Terminology

We must learn the
Exam boards version.
Word perfect!

AEROBIC

Aerobic ‘with oxygen’. If exercise is not too fast and is steady, the heart can supply all the oxygen the muscles need.

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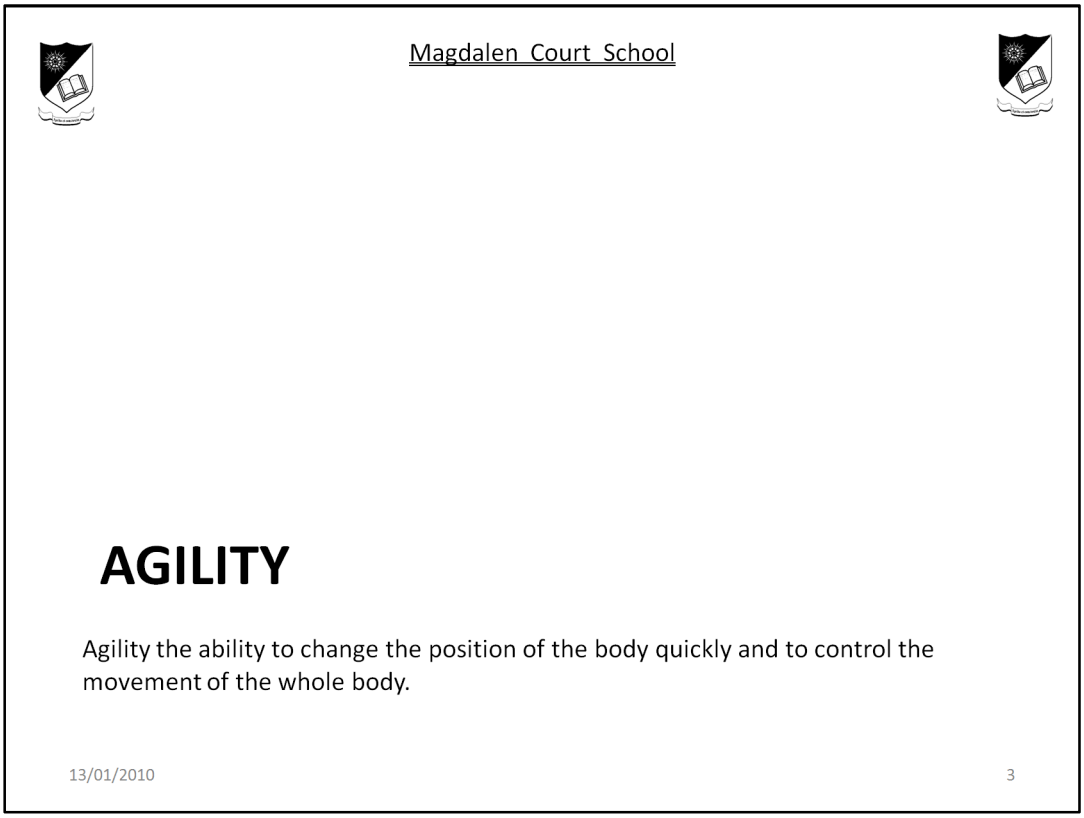
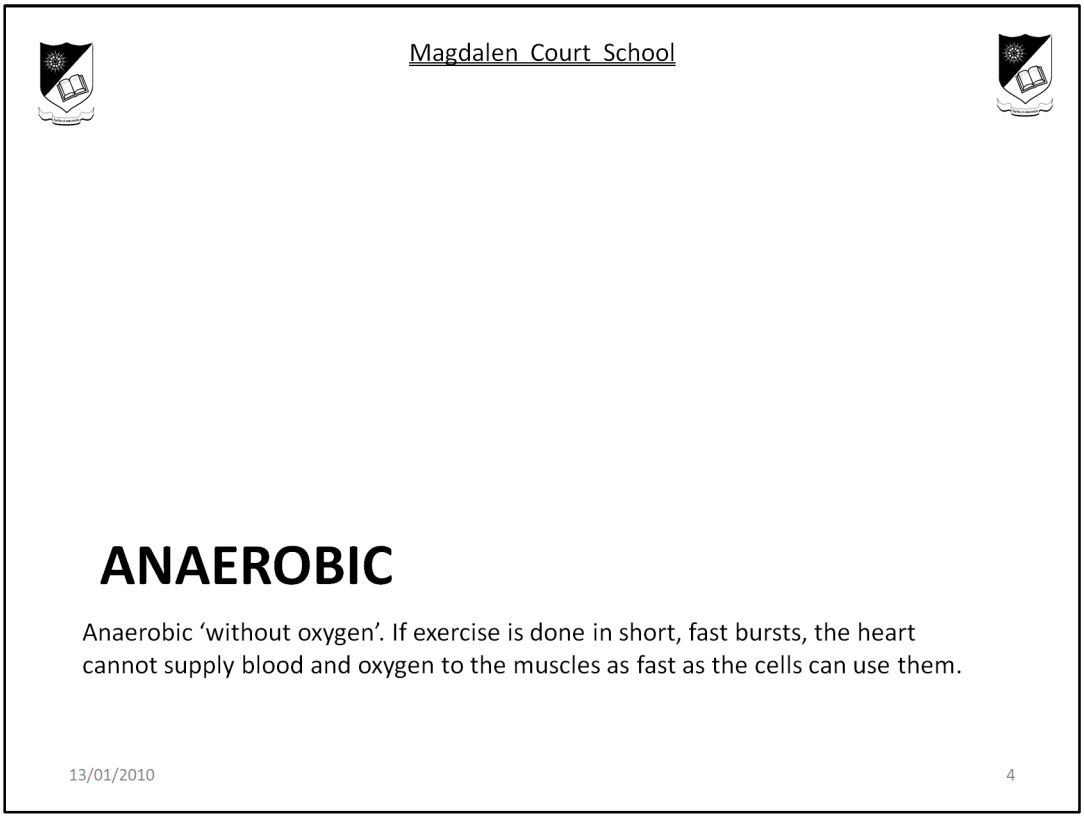
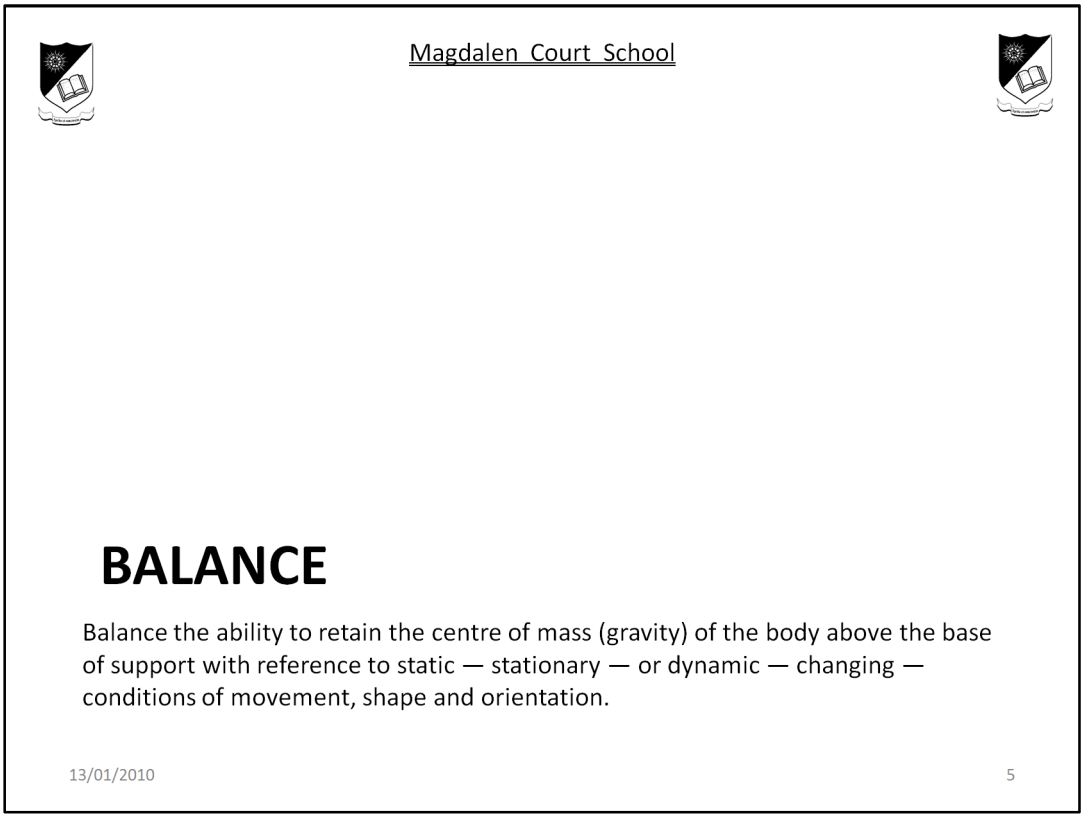


Agility the ability to change the position of the body quickly and to control the movement of the whole body.



Anaerobic 'without oxygen'. If exercise is done in short, fast bursts, the heart cannot supply blood and oxygen to the muscles as fast as the cells can use them.



Balance the ability to retain the centre of mass (gravity) of the body above the base of support with reference to static — stationary — or dynamic — changing — conditions of movement, shape and orientation.

BODY COMPOSITION

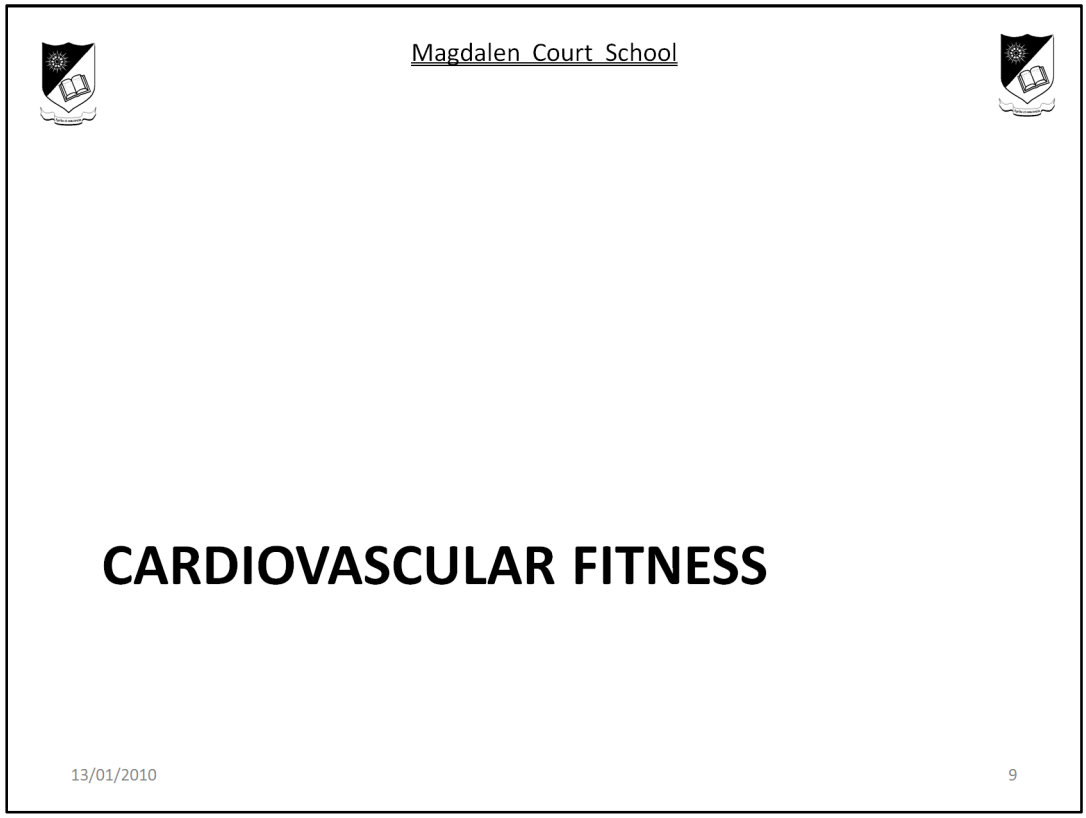
Body composition the percentage of body weight which is fat, muscle and bone.

CARDIAC OUTPUT

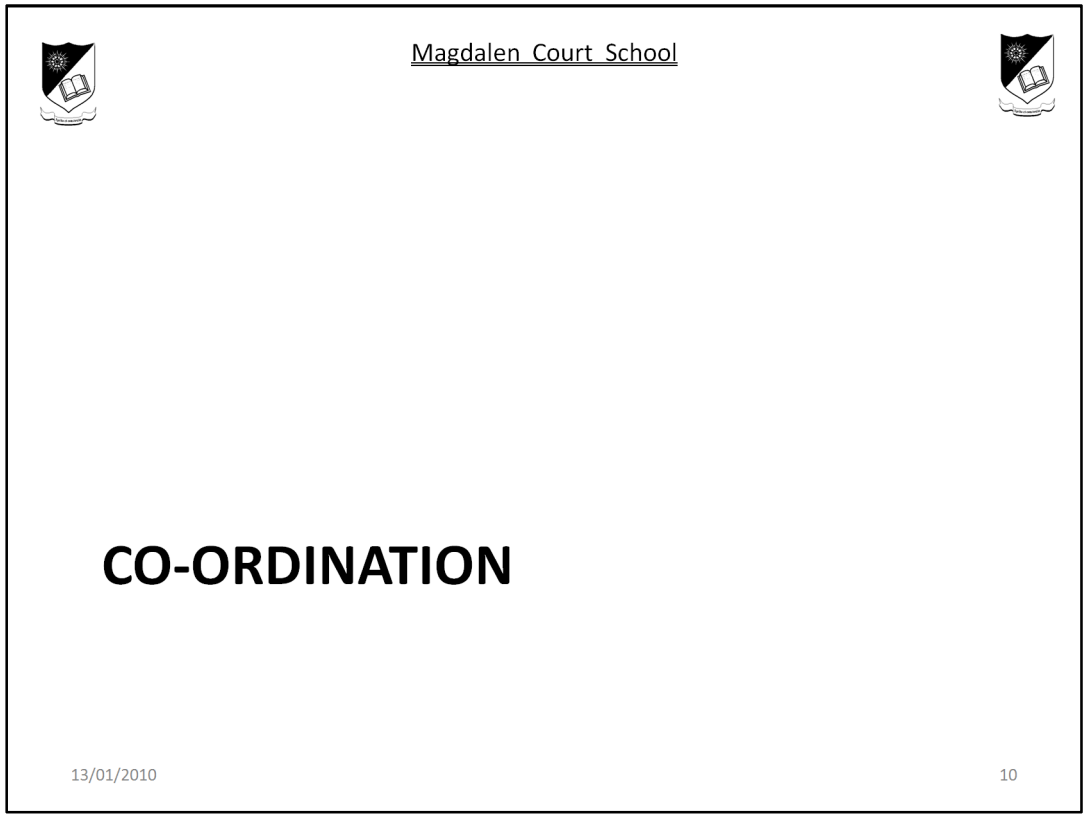
Cardiac output the amount of blood ejected from the heart in one minute.

CARDIOVASCULAR

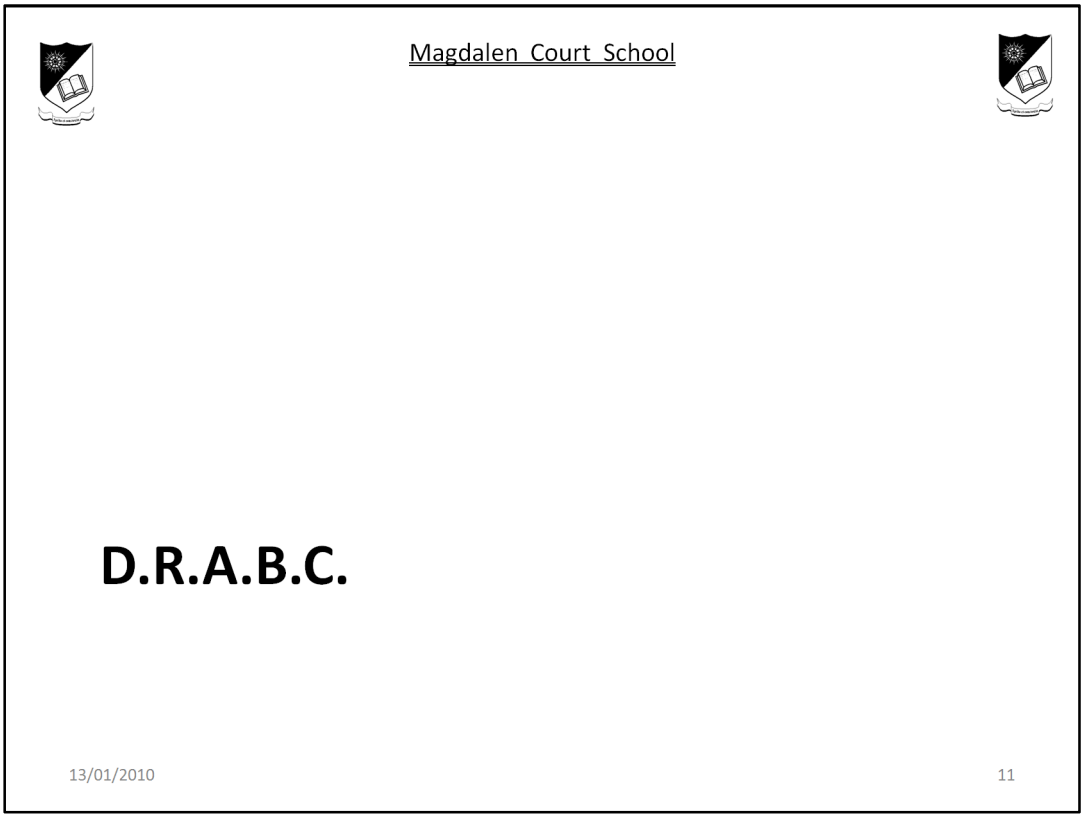
Cardiovascular pertaining to the heart and blood vessels.



Cardiovascular fitness is the ability to exercise the entire body for long periods of



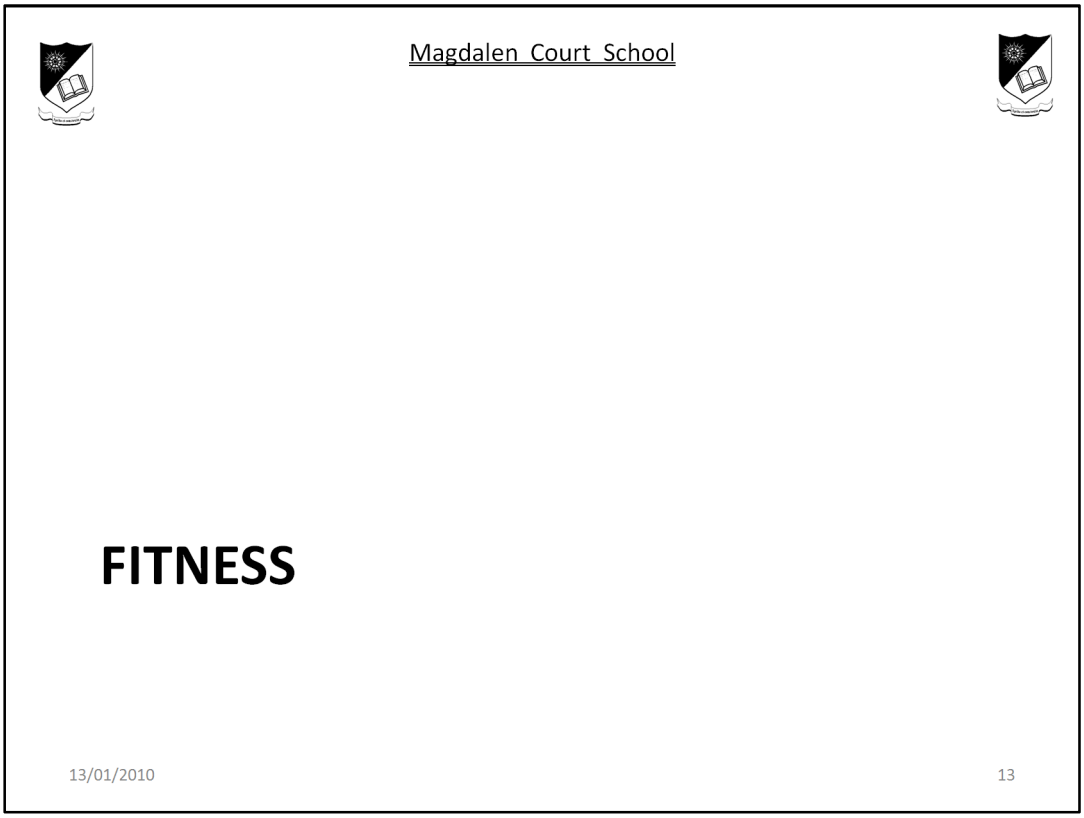
Co-ordination the ability to use two or more body parts together.



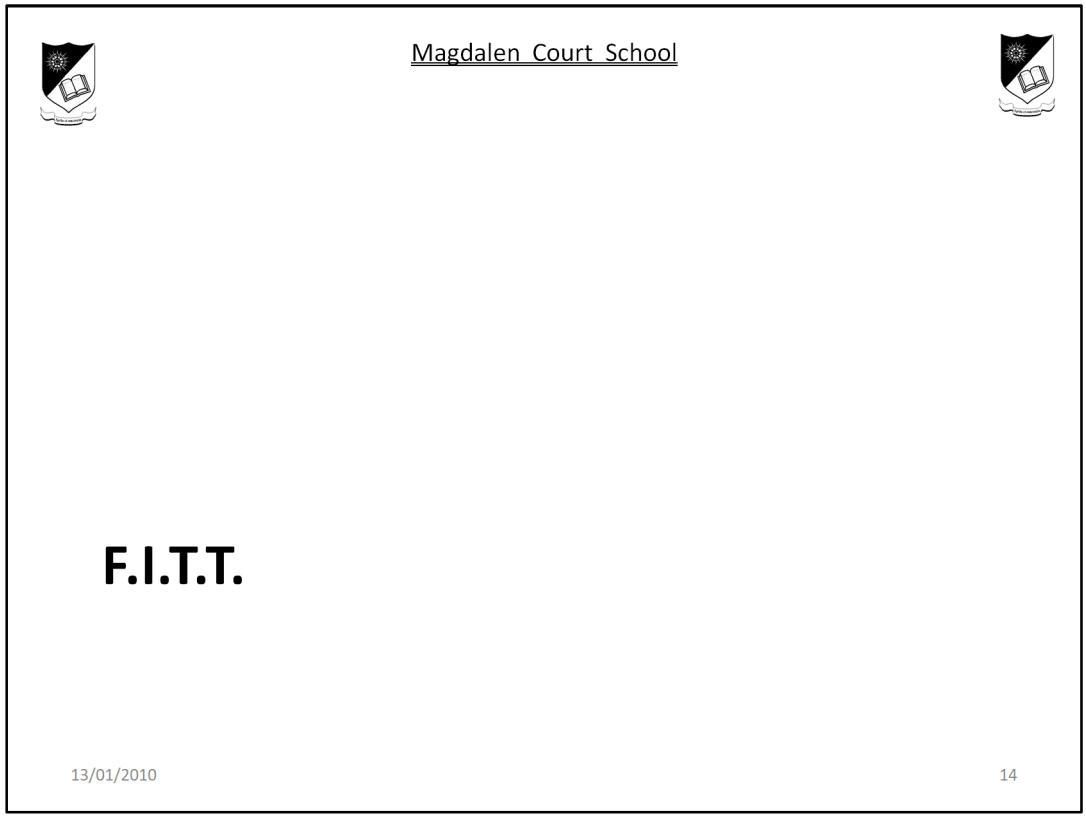
D.R.A.B.C.
Danger (to casualty or first-aider)
Response (different levels of casualty response — alert/unresponsive; presence or absence of (voice/pain)
Airway (is there a blockage of the airway?)
Breathing (listening and feeling if the casualty is breathing)
Circulation (is the blood circulating?)

EXERCISE

Exercise a form of physical activity done primarily to improve one's health and physical fitness.



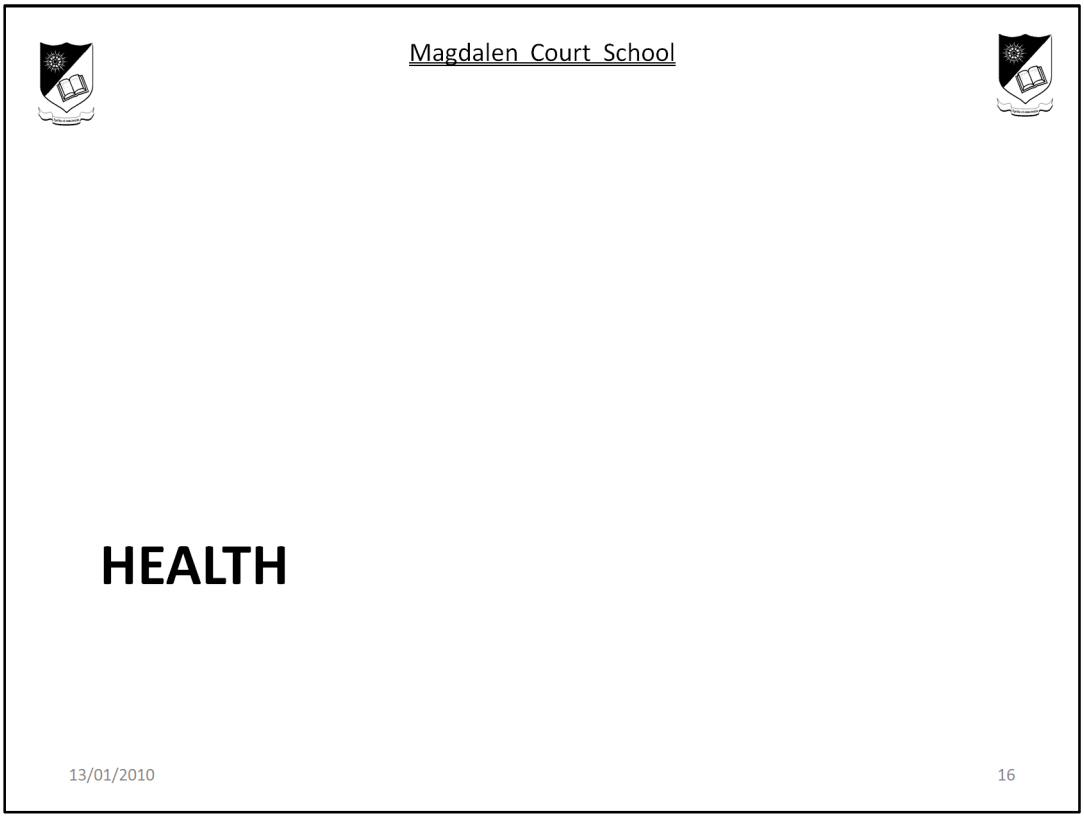
Fitness the ability to meet the demands of the environment.



You can also use the acronym FITT to help you design training programs:
Frequency - How often should you exercise? If you want to stay fit and healthy you should exercise at least twice a week. You also need to make sure if you are training hard, you get enough rest
Intensity - This is how hard you should work. For example, if you want to lose weight you should work at around 75% of your maximum heart rate
Time - How long are your exercise sessions going to be? Aerobic training sessions should last at least 20 minutes. If time is tight, it is better to do three 20 minute sessions a week than one 60 minute session.
Type - What type of training are you going to do? This will depend on what your aims are. Although in most cases try to vary your sessions to keep you interested.

FLEXIBILITY

Flexibility the range of movement possible at a joint.



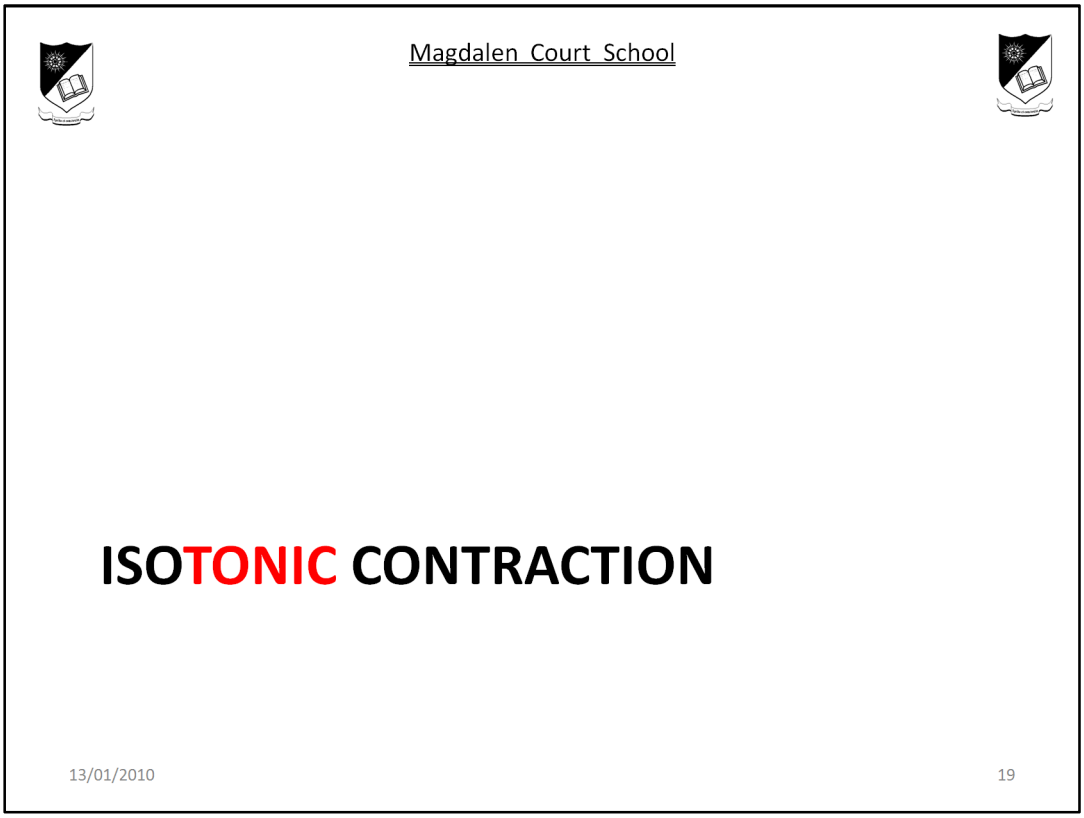
Health a state of complete mental, physical and social well-being, and not merely the absence of disease and infirmity.

HEART RATE

Heart rate the number of times the heart beats each minute.

ISOMETRIC CONTRACTIONS

Isometric contractions; muscle contraction which results in increased tension but the length does not alter, eg, when pressing against a stationary object.



Isotonic contraction muscle contraction that results in limb movement.

JOINT

Joint a place where two or more bones meet.

MUSCLE TONE

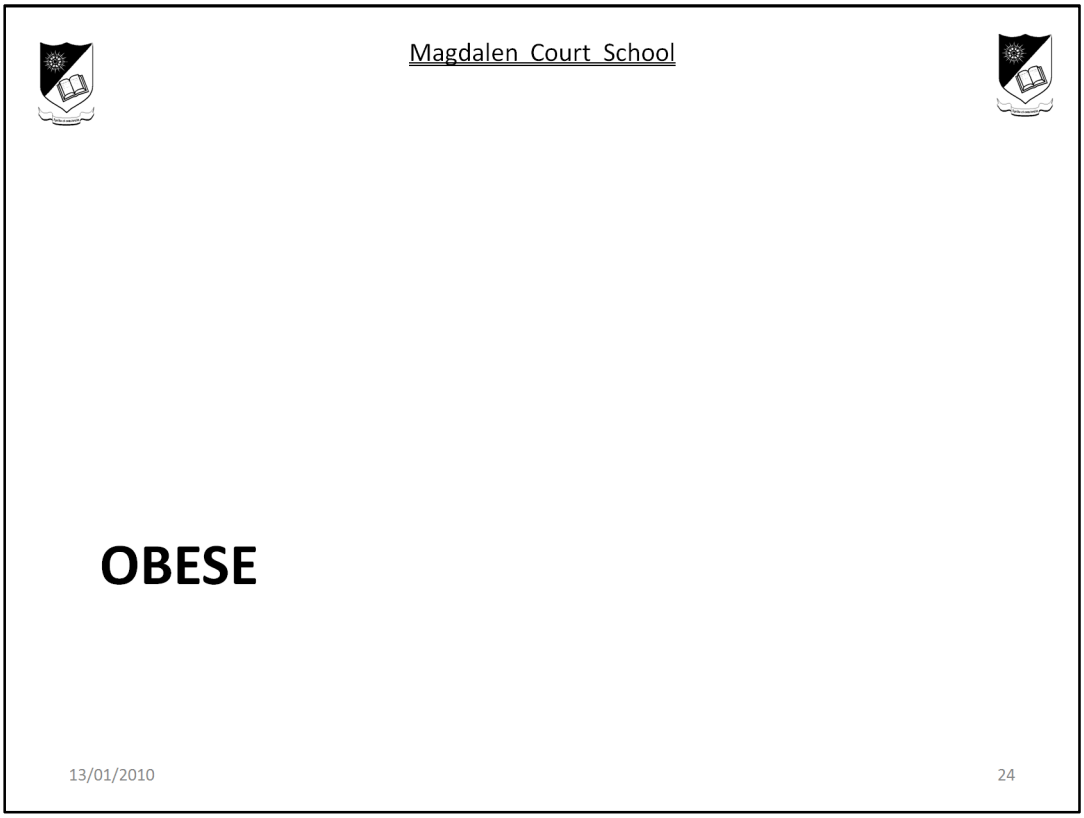
Muscle tone voluntary muscles in a state of very slight tension, ready and waiting to be used.

MUSCULAR ENDURANCE

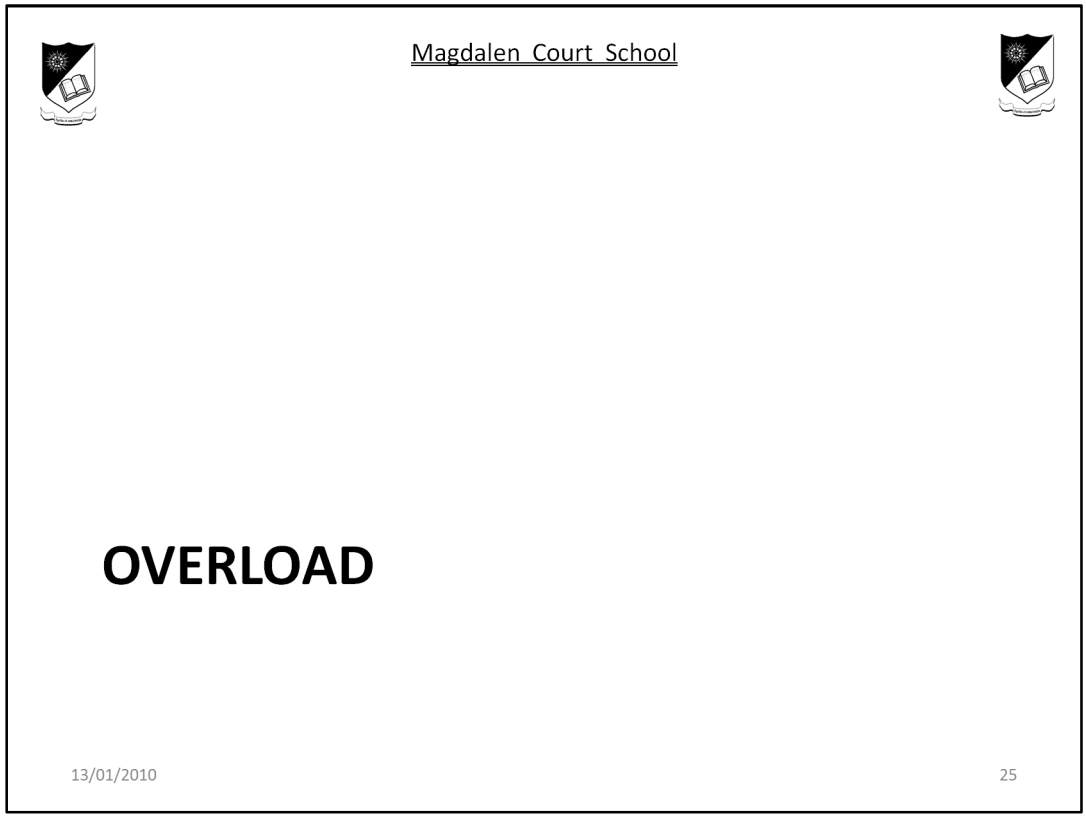
Muscular endurance the ability to use voluntary muscles, many times without getting tired.

MUSCULAR STRENGTH

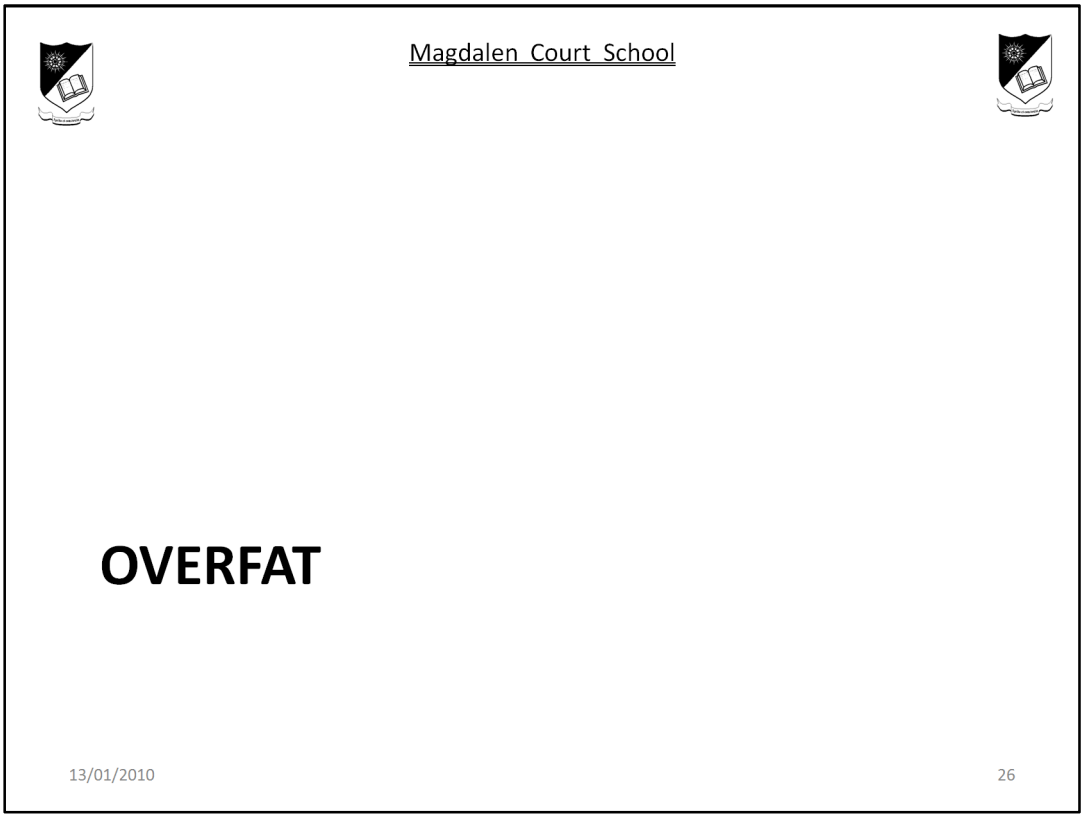
Muscular strength the amount of force a muscle can exert against a resistance.



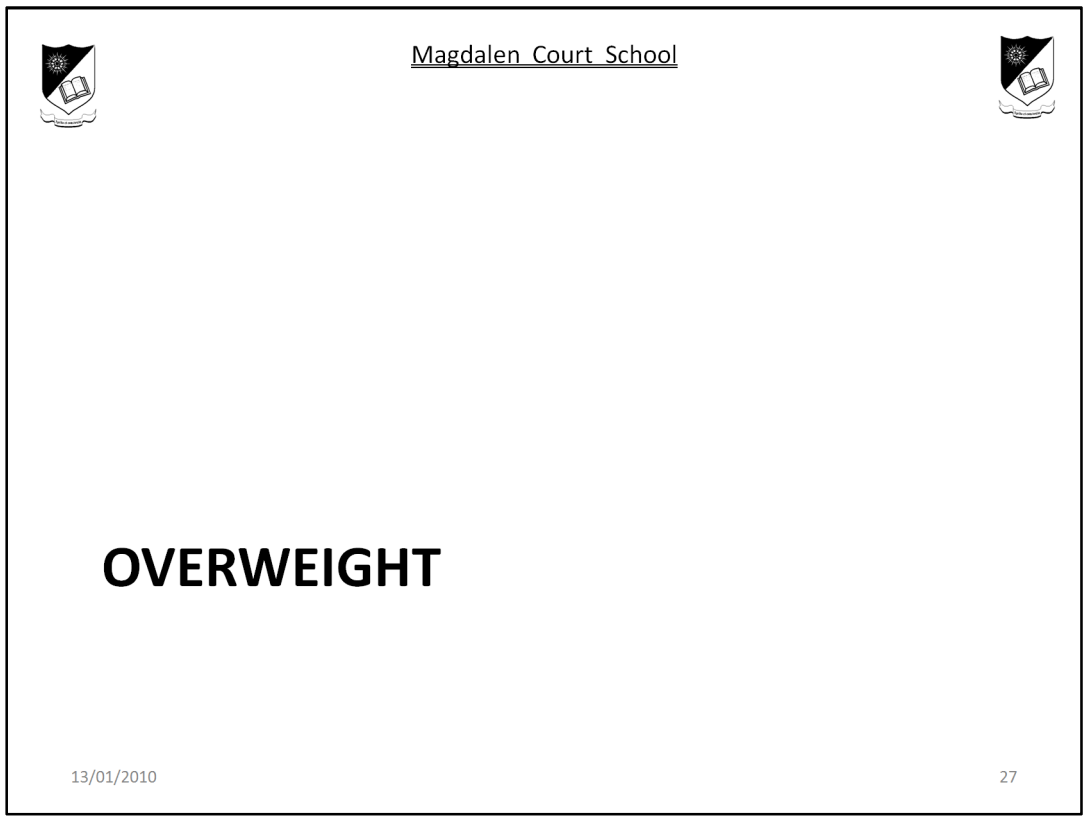
Obese a term used to describe people who are very overfat.



Overload fitness can only be improved through training more than you normally do.



Overfat a way of saying you have more body fat than you should have.



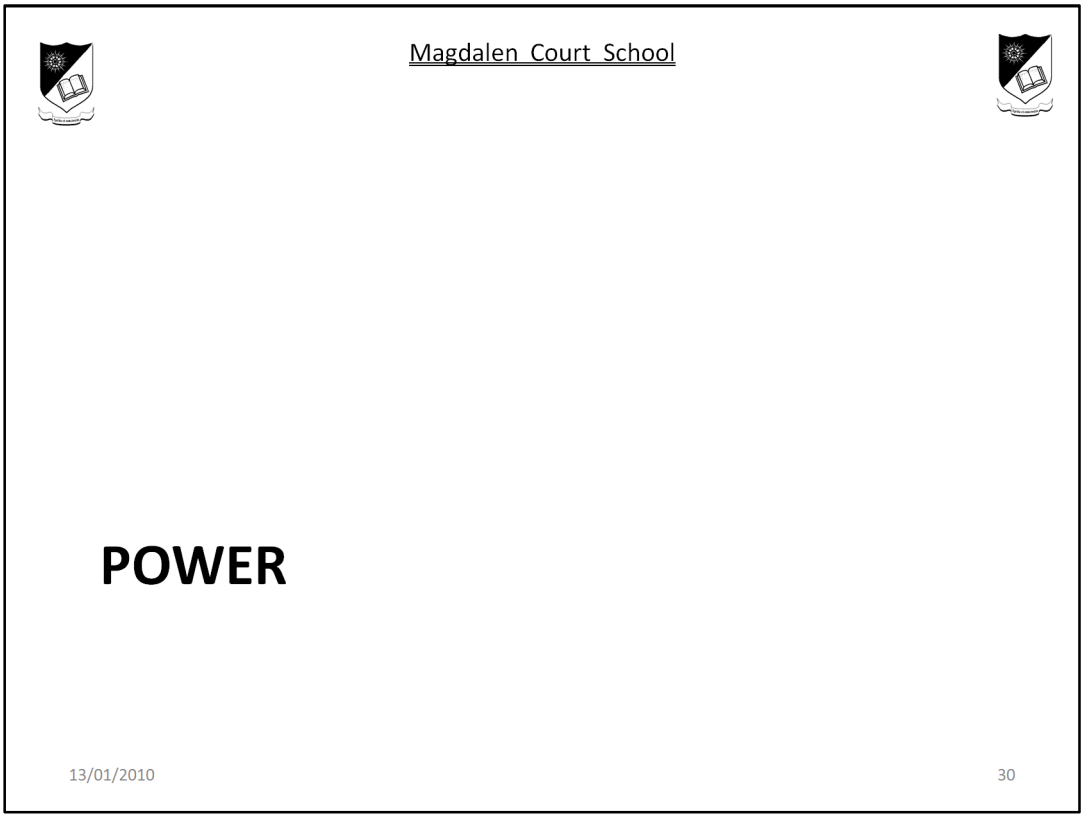
Overweight having weight in excess of normal. Not harmful unless accompanied by overfatness.

OXYGEN DEBT

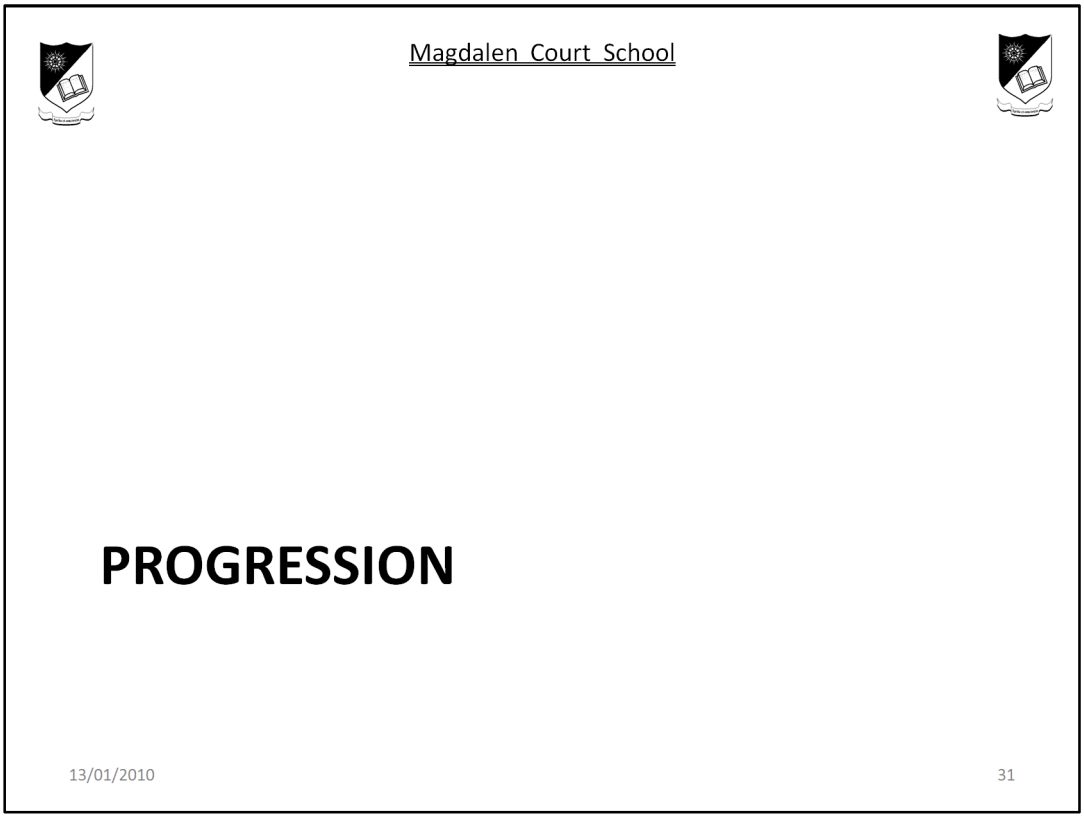
Oxygen debt the amount of oxygen consumed during recovery above that which would have ordinarily been consumed in the same time at rest (this results in a shortfall in the oxygen available).

PERFORMANCE

Performance how well a task is completed.



Power the ability to do strength performances quickly. Power = Strength x Speed.



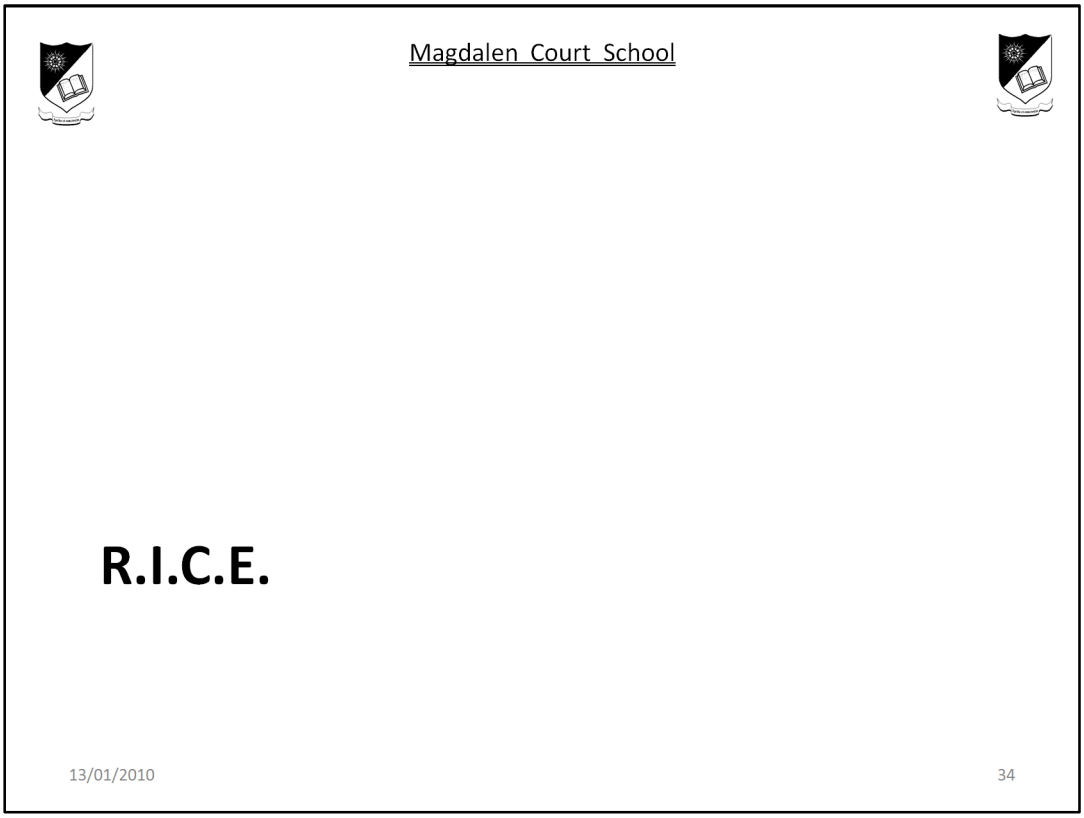
Progression start slowly and gradually increase the amount of exercise you do.

REACTION TIME

Reaction time the time between the presentation of a stimulus and the onset of a movement.

REVERSIBILITY

Reversibility any adaptation that takes place as a consequence of training will be reversed when you stop training.



R.I.C.E.
Rest, Ice, Compression, Elevation.

SPECIFICITY

Specificity you must do specific kinds of activity or exercise to build specific body parts.

SPEED

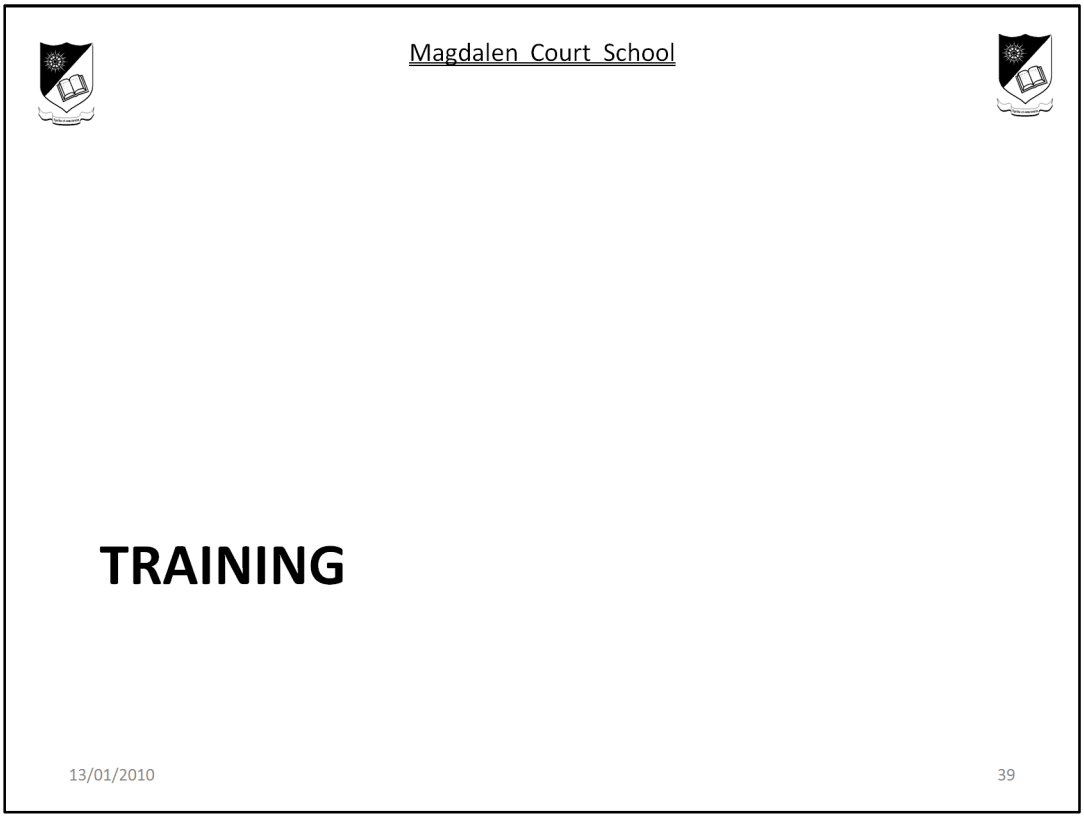
Speed the differential rate at which an individual is able to perform a movement or cover a distance in a period of time.

STROKE VOLUME

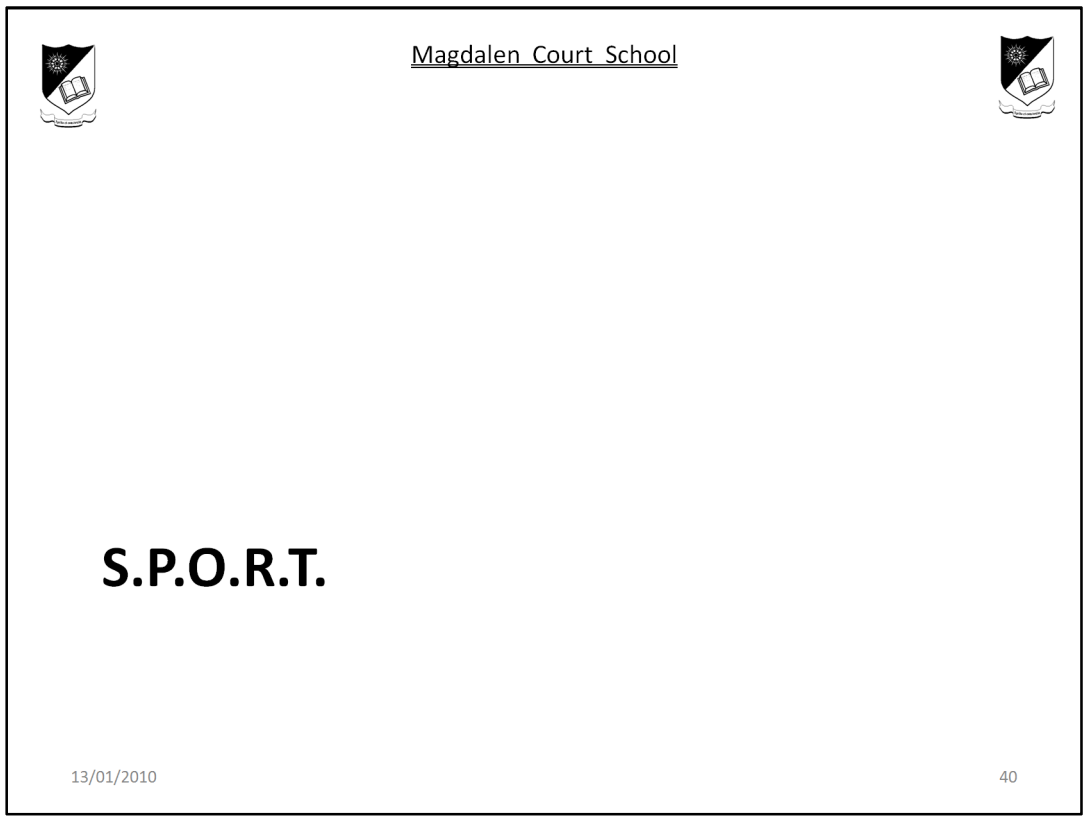
Stroke volume the volume of blood pumped out of the heart by each ventricle during one contraction.

TIDAL VOLUME

Tidal volume the amount of air breathed in or out of the lungs in one breath.



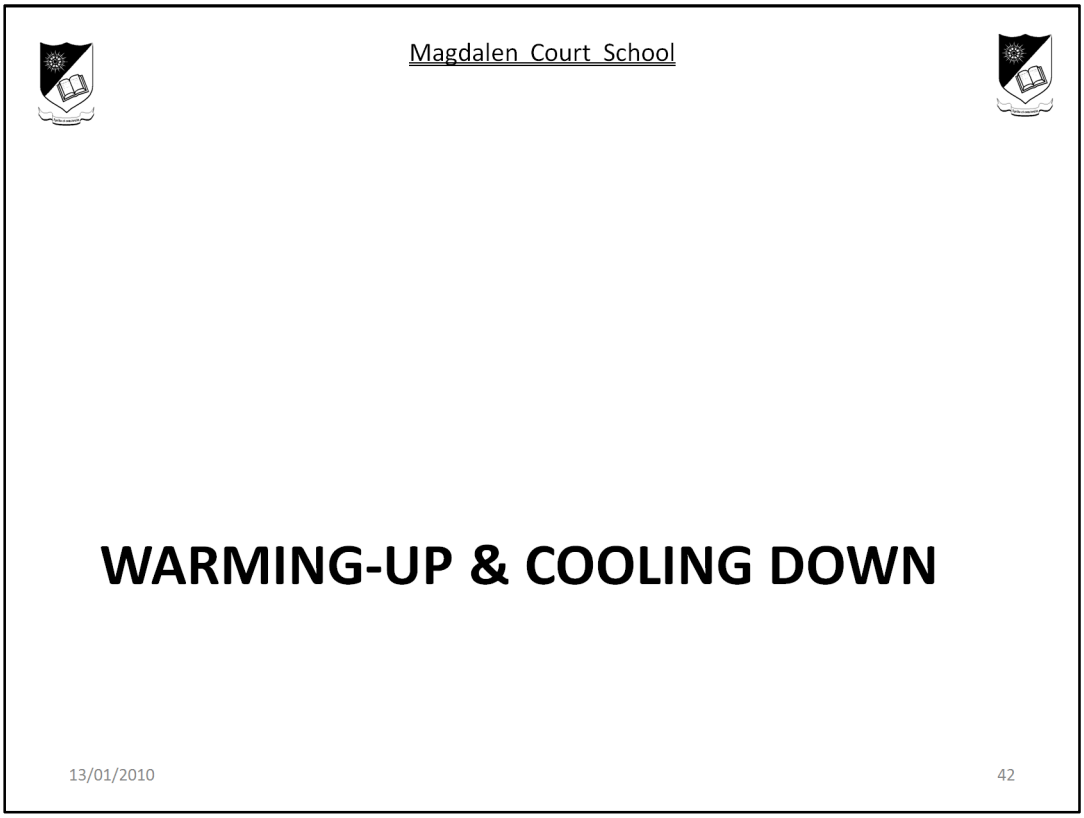
Training a well-planned programme which uses scientific principles to improve performance, skill, game ability and motor and physical fitness.
Refer to S.P.O.R.T.



SPORTSpecificity, Progression, Overload, Reversibility, Tedium
Principles of Training
When we are training the type of exercise that we do must be specific to our sport and we must keep increasing the difficulty to improve:
Specificity
Training must be specific to the sport. For example there's no point in running 1500 meters in training for 100m. Training must also be specific to the athlete, by working on their weaknesses and at their level
Progression
You should gradually increase the amount of training you do. For example when you start you may only train for half an hour twice a week. You should gradually increase this amount in order to progress once your body can cope
Overload
This involves pushing your body harder than normal. In order to do this, you can increase one or a combination of the following:
Frequency - Train more often (i.e. from twice a week to three times a week)
Intensity - Work harder in training (i.e. lift heavier weights)
Duration - Train for longer each session (i.e. running for a further 5 minutes each week)
Reversibility
If you have to stop training because of illness or a holiday, when you return your fitness levels will have dropped. Always start at a slightly lower level than you were at when you stopped. It takes longer to gain fitness than to lose it!
Tedium

VITAL CAPACITY

Vital capacity the maximum amount of air that can be forcibly exhaled after breathing in as much as possible.



The best way of preparing for both a good training session, and competition is by warming-up. This will help you to avoid injury and prepare you physically and mentally for exercise.
Body temperature increases and blood flow to the muscles increases, to get them ready for action. This helps prevent sprains and strains
Warm-ups should stretch the muscles, get the joints moving and increase the range of motion. This will also help avoid injury
Warm-ups help focus the mind on the exercise
Cool downs are often overlooked once you have finished training and after competition because the fun bit is over and you're tired! However a cool down will help your body to return back to normal more quickly and will help reduce any aches and pains the next day!
Cool-downs help reduce the Oxygen debt and clear any lactic acid in the muscles
It stops blood from pooling within the veins when you stop as continued gentle exercise will keep the blood pumping and muscles contracting which squeezes blood back towards the heart