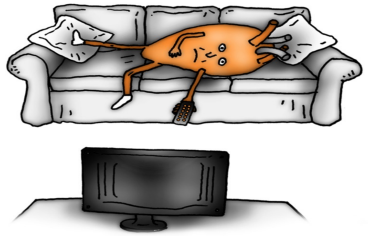
Health and Wellbeing



What is health?

This is when a person is free from illness and disease. Exercising helps a person to be healthy as it makes our bones, ligaments, muscles and tendons stronger and therefore have a lower chance of getting injured. Illness can be prevented as blood cell production increases and therefore our bodies have a better chance to fight of disease using white blood cells.

Why do we exercise?

There are lots of benefits to exercising; it helps us physically to become fitter and more healthy. It can also help us to have more social opportunities and also be better at dealing with emotional situations.

What is well-being?

This is the state of being comfortable, content, healthy and happy.
Exercise releases endorphins from the brain, which help to improve sleep patterns, energy levels and mood - these all have a positive effect on a person's wellbeing.

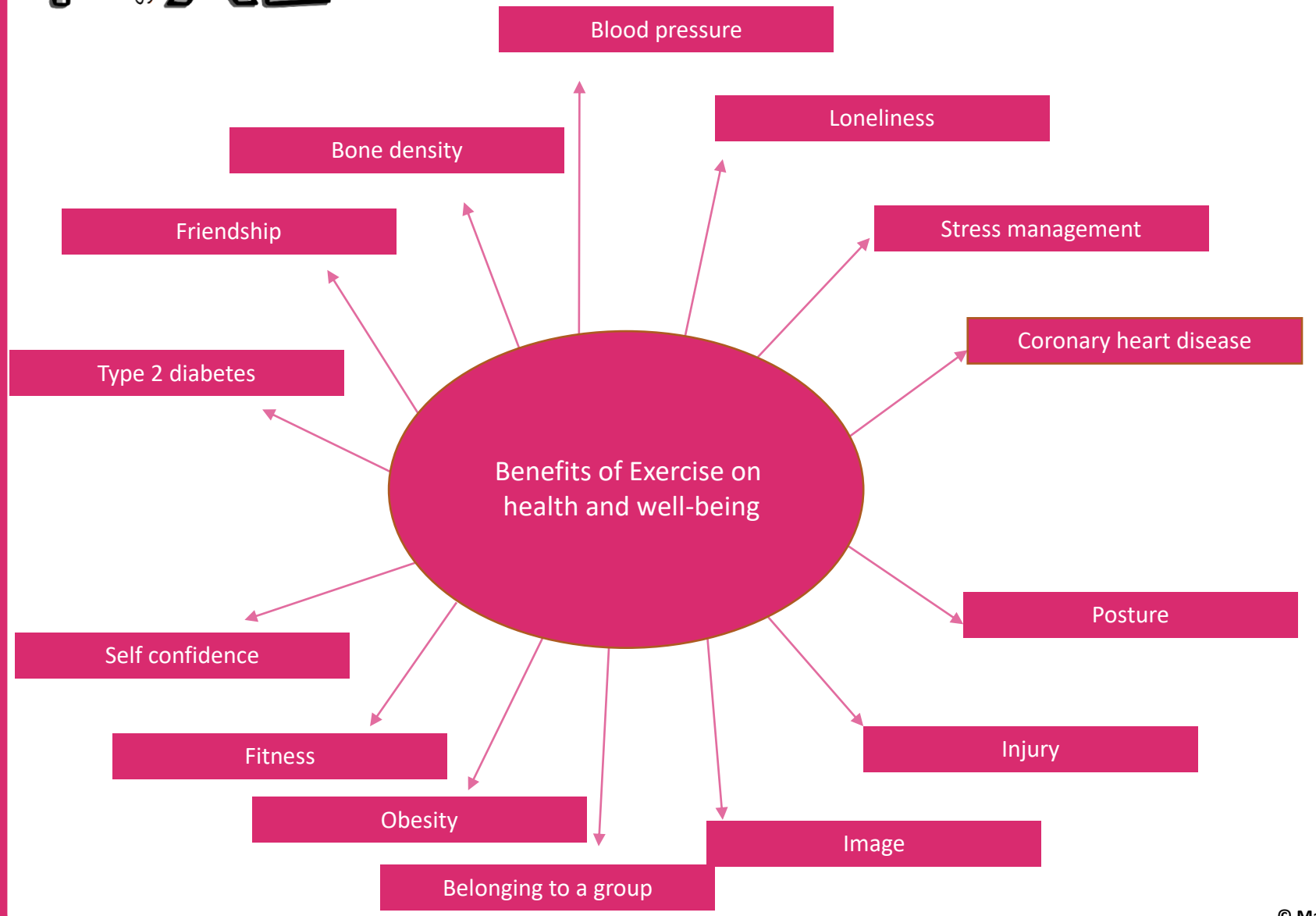
What is a sedentary lifestyle?

This is a type of lifestyle with little or no physical activity. This lifestyle involves lots of sitting around, playing on games and mobile phones.
Changes in work due to increased technologies have led to some jobs also causing more sedentary lifestyles.

Task

Write a newspaper article that outlines the benefits of sport and physical activity on a person's health and well-being.
Make sure you have a catchy headline to draw the reader's attention.
Use the internet to find some good facts and figures to support your writing.

PE KS3 Health and Well-being



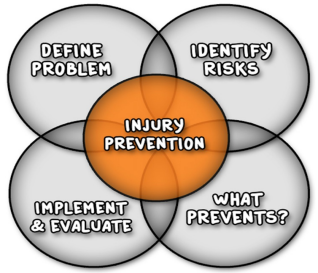
Task

Separate all the key terms into three categories; physical, emotional and social.
Put the terms into a table explaining how exercise will help to benefit the factor.
Describe what would happen to each factor if a person did not exercise.

Task

Think of 10 statements about a person's thoughts and feelings; for example, '*I have been feeling relaxed*'.
Rate yourself on a scale of 1 to 5 on how you have been feeling in the past 2 weeks (1 being very positive) on the statements you have written.
What can you do to change the negatives to a positive?

Injury in Sport



Types of Injury

During sports, lots of injuries can occur due to many different factors. Fractures and dislocations occur due to impact upon the bone or joint, causing a deformity. Sprains and strains are when ligaments, tendons and muscles tear, causing severe pain.
Head injuries such as concussion occur within sport due to collisions within contact sports or bad falls. Although not as common, spinal injuries can also happen within sport and can lead to lasting damage to a person's health.

Minimising the risk of injury in sport

When we play sport, there are a lots of ways we can try to prevent injury, although it can never be stopped altogether. Personal protective equipment, such as shin pads, can be worn to reduce the chance of injury. A warm up and cool down prior to exercising will prevent common injuries such as strains.
Making sure people compete at an appropriate level is crucial. In boxing, for instance, they use the weight of the performer to group the competition. Using good techniques for lifting and carrying equipment is essential to reducing the chances of muscle strains and also preventing injury due to equipment being put up incorrectly.

Risk Assessments

This is the technique used to measure the chance of an accident happening, anticipate the consequences and plan actions to prevent it occurring.
The risk assessment looks at health and safety hazards within the situation; the level of risk to participants within the activities; the risks that are involved within the activity and procedures for monitoring and checking the risks.

Task

Pick a sports facility within your school. Design a risk assessment template (use the internet for ideas) and complete the risk assessment for the facility you have chosen.

Task

Write down as many pieces of personal protective equipment from sport you can think of.
Write down as many different ways you can think of how Sport is split into appropriate levels.

PE KS3 *Injury in Sport*

Warm Up

There are 5 stages of a warm up.

1. Pulse raiser, which involves getting the heart rate to increase and prepare for exercise.
2. Mobility exercises to increase the range of movement at the joints.
3. Stretching to prevent injury within the ligaments, tendons and muscles.
4. Dynamic movements to prepare for the match play.
5. Skill rehearsal involving movement patterns that could occur in the game.

When exercising, it is also really important to complete a cool down.

Task

Design a warm up you could complete before competing in a basketball game.
How could you make it specific to basketball?
What areas of the body are really important to warm up?

Task

Design an instruction sheet to explain how to use D.R.A.B, followed by both the recovery position and CPR.

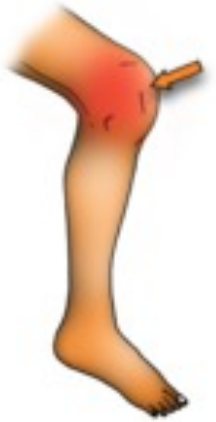
When a person gets injured during sport, it is important that you do not move them until you know how severe the injury is.
A common method of injury treatment is rest, ice, compression and elevation. This can help to reduce swelling and bruising. However, it cannot be used on more serious injuries initially.

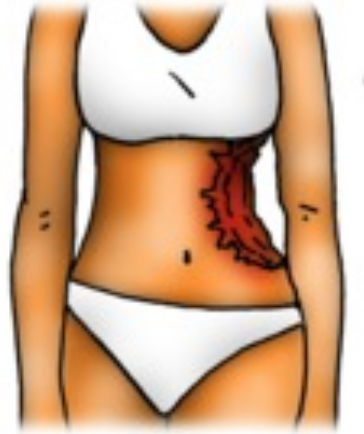
D.R.A.B

When a person becomes unconscious, it is really important that they are treated immediately following D.R.A.B.

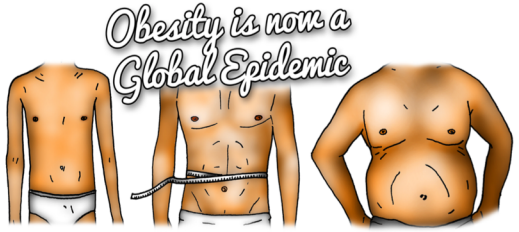
- D stands for danger - check the danger around the casualty and remove anything that can be moved.
- R stands for response - ask them key questions and check to see whether they can hear you.
- A stands for airways - make sure the airways are open and clear from any objects.
- B stands for breathing - check to see whether your casualty is breathing.

If a person is breathing, you would put them in the recovery position. If a person is not breathing, you would perform CPR.





Nutrition



A balanced diet involves taking in the right amount or level of energy that the body needs for completing daily life and exercising.

A balanced diet includes:

- Starchy foods such as bread
- Fruit and vegetables
- Protein rich food such as meat
- Some milk and dairy
- Not too much fat, salt and sugar

Obesity is one of the problems if you do not have a balanced diet. A diet with too much fat can lead to becoming overweight. This can lead to heart problems and diabetes.

Composition of a healthy diet
When eating food, the daily guidelines suggest that 50% of the diet is carbohydrates, 30% of the diet is fats and 20% protein.

When eating food, it is important that you eat enough food to provide the body with energy. Food is energy in to the body and exercise is energy out of the body.

Rehydration during exercise is very important. Water is the best form of hydration before, during and after exercise. Sport specific energy drinks can also be useful.

Task

Design a plate of food which meets the demands of a balanced meal. Take into consideration the percentages of carbohydrates, protein and fat, as well as the different foods required for a balanced diet.

PE KS3 Nutrition

Protein is used by the body for building and repairing body tissues. They also help in the production of haemoglobin. It can also help to increase muscle mass.

Minerals are essential for carrying oxygen around the body and getting healthy teeth and bones. There are some minerals called macro minerals which are needed in large amounts, such as calcium and micro minerals such as iron required in very small amounts.

Carbohydrates are used for energy production within the body. There are two types of carbohydrate - simple sugars and complex starch. They are stored as glycogen in the body.

Task

Keep a food diary for a week.
What can you see from your diet? Does it include all 7 food groups?
What is good about your diet? What could you improve about your diet?

Vitamins are needed in small quantities. They help to prevent disease, support the functioning of our metabolism and are vital in the production of energy.

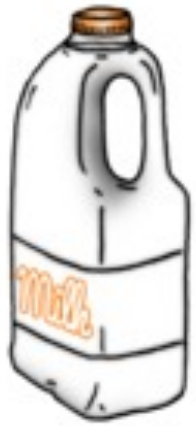
Fats are another good source of energy within the body. They help insulate the body and keep you warm. There are two types of fat - saturated and unsaturated. Fats also help to protect vital organs.

Fibre helps the digestive system work more effectively and reduces cholesterol.

Water is crucial for transportation of nutrients and hydration.

Task

Using the information gathered above, design a leaflet explaining why each food group is important for an athlete. Make sure you include examples of each food group.



Physical Training

Components of Fitness

Muscular endurance, muscular strength, cardiovascular endurance, power, speed, flexibility, agility, balance, reaction time and coordination.

Cardiovascular endurance is the ability to continuously exercise without tiring.
Muscular endurance is the ability for a group of muscles to repeatedly contract or keep going without rest.
Speed is the ability to move the body quickly.
Strength is the amount of force a muscle can exert in one movement.
Power is a combination of strength and speed.
Flexibility is the range of movement available at a joint.
Agility is how quickly you can change direction with control.
Balance is the ability to keep your body mass over a base of support.
Coordination is the ability of repeating a pattern or sequence of movement with fluency.
Reaction time is the time it takes to react and move to a stimulus.

Task

Research fitness tests that test each of the components of fitness. What is the test called? How is the test completed? What is the test's normative data?

Types of Training

Continuous, interval, circuit, weight and plyometric training.

Interval training is when you exercise for a set period of time and then rest for a set period of time. When working, the exercise should be of a high intensity.

Continuous training is completed at a low intensity for between 30 minutes and 2 hours. During continuous training, no rest is taken. It normally involves one activity throughout, such as cycling.

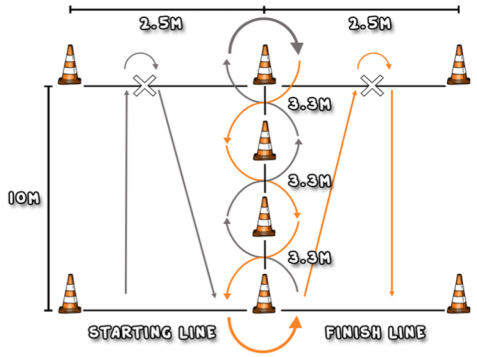
Plyometric training involves rapid and repetitive movements. The training involves skipping, leaping, bounding and jumping.

Weight training is using a resistance to enable the body to work hard. When weight training, you can change the activity, the weight, the repetitions and the amount of sets.

Circuit training is a sequence of different stations (exercises) completed for a set period of time.

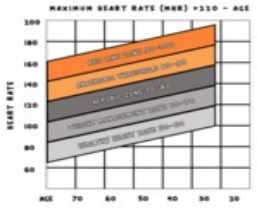
Task

Design a training session for each of the methods of training.



PE KS3 ***Physical Training***

PE KS3 **Physical Training**



Principles of Training

Specificity, progression, overload and reversibility

Frequency, intensity, time and type

Specificity - the activity you complete within a training programme should be relevant to a specific sport or activity.

Progression - this is ensuring that the training gradually becomes more difficult so that you can see improvement.

Overload - ensuring that the body works harder than normal and involves some discomfort to ensure improvement is made.

Reversibility - if training stops then performance can deteriorate and fitness gains will be lost.

Frequency - the amount of times a person trains within a week
Intensity - this is how hard the training is on a scale of low to high.
Time - this is how long one training session lasts for.
Type - this is the method of training used within the programme.

Aerobic training threshold is when a person's heart rate is between 60-80% of their maximum heart rate.
Anaerobic training threshold is when a person's heart rate is above 80% of the maximum heart rate.
This is whenever a person is exercising.

The maximum a person's heart rate can be is 220 bpm. To work out maximum heart rate, it is 220 - age.

Training Thresholds

Maximum heart rate
Aerobic training threshold
Anaerobic Training threshold

Task

- Work out your maximum heart rate.
- Work out your heart rate within the aerobic training threshold.
- Work out your heart rate within the anaerobic training threshold.
- Now pick a famous athlete and work out the three questions again.

Task

- Design a 4 week training programme for a sports person of your choice. Why have you picked specific methods of training? How many times a week will you train?
- Make sure you consider all of the principles of training.