
Tossup

19) Biology- Short Answer: Short Answer: Order the following levels of function from smallest to largest:
1) tissue 2) organ 3) organ system 4) cell
Answer: 4,1,2,3

Bonus

19) Biology- Akshara is enjoying vegetarian samosas for lunch. After the samosas pass through her stomach and are partially digested, where do the remains go assuming normal biologic function?

Answer: Small intestines

Tossup

20) Chemistry-Multiple Choice: Which of the following is a possible set of quantum numbers for a 3d orbital?

w) n=3, l=0
x) n=3, l=1
y) n=3, l=2
z) n=3, l=3

Answer: **y) n=3, l=2**

Bonus

20) Chemistry-Short Answer: When sodium chloride reacts with fluorine gas to produce sodium fluoride and chlorine gas, what is the sum of the coefficients in the balanced equation?

Answer: 6

Tossup

21) Earth and Space-Short Answer: Olympus Mons, the tallest volcano in the solar system, is what type of volcano?
Answer: Shield Volcano

Bonus

21) Earth and Space- Short Answer: Rank the following types of lava by decreasing silica content: 1) rhyolitic 2) basaltic 3) andesitic

Answer: 1,3,2

Tossup

22) Physics-Multiple Choice-Which of the following laws describes the bending of waves as it passes from one medium to another with a different index of refraction?

w) Snell's Law

x) Lenz's Law

y) Faraday's Law

z) Law of reflection

Answer: **w) Snell's Law**

Bonus

22) Physics-Short Answer: An electromagnetic wave has a wavelength of 1 m. What is the frequency of the wave in Hz?

Answer: $3x10^8$ Hz or 300,000,000 Hz

Tossup

23) Math Multiple Choice: Which of the following numbers is *prime*?

w) 21

x) 39

y) 41

z) 51

Answer: y)41

Bonus

23) Math-Short Answer: Solve the following system of equations for x and y: 2x+3y=7 and 4x-y=5

Answer: x=11/7, y=9/7(must say which one is equal to which to get credit)