

PHYSICAL EDUCATION DEPARTMENT

Year Group	7	Term	Autumn
GCSE Topic	Effects of exercise on the body systems		

Key words	Heart Rate, Stroke Volume, rest and recovery. Muscle fatigue, Lactic Acid, Anaerobic
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Topic	Key areas of knowledge relating to the effects of physical activity of;	Examples of the knowledge that pupils need to be able to recall
Short term effects	Changes to: 1. Depth of breathing 2. Rate of breathing	<ol style="list-style-type: none"> 1. Depth and rate of breathing increases with exercise 2. To increase intake of oxygen/removal of carbon dioxide 3. Supply working muscles with increased amounts of oxygen to sustain activity
	Changes to 1. Heart Rate 2. Stroke Volume	<ol style="list-style-type: none"> 1. Heart rate increases in line with increase in exercise 2. Amount of blood pumped out of the heart per beat increases to deliver more oxygen
	Increase of 1. Lactate accumulation 2. Muscle fatigue	<ol style="list-style-type: none"> 1. Intense (anaerobic) exercise causes Lactic acid to be produced in the blood and muscles more quickly 2. Caused by a build-up of lactic acid after intense exercise reducing muscle function