

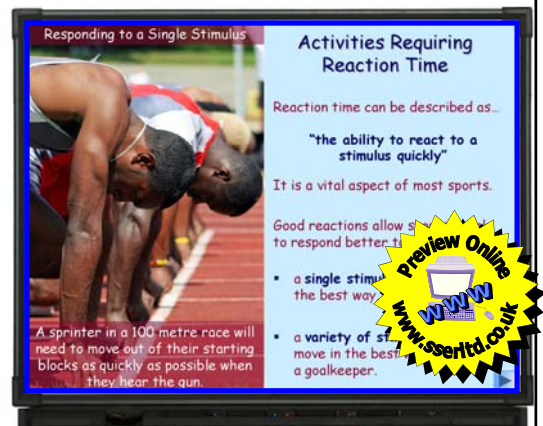


P.E. PRESENTATIONS (14-16)

- UTILIZES THE PROVEN BENEFITS OF THE STAGED DISPLAY OF INFORMATION
- VISUALLY ENHANCES ANY 14-16 EXAM COURSE IN PHYSICAL EDUCATION
- SUITABLE FOR A SINGLE COMPUTER, NETWORK, DIGITAL PROJECTOR OR VLE
- CORE PRESENTATIONS, SUPPORTING WORKSHEETS & INTERACTIVE REVISION!

Students' interest and learning is proven to be enhanced when you use our outstanding sets of PowerPoint presentations for P.E./Sports Studies GCSE, BTEC or Scottish Standard Grade. These superb sets of presentations, worksheets and interactive exercises enable you to use interactive whiteboards, standalone or networked PCs, to enhance teaching and learning in a variety of ways.

Pack A - Core Theory Presentations feature animated, interactive presentations which cover core teaching content. The presentations average 25 slides each and feature quality photos, animations, and interactive



elements. Note templates are also included and are ideal for teacher narration notes, lesson plans and student notes.

Users of PowerPoint 2000 (or later) can easily edit the presentations to suit their own needs.

Pack B - Worksheets (workbooks and summary sheets) support the theory covered in Pack A - they can be used independently of the presentations. Answers are provided - all masters are MS Word files.

Pack C - Interactive Revision Presentations engage students and reinforce learning through a variety of exercises such as Drag & Drop, Animations, Quizzes and Wordsearches - see separate advert.

Health & Fitness - Stamina

3. The Harvard Step Test

- The person undertaking the test begins stepping up and down a box of height ___ cm for ___ minutes, at a rate of ___ steps per minute.
- The person then rests for ___ minute and then has their ___ rate taken.
- To find their score, the following calculation is carried out:

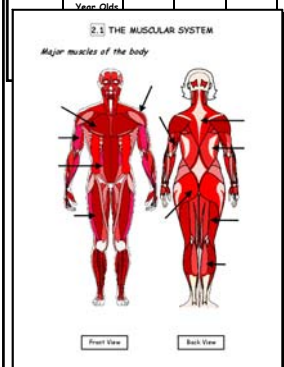
$$\frac{(\quad) \times 100}{5.5 \times \quad}$$

- Person A has a pulse rate of 70 bpm and was able to complete the 5 minutes of stepping:
Score: _____
- Person B has a pulse rate of 90 bpm and was able to complete 4 minutes of stepping:
Score: _____

Who has better stamina? _____

Once you have completed the Harvard Step Test the following chart can be used to check stamina levels:

	High Score	Above Average	Average	Below Average	Low Score
Males 15-16 Year Olds	Above 90	90 to 80	79 to 65	64	



Dealing with injuries, which may have developed during competition...

- Rest and Recovery
- Physiotherapy
- Surgery
- Rehabilitation
- Fitness Work
- Skills Work
- Light Game Play

Gymnastics

The aim of gymnastics is to perform a series of shapes with the body upon specific pieces of equipment, for example Floor Work. Marks are awarded for accuracy but also according to how difficult or complex the move is.

A 'crocodile' requires muscles to:

- Make the body move into and out of the 'crocodile'.
- Hold the body in the 'crocodile'.
- Bear the total weight of the body on the hands and arms.

Skill Related Set 3 Fitness

The Human Body
Set 1

THE HUMAN BODY

PACK A - 6 SUPERB PRESENTATIONS
PACK B - 5 OUTSTANDING WORKBOOKS

Set 1 (6 Topics)	
Introduction to the Body	
The Skeletal System	
The Muscular System	
The Cardiovascular System	
The Respiratory System	
The Nervous System	

1.12 Movement at Synovial Joints

Different types of synovial joints allow different kinds of movement. There are 6 basic types of movement that can occur at such joints:

- Extension:** Straightening or extending a limb.
- Flexion:** Bending or flexing a limb.

Example: the arm can be extended at the elbow.

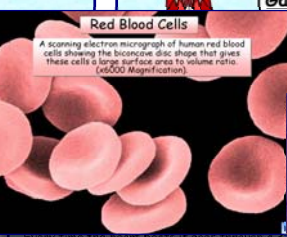
Example: the leg can be flexed at the knee.

2.2 Functions of the Body Muscles

Muscle	Position in the body	Main Action
Gluteals	Found in the middle of the body at the back, forming the bottom.	These pull the legs back at the hips.
Hamstrings	Found at the top of each leg at the back.	These bend the legs at the knees.
Gastrocnemius	Found at the back of the foot.	These straighten the foot so you can stand on your toes.

The Difference between Inhaled and Exhaled Air

Inhale air into the lungs (%)	Exhale air out of the lungs (%)
Oxygen 20.95%	Oxygen 16%
Nitrogen 79%	Nitrogen 79%
Carbon Dioxide 0.04%	Carbon Dioxide 4.0%
Water vapour 0.01%	Water vapour 1%



Capillary Wall

Decreasing concentration

Inside Alveolus

● Carbon dioxide
● Oxygen

MS Word Worksheets
Set 1 HAS 60 PAGES OF WORKSHEETS + ANSWERS in both colour & B/W!

Health & Fitness
Set 2

HEALTH & FITNESS

PACK A - 12 SUPERB PRESENTATIONS
PACK B - 12 WORKBOOKS & 12 SUMMARY TASKS

Set 2 (12 Topics)	
The Effects of Exercise	
Energy for Exercise	
Exercise & Recovery	
Fitness Training & Exercise	
Health & Fitness - (5 Presentations)	
Hygiene & Safety	
Nutrition, Sport & Exercise 1 & 2	

1) Strength be Tested?

A person's level of strength can be measured using a variety of tests, which are carried out in different ways. Each test focuses upon one type of strength.

Testing Static Strength - The Hand Grip Dynamometer

This test is carried out using a special piece of equipment called a Hand Grip Dynamometer.

- The handle is squeezed 3 times, as hard as possible with the hand.
- The highest reading is recorded as the best score.

The higher the score, the better the levels of static strength in the hand.

3) The Harvard Step Test

- The person undertaking the test begins stepping up and down a box of height 45cm for 3 minutes, at a rate of 30 steps per minute.
- The person then rests for 1 minute and has their pulse rate taken.
- To find their score, the following calculation is carried out:

$$\text{Length of Exercise in Seconds} \times 100 \div 5.5 \times \text{Pulse Rate}$$

Vermosis

What is it?
It is a flat wart which grows on the sole of the foot. Caused by a virus.

How does it spread?
It is spread in the same way as athlete's foot through direct contact with socks, towels and changing room floors used by other people with verrucae.

Nutrition, Sport & Exercise 1 - Notes

Slide 5: **Protein**
Protein is essential for building and repairing tissues. It is also used for energy.

Slide 6: **Vitamins**
Vitamins are essential for many body processes. They help to convert food into energy.

Slide 7: **Carbohydrates**
Carbohydrates are the body's main source of energy.

Easy To Print
Note Templates
Pack A - Includes Free!

Suppleness - The Sit & Reach Test

This test measures suppleness in the lower back and the back of the legs.

- The person must sit on the floor with their legs together and place their feet against the box, keeping the legs straight.
- They then slowly reach as far as they can along the box, with both hands together.

This position is held for 3 seconds, during which the distance reached along the box is recorded.

The higher the score, the better the levels of suppleness in the lower back and the back of the legs.

5. Fibre

Fibre is indigestible plant material, which gives the gut bulk, against which the muscles can push. This helps prevent constipation.

Fibre can be found in the following foods:

Aerobic Respiration - With Oxygen

The Process of Aerobic Respiration

Work out what the aerobic and anaerobic training thresholds are for the following people:

- 20 year old
- 30 year old
- 40 year old
- 50 year old
- 60 year old
- 70 year old

How is Speed Tested?

A person's level of speed can be measured using a variety of tests, which are carried out in different ways.

- Whole Body Speed tests**
 - The Shuttle Run
 - The Slalom Run
- Limb Speed tests**
 - Bin Circuits - Arms
 - Bin Circuits - Legs

The Energy Balance

It is important to consider the number of calories we eat each day and compare this with those used.

There are 3 basic combinations, each one of which affects our body weight in a different way. We either stay the same weight, lose weight or gain weight.

Heart Rate for Aerobic and Anaerobic Training

They can be worked out using the following method:

- Draw a vertical line up from the selected age.
- Then draw a number of horizontal lines where the vertical line crosses the threshold graph, and the heart rate.

Animated
Graphs & Charts

Training & Skills Set 3

TRAINING & SKILLS

PACK A - 13 SUPERB PRESENTATIONS
PACK B - 12 WORKBOOKS & 12 SUMMARY TASKS

Set 3 (12 Topics)
Skill Related Fitness
Methods of Training 1 & 2
Acquisition of Skill 1 & 2
Developing a Training Programme 1 & 2
Exercise, Training & Good Health
Factors Affecting Performance (4 Presentations)

Well-Being

- Are you physically fit?
- Are all your body systems working effectively?
- Do you have any illness or injury?

Decide whether the following skills are basic or complex.

TASK Drag the numbers to the most appropriate place on the graph.

Skill Related Fitness Balance

Balance can be defined as _____

MS Word Worksheets Order Pack B

200+ PAGES OF WORKSHEETS & ANSWERS

How can Balance be Tested?

Circuit or Weight Training to Develop Strength

1) Sit-ups → 2) Squats → 3) Press-ups → 4) ...

8) Pull-ups ← 7) Shuttle Runs ← 6) Squat Thrusts ← 5) Dolphins

Testing Your Own Reactions!

When you press the start button, the green circle will light up after a random time period (between 1 and 5 seconds). When the green circle lights up, press the stop button or spacebar to stop the timer.

How can Balance be Tested?

Balance is measured in a variety of ways, the most common is the Stork Stand:

The Stork Stand

- The person undertaking the test must stand comfortably on both feet with their hands on their _____.
- They then lift one leg and place the foot of this leg against the other.
- On the command 'go' they must raise the _____ and balance for as _____ as possible in this position.
- Carry out the test twice, timing each attempt using a stopwatch and record the _____ time.

Social Issues & Injuries Set 4

SOCIAL ISSUES & INJURIES

PACK A - 10 SUPERB PRESENTATIONS
PACK B - 10 WORKBOOKS & 10 SUMMARY TASKS

Set 4 (9 Topics)
Sponsorship
The Media
Social & Cultural Aspects
Amateur & Professional Sport
Local Providers of Sport
National & International Sports Provision
Funding of Sport
Sporting Injuries
First Aid

Mouth to Mouth Resuscitation

The following points will ensure mouth to mouth resuscitation is carried out effectively:

- Clear and open the airway by tilting the head back and lifting the chin.

Funding Sport

Sport requires a great deal of money in order to:

- Build and maintain sports facilities...

Dislocations

Dislocations can occur wherever there is a joint, and results in one of the bones coming out of its normal position.

It is common to find dislocations of the shoulder, elbow, knee, jaw, thumb and finger joints.

You should never attempt to put the dislocated bone back; proper medical attention should always be sought.

The Media and Sport

Advances in technology mean that the different forms of media constantly changing.

- Sky TV offers viewers the option of following key players of a football match, via their 'player cam'.
- Mobile phone users can now have sports sent to them as they happen, via a text service, and videos of the latest premier goals as they are scored.

Sprains

A sprain occurs at a joint, where there has been an over-stretching or tearing of the ligaments which hold the bones of the joint together.

Sprains are usually a direct result of a sudden wrench or twist. The most common joint to suffer this injury is the ankle.

Centres of Excellence

Centres of Excellence have superb sports facilities and support services.

Amateur & Professional Sport

It is essential to understand the differences between amateur and professional sport.

The status of each competitor is defined by the rules and regulations laid down by the governing body of the particular sport undertaken.

In most cases, amateurs and professionals do not compete together, although some sports are 'open' to both, for example:

Full Time Training & Competing

Sponsorship is vital to sport, it has helped establish the vast range of sport we see today.

Sponsorship can enable those involved in sport to train and compete full time.

It helps cover both everyday living expenses and all the cost involved in getting to the top and staying there.

Developing Talent

Sponsorship is fundamental to the development of young people with potential talent. Again, it helps cover all the necessary costs of becoming a top sports star.

Types of Sporting Injury

Many injuries seen in sport are many and varied. The different types are:

- Fractures
- Dislocations
- Strains or cracked bone. There are 3 main types:
 - Open Fractures
 - Complicated Fractures

Officials enforce the rules and regulations of the sport, and use a system of cautions.

This leads to some form of punishment for participants who break the rules of their sport.

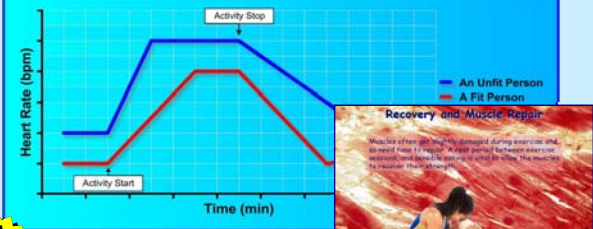
Example: In football the following discipline system is used:

- Verbal Caution
- Yellow Card
- Red Card

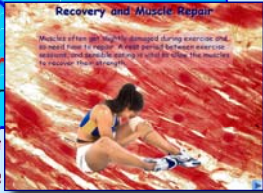
Recovery Rates of a Fit and Unfit Runner

Recovery rates measure how quickly the body returns to normal once exercising has stopped. It can be worked out by monitoring the person's heart rate. Explain the key points in the graph below...

Comparison of Recovery Rates for Fit and Unfit People



- Recovery rates depend on two main factors:
- How intensive (hard) the exercise is
 - How fit the person is



Blood Doping

Blood doping is an illegal process, but is sometimes used to improve the oxygen carrying capacity of the body. As a result, it could give an advantage to those involved in sports requiring endurance.

How is it Carried Out?

- A few months before an important competition, up to a pint of blood is taken from the body. The blood is then stored.
- In just over a week, the body has replaced the removed blood.
- Shortly before competition, the stored blood is put back into the body.

2) Intensity

Raising intensity means increasing how hard you train or exercise. For example, running at a faster speed or lifting a heavier weight.

20 Kg lifted → 40 Kg lifted
Lifting heavier weights will increase muscle bulk (hypertrophy) and therefore improve strength.

The Skeletal System - Student Notes

Slide 13: The Vertebral Column and its Function

Slide 14: What are bones made of?

Slide 15: Types of Bones

Easy To Print Pack - Includes Presentation Note Templates

The worksheets are suitable for classwork or homework and can be duplicated in full colour or b/w - full duplication licence is included as standard. The **Single User Licence** is provided with the Presentations CD ROM and allows you to place the presentations on one teacher's home PC and also on one PC at school - this allows you to use a digital projector to project the presentations to any class(es), in any room, as long as the presentations are only loaded onto the one PC. The **Site Licence** extends the single user licence to an unlimited number of standalone or networked PCs on a single school site. The **VLE Licence** is additional to a site licence and extends the permitted use to allow students and staff to access the resource externally through the school's Virtual Learning Environment (password protected access only). To obtain an evaluation CD or for details of our low cost VLE licence please phone 01404 811667.

ORDER FORM

PRESENTATIONS - PACK A SINGLE USER LICENCE	SITE LICENCE - PACK A ADDITIONAL TO PRESENTATIONS - PACK A	WORKSHEETS - PACK B CAN BE PURCHASED SEPARATELY FROM THE PRESENTATIONS
Stock Code	Stock Code	Stock Code
Set 1 (PE1CD) @ £70 + VAT = £84.00 <input type="checkbox"/>	Set 1 (PE1ST) @ £70 + VAT = £84.00 <input type="checkbox"/>	Set 1 (PWS1CD) @ £30 + VAT = £36.00 <input type="checkbox"/>
Set 2 (PE2CD) @ £70 + VAT = £84.00 <input type="checkbox"/>	Set 2 (PE2ST) @ £70 + VAT = £84.00 <input type="checkbox"/>	Set 2 (PWS2CD) @ £30 + VAT = £36.00 <input type="checkbox"/>
Set 3 (PE3CD) @ £70 + VAT = £84.00 <input type="checkbox"/>	Set 3 (PE3ST) @ £70 + VAT = £84.00 <input type="checkbox"/>	Set 3 (PWS3CD) @ £30 + VAT = £36.00 <input type="checkbox"/>
Set 4 (PE4CD) @ £70 + VAT = £84.00 <input type="checkbox"/>	Set 4 (PE4ST) @ £70 + VAT = £84.00 <input type="checkbox"/>	Set 4 (PWS4CD) @ £30 + VAT = £36.00 <input type="checkbox"/>
All 4 Sets (PE14CD)* @ £250 + VAT = £300.00 <input type="checkbox"/>	All 4 Sets (PE14ST)* @ £250 + VAT = £300.00 <input type="checkbox"/>	All 4 Sets (PW14CD)* @ £100 + VAT = £120.00 <input type="checkbox"/>
Super Bundle - all 12 Products (4 Sets of Presentations + Site Licences + 4 Sets of Worksheets) (PEPB2)* @ £550 + VAT = £660.00 <input type="checkbox"/>		

N.B. You pay no more by buying individual sets at separate times - the discount offered by a bundle (*) will be given when you complete an appropriate purchase.

All U.K. customers (except Channel Islands) must pay the VAT inclusive prices. A VAT invoice will be sent with the goods - allowing eligible schools to reclaim VAT. If possible cheques should accompany the orders and are payable to S.S.E.R. Ltd. A receipt/invoice, licence and a set of terms/conditions are sent with the goods which are normally despatched within 24hrs. of receiving your order. Official orders are welcome but please attach a completed S.S.E.R. Ltd. order form indicating the stock code required. **N.B. Owing to the nature of these resources S.S.E.R. Ltd. does not operate an 'inspection copy' service. In the rare case of damaged or faulty goods you must phone S.S.E.R. Ltd to obtain an official returns number.**

Grand Total £

Most credit/debit cards accepted.

Please complete the following table in **BLOCK CAPITALS** N.B. Goods are usually despatched within 24hrs. of receiving your order.

Name:	Signature:
Position:	
School name:	S.S.E.R. LTD. P.O. Box 46, Ottery St Mary, Devon. EX11 1ZH. Phone: (U.K.) 01404 811667 FreeFax: (U.K.) 0800 0664124 Email: SSERLtd@aol.com Web Site: http://www.sserltd.co.uk
School address:	
Pupil age range:	Post code:
School phone :	Fax:

N.B. All orders are subject to £3.00 +VAT p&p.