

PSE4U1 Exam Review 2014

1. Be able to label all ligament and bones of knee joint
2. Know the 5 types of bones and example for each
3. Know the 5 roles of the skeleton
4. Know 3 ways to prevent osteoporosis
5. Know 2 functions of cartilage and where it is located
6. Know three types of muscle and an example of each
7. Know three types of muscular contraction
8. Know three functions of muscle
9. Be able to write a jot dot essay on how a muscle contracts using physiological, anatomical and biochemical terms
10. Be able to differentiate between a muscle and a tendon with respect to connective tissue material, blood supply and what joins what to bones.
11. Know the difference between tendons and ligaments and how this would help you diagnose whether the injury is a sprain or strain
12. Know the terminology involving planes, axis and anatomical movements
13. Know all the components of the nervous system
14. Be able to explain with the stretch reflex that causes a knee jerk reaction using anatomical and physiological terminology
15. Know the components of the ECG signal and what they represents and be able to label the 4 electrical conduction components of the heart?
16. Know what the 2 components of blood pressure and what they represents
17. Know the three energy paths and what the energy source is, whether they use oxygen, the duration of the pathway, the by products, example of a sport that relies on this system and the muscle fibre that is usually recruited when this energy pathway is active
18. Know 4 functions of the cardiovascular system
19. Know the 3 main functions of the respiratory system
20. Know what the SHARP principle is used for and how each component indicates a soft tissue injury
21. Know the PIER principle and how each component in detail helps healing
22. Know what BMI stands for and how to use the BMI chart
23. Know 4 disease that can arise if you have an high BMI
24. Know 4 factors that affect your metabolic rate
25. Be able to write out the energy equation and how it relates to weight loss
26. Know a three types of Ergogenic Aid , an example for each and a pro and con for each example with respect to how it impacts the body
27. Know three ways to enhance rehabilitation and athletic performance using Ergonomics
28. Know what the reversibility principle is and the factor that lead to it
29. Know the four components of fitness and an example of a test to assess that component
30. Know 4 components of the general program design
31. Know what the FITT principle and the definition of each component
32. Know the frequency, intensity, number of sets, number of reps and duration of program when training a beginner in endurance and strength
33. Know the formula and to calculate a training heart rate of a certain percentage ?
34. Know the importance of a warm-up and cool-down
35. Know 5 factors that can effect skill development
36. Know the definition of "ideal performance state" and how it relates to the inverted "U" hypothesis
37. Know 3 ways to help you achieve ideal performance state
38. Know three areas in sport and fitness where biomechanical principles are applied
39. Know the 7 biomechanical principles
40. Know how to find the center of mass of a high jumper and why the flosbury flop is superior to the straddle