Key	
	GCSE
	Advanced
	Secure
	Developing

AO3- Analyse and evaluate

		Examples
Isometric	When the muscle contracts but does not change in length	e.g. Handstand, a gymnast holding the crucifix
Isotonic contraction	Concentric contraction - shortening of the muscle	e.g. execution phase of a chest pass (extension at the elbow)
	Eccentric contraction - lengthening of the muscle	e.g. downwards phase of a squat during the preparation phase of a basketball set shot (flexion at the knees)
SPORT	Specificity- Making training specific to the sport being played	• movements used • muscles used • energy system(s) used
	Progressive Overload- Gradual increase of the amount of overload so that fitness gains occur, but without potential for injury.	Frequency – how often you train e.g. training twice a week and increasing this to three times a week
		Intensity – how hard you train e.g. speed, level, intensity or weight e.g. from 20 reps to 22 reps
		Time – the length of the training session e.g. training for 45mins per session to 50mins.
		type – the specific method, e.g. continuous training. Refer to year 8 knowledge Organiser
	Reversibility -Losing fitness levels when you stop exercising. This could be caused by gaps in training or due to an injury	To avoid- use the SAFER principles - Stretch before training, appropriate intensity, correct footwear and clothing and correct rest and recovery.
	Tedium - Boredom that can occur from training the same way every time.	Variety is needed: changing the exercises, method of training or listening to music.
Aerobic	Summarised as: glucose + oxygen → energy + carbon dioxide + water.	When exercise is low to moderate intensity, the heart can supply all the oxygen that the working muscles need. Sports: long distance runners,
Anaerobic	Summarised as: glucose → energy + lactic acid	When exercise duration is short and at high intensity, the heart and lungs cannot supply blood and oxygen to muscles as fast as the respiring cells need them. Sports: sprinters, shotput, long jumpers etc.
Aerobic training zone	The aerobic training zone allows the aerobic system to be trained. 1. Calculate maximum heart rate (220 bpm) minus age: 220-age 2. Work at 60-80% of maximum heart rate.	Types of training: Continuous, long interval
anaerobic training zone	The anaerobic training zone- 80-90% of Maximum heart rate.	Types of Training: Short interval, plyometric

Short term-effects of exercise

- Increases heart rate
- Increases tidal volume

- Increases stroke volume (SV)
- Increase cardiac output
- Increases Temperature: vasodilation

Long term-effects of exercise

- Decreases fat stores
- Improves components of fitness e.g. flexibility, strength, muscular endurance.

- Lower resting HR 60> bradycardia
- Increased cardiac muscle (SV)-hypertrophy