

Section 1: Applied Anatomy and Physiology

Knowledge Checklist

Topic		What do I need to know?	Self-Assessment		
			l Don't Know lt	l've Learnt It	l've Mastered It
1.1 Structure & Function of the Skeletal System	Bones	The names and locations of the major bones in the human body			
	Function	Understand the function of the skeletal system and be able to apply relevant examples			
	Joints	Know the definition and structure of a synovial joint			
		Identify the location and articulating bones of 2 ball and socket joints; and 2 hinge joints			
		Know the roles of ligaments, cartilage and tendons in a joint			
	Movements	Know the types of movements at both hinge and ball and socket joints, with relevant examples			
1.2 Structure and Function of the Muscular System	Muscles	Know the name and locations of the major muscle groups in the human body			
		Give relevant physical examples of the uses of each major muscle groups			
	Muscle Movement	Understand how muscles work antagonistically, and use relevant sporting examples			
1.3 Movement Analysis	Levers	Know the three classes of levers and their uses in physical activity and sport			
		Know the definition of mechanical advantage			
	Planes and Axes	Know the locations of the planes of movement in the body, and their application			
		Know the location of the axes of rotation in the body, and their application			



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1.4 The Cardiovascular and Respiratory Systems	Cardio- vascular System	Know the double Circulatory System			
		Know the different types of blood vessels, and the role of red blood cells			
		Understand the pathway of blood through the body			
		Know the definitions of heart rate, stroke volume and cardiac output			
	Respiratory System	Understand the pathway of air through the respiratory system			
		Know the role of respiratory muscles in breathing			
		Know the definitions of breathing rate, tidal volume and minute ventilation			
		Understand the role of the alveoli in gaseous exchange			
	Aerobic and Anaerobic Exercise	Know the definitions of aerobic and anaerobic exercise			
		Be able to apply practical examples of aerobic and anaerobic activities, relating to intensity and duration			
1.5 The Effects of Exercise	Short-Term	Understand the short-term effects of exercise			
		Be able to apply the effects to examples from physical activity/sport			
		Be able to collect and use data relating to short term-effects of exercise			
	Long-Term	Understand the long-term effects of exercise			
		Be able to apply the effects to examples from physical activity/sport			
		Be able to collect and use data relating to long-term effects of exercise			