

The PE Classroom

Physical Training

Part 2

Edexcel GCSE PE

Injuries in Sport

The best way to treat all minor injuries is through **RICE**:

Rest The body will have time to fix the injury

Ice Reduces blood flow to the area so less swelling occurs

Compression Decreases swelling

Elevation Gravity assists in sending blood flow away from the injured area

Soft Tissue Injury

Skin Damage



Tennis Elbow



Sprain



Golfer's Elbow



A Physical Activity Readiness Questionnaire (Par-Q) is a set of questions that should be answered before taking part in an exercise programme

Possible Par-Q Questions:

- Do you suffer from Asthma?
- Do you have a bone or joint problem?
- Are you currently taking any medication?
- Do you suffer from high blood pressure?



Preventing Injuries

- Complete a Warm-Up
- Applying Rules
- Checking equipment / facilities
- Apply principles of training
- Protective clothing and equipment



Warm Up

Psychological Benefits

- Heightened arousal
- Mental Rehearsal
- Increases confidence
- Improved focus
- Increase motivation

Stages of a warm up

1 Pulse Raiser

- Light cardiovascular activity



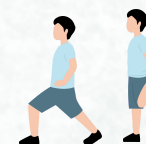
2 Mobility

- Static stretches
- Full range of motion



3 Dynamic Stretching

- Changing speed & direction



4 Skill Rehearsal Phase

- Gradually increasing intensity of action



Cool Down

Lowers the heart rate and body temperature gradually. Promotes safe muscle recovery - includes light jogging and stretching.

Physiological Benefits

- Muscle temperature
- Heart rate
- Flexibility of muscles and joints
- Speed of muscle contractions
- Oxygen flow to muscles

Pliability of ligament and tendons

1.	Maintenance stretches (10-15 secs)
2.	Static stretches (30secs plus)
3.	Proprioceptive Neuromuscular Facilitation (PNF)

PNF is a stretching technique involving muscle contraction and relaxation. It increases range of motion by gradually deepening the stretches.

Performance Enhancing

Drugs

Blood Doping



Increases red blood cell count

EPO

Increases production of red blood cells

Growth Hormones

A peptide hormone that increases muscle development

Beta Blockers

Reduce heart rate and lower blood pressure

Anabolic Steroids

Increases muscle mass

Stimulants

Increase alertness, HR and stimulate the CNS

Diuretics

Increase urine produced to increase weight loss

Narcotic Analgesics

Give relief from injuries by targeting the CNS

