

Year 12 PE Pre course material.

1. Choose sporting activity and if not already part of a club, join one.
2. Name and locate the following bones on a skeleton:
Cranium, tibia, fibula, humerus, ulna, radius, carpals, metacarpals, tarsals, metatarsals, phalanges, patella, femur, vertebrae, mandible, scapula, clavicle, and pelvis.
3. Name and locate the following muscles and learn in pairs:
Hamstring (know the 3 muscles that make up the hamstrings), quadriceps (know the 4 muscles that make up the quadriceps) gastrocnemius, soleus, anterior tibialis, gluteus maximus, iliopsoas, gluteus medius, adductor longus, latissimus dorsi, trapezius, bicep brachii, tricep brachii, scalenes, pectoralis major, Rotator cuff muscles (Supraspinatus, infraspinatus, subscapularis, Teres minor) Wrist flexors and extensors, Deltoid.
4. Investigate Heart rate, Stroke Volume and Cardiac output definitions, units each are measured in and resting values for a trained and average person then compare to the values when exercising at submax and maximal exercise for a trained and untrained.
5. Investigate the definitions for the Breathing rate, Tidal volume and find out what the name is when you multiply these 2 things together. Research values and the unit each are measured in for a trained and an untrained athlete at rest and during submaximal and maximal exercise.
6. Research into what causes asthma and COPD, what changes physiologically and treatments.
7. Investigate 4 different sports performers who have been reported to have taken performance enhancing supplements, drugs or use methods to aid performance. Find out what it was, what the benefits were and the risks associated with it.
8. What are the components of diet and how does each part help a performer?
9. What physiological changes occur in the cardiovascular, respiratory, muscular and skeletal systems after a long training programme.
10. How many planes are there in the body? What are they called?