an element are mostly determined by?
- a) **the electrons – the number of which happen to be same generally as the protons and thus the same as the atomic number; affects other external characteristics such as color <<<<<<<<**
 - b) the muons
 - c) the neutrons
 - d) the protons
 - e) None of the above
7. Grasses (Poaceae) are a?
- a) species
 - b) genus
 - c) **family – you will also see the old word “Gramineae” <<<<<<<<**
 - d) order
 - e) None of the above
8. An organelle the does photosynthesis:
- a) logarithm
 - b) mitochondrion
 - c) nucleus
 - d) ribosome
 - e) **None of the above – it’s the chloroplast <<<<<<<<**
9. The sister family of grasses is?
- a) **sedges (Cypreaceae) <<<<<<<<**
 - b) coffee family (Rubiaceae)
 - c) sunflower family (Asteraceae)
 - d) pea family (Fabaceae)
 - e) None of the above
10. The article on “Impact of cultural factors on weed populations in St. Augustinegrass turf”:
- a) Dollarweed was mostly affected by fertilization rate
 - b) Dollarweed was mostly affected by herbicides
 - c) **Dollarweed was mostly affected by irrigation**
 - d) Dollarweed was mostly affected by mowing height
 - e) None of the above

11. What are some common characteristics of weeds:
- a) large number of seeds
 - b) underground rhizomes
 - c) opportunistic
 - d) All of the above <<<<<<<**
 - e) None of the above

12. List four undesirable characteristics of weeds:

- a) Allopathy (not mentioned in class)
- b) Allergies (e.g., pollen ragweed)
- c) Compete with crop for water, fertilizer, and space
- d) Crop quality problems
- e) Destroy native habitats, create monoculture
- f) Esthetically undesirable
- g) Expensive to control
- h) Fast growing
- i) Fire hazard
- j) Flood hazard
- k) Harbor fungus
- l) Hard to control
- m) Increase use of pesticides
- n) Opportunistic, aggressive
- o) Parasites
- p) Poisonous
- q) Reduce property value

13. List four desirable characteristics of weeds:

- a) Attract pollinators
- b) Attractive esthetically
- c) Bioindicators
- d) Create jobs
- e) Edible (vitamins, minerals)
- f) Gene pool for pest resistance
- g) Golf course grass
- h) Ground cover
- i) Hardy
- j) Medicine