Year 11	Autumn Term
Subject BTEC Sport	Topic Component 3

	Knowledge	Answer
1	What types of activities require good levels of aerobic endurance and muscular endurance?	Events/sports lasting more 30 minutes
2	What types of sports require good levels of muscular strength?	Activities requiring force, e.g. throwing event
3	What types of activities require good levels of speed?	Activities requiring fast movement, e.g. sprinting
4	What does the FITT principle stand for?	Frequency – the number of training sessions completed over a period of time, usually per week. Intensity – how hard an individual will train. Time – how long an individual will train for. Type – how an individual will train by selecting a training method to improve a specific component of fitness.
5	Define progressive overload.	To progress, training needs to be demanding enough to cause the body to adapt, improving performance
6	Define reversibility.	If training stops, or the intensity of training is lowered, fitness gains from training are lost
7	Define specificity	Training should meet the needs of the sport, or physical/skill-related fitness goals to be developed.
8	How do you calculate maximum heart rate?	220 – age.
9	What is the aerobic training zone?	60 – 85%
10	What is the relationship between RPE and heart rate?	RPE x 10 = Heart rate.
11	What are the fitness tests for aerobic endurance?	Multi-stage fitness test, also known as the bleep test (20 metre distance), Yo-Yo test,

		Harvard step test, 12-minute Cooper run or swim
12	What are the fitness tests for muscular endurance?	One-minute press-up, one-minute sit-up, timed plank test.
13	What are the fitness tests for flexibility?	Sit and reach test, calf muscle flexibility test, shoulder flexibility test
14	What are the fitness tests for speed?	30 metre sprint test, 30 metre flying sprint.
15	What are the fitness tests for muscular strength?	Grip dynamometer, 1 Rep Max
16	What are the tests for agility?	Illinois agility run test, T Test
17	What are the tests for balance?	Stork stand test, Y balance test.
18	What training methods are used to help improve aerobic endurance?	Continuous training – steady pace and moderate intensity for a minimum period of 30 minutes. Fartlek training – the intensity of training is varied by running at different speeds and/or over different terrain. Interval training – work period followed by a rest or recovery period. Circuit training – use of several stations/exercises completed in succession with minimal rest periods in between to develop aerobic endurance
19	What training methods are used to help improve aerobic flexibility?	Static active – the performer applies internal force to stretch and lengthen the muscle. Static passive – requires the help of another person or an object, e.g. a wall to apply external force causing the muscle to stretch. Proprioceptive Neuromuscular Facilitation (PNF) technique – the technique involves the use of a partner or immovable object, isometric muscle contractions to inhibit the stretch reflex
20	What training methods are used to help improve muscular endurance?	Free weights and fixed resistance machines – high repetitions and low load. Circuit training – using body resistance exercises or weights with low loads and high repetitions
21	What training methods are used to help improve muscular strength?	Free weights and fixed resistance machines – high loads and low repetitions

22	What training methods are used to help improve speed?	Acceleration sprints – pace is gradually increased from a standing or rolling start to jogging, then to striding, and then to a maximal sprint Interval training – work period followed by a rest or recovery period. For speed short, high intensity work periods, increasing the number of rest periods and increasing work intensity (compared to aerobic endurance training. Resistance drills – hill runs, parachutes, sleds, bungee ropes, resistance bands
23	Describe 3 long term effects of aerobic endurance training on the body systems.	Adaptations to the cardiovascular and respiratory systems, cardiac hypertrophy, decreased resting heart rate, increased strength of respiratory muscles, capillarisation around alveoli.
24	Describe 3 long term effects of speed training on the body systems.	Adaptations to the muscular system, increased tolerance to lactic acid
25	Describe 3 long term effects of flexibility training on the body systems.	Adaptations to the muscular and skeletal systems, increased range of movement permitted at a joint, increased flexibility of ligament and tendons, increased muscle length.
26	Describe 3 long term effects of muscular endurance training on the body systems	Adaptations to the muscular system, capillarisation around muscle tissues, increased muscle tone.
27	Describe 3 long term effects of muscular strength and power training on the body systems.	Adaptations to the muscular and skeletal systems, muscle hypertrophy, increased tendon and ligament strength, increased bone density
28	Define ‘aims’ and ‘objectives’ of a personal training programme.	Aims – details of what they would like to achieve for the selected sport. Objectives – how they intend to meet their aims using an appropriate component of fitness and method of training.
29	What is a PAR-Q?	Physical Activity Readiness Questionnaire.
30	What is intrinsic motivation?	Behaviour that is driven by internal rewards such as enjoyment or a sense of satisfaction.

31	What is extrinsic motivation?	Behaviour that is driven by external rewards, such as trophies or money
32	What does ‘SMARTER’ goals stand for?	Specific, measurable, achievable, realistic, time-related, exciting, recorded.
33	Define short-term goals	Set over a short period of time, between one day and one month
34	Define long-term goals.	What a participant wants to achieve in a number of months/years, and the best way of doing this
35	Describe two influence of goal setting on motivation.	Provides direction for behaviour. Maintains focus on the task in hand.
36	Describe four benefits of motivation on a sports performer.	Increase participation, maintain training and intensity, increased fitness improved performance