



Factors Affecting Fitness



Starter

- Draw your ideal sports person from your favourite sport
- Put them into their most perfect environment for training
- Give them all that is essential for their training needs



Objectives

- Explain some of the factors that affect fitness
- Understand that some factors can be altered and some are fixed

Age

- **Strength**
 - Maximum Strength around 20
 - 20's and 30's easy to build muscle
 - After 30's protein and muscle mass fall and strength declines
- **Injury and disease**
 - Older = more injury, longer recovery, more disease
- **Flexibility**
 - Most flexible in teens
 - 30+ less flexible
- **Oxygen Capacity**
 - Falls and less taken by muscles
- **Reaction Time**
 - Slower
- **Experience**
 - Vital factor, more as you age

Gender

Men

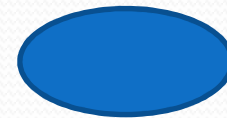
- Up to 50% stronger – testosterone promotes the growth of muscle and bone (Strength)
- Larger hearts and lungs and more blood (CV Endurance)
- Red blood cells contain more haemoglobin (carry O₂) (CV Endurance)
- Larger, heavier and bigger bones (Bone structure)
- Move Faster – more power

Women

- Wider pelvis – less effective transmission of power between trunk and legs (power)
- More flexible than men
- More body fat- extra strain on the heart, joints and muscles
- Menstruation
- Pregnancy

Physique

- Certain physiques suit certain sports
 - Endomorph (dumpy) – Sumo Wrestler
 - Ectomorph (thin) – marathon runner
 - Mesomorph (Muscular)- Swimmer



Diet

- Body needs certain substances for energy and growth and repair
- Without a healthy diet your body will not function properly
- Next topic



Exercise

- However unfit you are regular exercise will make you fitter



Physical Disability

- Disability means that a part of your body does not function properly
- Exercise can keep the rest of the body very fit
- Many disabled people are elite athletes





Illness and Fatigue

- When you are tired or ill you are less fit for activity



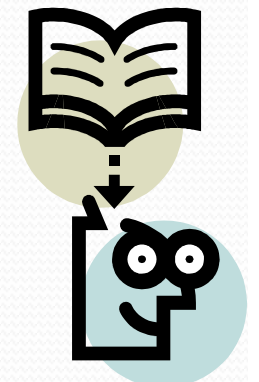
Drug Taking

- Alcohol, cigarettes and many other substances lower fitness

Stress

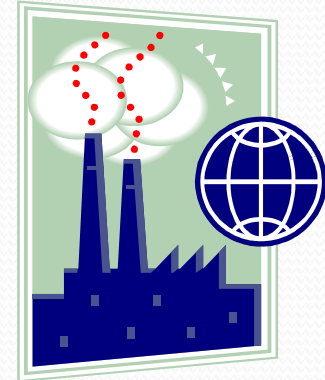


- Exams, overwork, money problems = stress
- Continual stress = high blood pressure and heart disease / cancer
- Short term stress affects performance = tight muscles, lack of concentration, make mistakes
- Dealing with stress = exercise and relaxation



The Environment

- Pollution – affects lungs and fitness
- Weather – hot humid day / windy day
- Altitude





Homework

- Questions Page 15 for Tuesday