Principles of training

Principles of training				
Describe each principle, giving sporting examples of each.				
Explain how each principle can affect a performer.				

Specificity	Training must be suited to the particular activity or sport.	E.g. a goalkeeper would need to train differently from a striker.
Overload	Making the body work harder than normal in order to improve it. FREQUENCY- increasing the number of training sessions per week, INTENDITY- making the training session harder. TIME- making the training sessions longer.	For example training 4 times in a week instead of 3 to push the body a little harder.
Progression	Training must be increased gradually as the body adjusts to the increased demands being made on it.	For example training once a week, then twice, then three times.
Reversibility	Stopping or decreasing training will lose the effects that were gained.	
Tedium	Training can get boring- so a variety of training methods should be used to prevent this.	Continuous training one session, interval the next, circuits the next.

Activities:

Plan a 6 week training plan for an athlete, showing all of the principles of training.

Tips:

- Remember the acronym SPORT
- All of these can be applied to all training and sports
- Overload is a good thing- it does not mean working the body too hard.

Exam Questions

Identify the principles of training (5 marks)

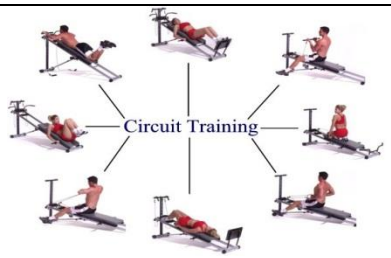
Plan a training program for a footballer, explaining how you could use each principle of training (8 marks)

Explain how David could use interval training, in your answer refer to the principle of overload (8 marks)

Training methods

Training methods				
Describe each training method, giving sporting examples of each.				
Describe the advantages and disadvantages of each training method.				
Apply each training method to the principles of training.				

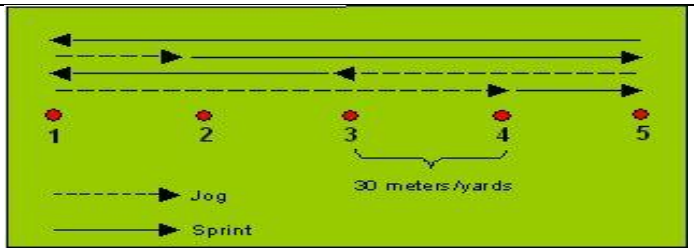
Circuit training- Training at a variety of stations.

ADVANTAGES	**DISADVANTAGES**
Easy to set up and is flexible	Can require lots of equipment depending on the type of circuit.
Can select activities **specific** for your sport	Have to keep checking a stopwatch if you have no training partner.
Adaptable to team games and individual fitness levels	Can be difficult to maintain work rate.
Can develop both fitness and skills	
Allows a rest period in between stations for recovery. (Intervals)	
Develops both aerobic and anaerobic systems	
Easy to apply Progressive Overload and measure improvement.	

Continuous training- Any training that keeps the heart rate high over a sustained period of time.

ADVANTAGES	**DISADVANTAGES**
You can work on your own or in a group.	Can become boring and requires motivation to continue.
Improves Aerobic fitness.	Time consuming.
Can take place in a variety of venues.	Does not develop other components of fitness – e.g. strength, agility.
It can be adapted to suit your individual needs	
Very cheap! Minimal equipment.	
Easy to monitor and apply Progressive Overload.	

Interval training- Training with periods of work ad rest.

ADVANTAGES	DISADVANTAGES
Takes place over short periods of time.	Can become repetitive and requires motivation to continue.
Includes rest which allows recovery.	Difficult to identify how hard an individual is working.
Includes repetitions which raises the HR to near maximal	Can be difficult to maintain work rate.
Develops aerobic and anaerobic systems.	
Can develop other areas of fitness and skill – agility, speed etc.	
Allows for monitoring and evaluating of HR.	

Fartlek Training- training at a variety of intensities.

ADVANTAGES	DISADVANTAGES
Takes place over short periods of time.	Can become repetitive and requires motivation to continue.
Includes active rest which allows recovery.	Difficult to identify how hard an individual is working.
Includes repetitions which raises the HR to near Maximal.	Can be difficult to maintain work rate
Develops aerobic and anaerobic systems.	**FARTLEK AND INTERVAL TRAINING ARE VERY SIMILAR…FARTLEK TRAINING HOWEVER CAN TAKE PLACE OVER DIFFERENT TERRAINS AND CAN INCLUDE HILLS AND THE REST SHOULD BE ACTIVE.**
Can develop other areas of fitness and skill – agility, speed etc.	
Adaptable to team games and individual fitness levels	
Can be done almost anywhere on any terrain.	

Weight training- training using weight equipment.

ADVANTAGES	**DISADVANTAGES**
Can improve Muscular Strength, Muscular Endurance and Power (Strength x Speed).	Requires specialist equipment, which can be expensive.
Increase Muscle size or bulk.	Requires knowledge of correct techniques to gain benefits and avoid injury.
Improve muscle tone.	
Assist recovery after injury, rehabilitation.	
Can focus on specific areas/muscles in the body.	
Large variety of exercises.	
Easy to monitor and apply Progressive Overload.	

Activities:

- Complete a table which has each training method, and an advantage and disadvantage in.
- Complete a table with the method and a definition – create a card sort.
- Draw pictures represent each training method- play Pictionary with a friend.
- Create a brainstorm with 'training methods' in the middle, have each one coming off, and include a definition, advantages, disadvantages and examples.

Tips;

- Focus on remembering one or two advantages and disadvantages of each training method.
- You need to learn the definitions by heart.
- You need to be able to apply each of these to the principles of training (SPORT)

Exam Questions:

In a weight training session the number of times that you lift the weight is known as:

- Sets
- Reps
- Numbers
- Lifts

Describe a training method Rachel could use for swimming, and explain in detail how she could also use the principle of overload (8 marks)