



Welcome to the PE Department



Staff:

- Mr Hall, Subject Leader
- Miss Powick, Deputy Subject Leader
- Miss John, Year 7 Leader
- Mr Neville, Year 10 Leader
- Miss Hawes, Year 8 Leader
- Mr L Flynn
- Mr Cawley, Deputy Year 11 Leader



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Our Year 7 Curriculum

In Year 7 Vyners students will study:

Rugby, netball, football, fitness, gymnastics, athletics, cricket, dance, outdoor activities, hockey, lacrosse, rounders, softball, basketball, badminton, table tennis

“PE at school is fun and we get to try so many sports!”

- Year 8 Student





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Our Key Stage 4 Curriculum



From Year 9 we offer two academic qualifications within PE. This variety means we can guide students to a course that is best suited to them. PE as an academic subject is optional from Year 9 however you will still have two hours of core PE a week.



I've loved learning the theory behind sport and how the body works during exercise.

- Year 11 Student

Academic courses:

GCSE PE

OCR Nationals Sports Studies



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Our Key Stage 5 Curriculum

OCR

Oxford Cambridge and RSA

It's been great to learn the scientifics and psychology underpinning sport and has opened the door to a degree and career in sport!

- Year 13 Student

In the 6th Form we continue are broad offer of academic courses offering two courses for students to study.

Courses offered -

A Level PE

OCR Technicals in Sport and Physical Activity

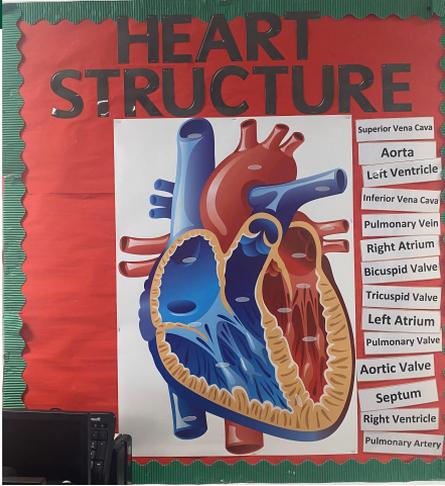


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PE PERIODIC TABLE

Mo Molybdenum				Co Cobalt		Sk Scandium	Cr Chromium			
Ab Barium			Mu Manganese	Cf Cadmium	St Strontium	SM Samarium	SC Selenium	Cy Copper	Tv Vanadium	Sc Sulfur
Ad Antimony	Pi Phosphorus	Bi Bismuth	Tr Tin	Me Mercury	Fl Fluorine	Te Tellurium	Fp Fermium	Lv Lithium	Sc Sodium	H Hydrogen
Ro Radium	Lu Lutetium	A Aluminum	Qu Quartz	Ag Argon	Po Polonium	R Radium	Se Selenium	Ri Rhenium	Cl Chlorine	Fe Iron
B Boron	Ss Sulfur	Ha Hassium	G Gallium	U Uranium	Co Cobalt	La Lanthanum	L Lithium	U Uranium	Ra Radium	Co Cadmium
Sq Selenium	J Jodine	F Fluorine	Ex Einsteinium	Co Cobalt			T Thallium	Fi Fermium		Tm Terbium



Monday 20th September
Exercise

- Endurance:** The period around that the heart rate stays high.
- Intensity:** The force that is applied to the heart system by weight of load, speed, or resistance.
- Frequency:** The force that is applied by the user of the heart system by muscle.

Heart Rate (HR)

Formula: $HR = \frac{V}{T}$

Example: If you run 1000m in 5 minutes, your heart rate is $\frac{1000}{5} = 200$ beats per minute.

Heart Rate Reserve (HRR): The difference between your maximum heart rate and your resting heart rate.

Formula: $HRR = HR_{max} - HR_{rest}$

Example: If your maximum heart rate is 200 and your resting heart rate is 70, your HRR is 130.

Long term effects of Physical Activity on Muscular System

Increased bone density

- weight bearing exercise puts bones under stress
- in response, the body produces more cells that build new bone
- prevents osteoporosis
- reduces bone density / disease

Increased strength of ligaments and tendons

- weight bearing exercise increases strength of ligaments and tendons
- reduces the risk of injury to these ligaments and tendons

Muscle Hypertrophy

- strength training increases muscle size
- also increases strength of muscles
- muscle endurance - low weight, high reps
- muscle strength - high weight, low reps

Heart Adaptations

- heart rate decreases at rest
- stroke volume increases
- cardiac output increases
- heart becomes more efficient
- heart becomes more elastic
- heart does not need to pump with as much force
- heart rate does not need to pump with as much force

Heart Structure and Function

Heart Chambers: Right Atrium, Right Ventricle, Left Atrium, Left Ventricle.

Heart Valves: Atrioventricular (AV) valves (Tricuspid, Bicuspid), Semilunar (SL) valves (Aortic, Pulmonary).

Heart Wall Layers: Endocardium, Myocardium, Epicardium.

Heart Conduction System: SA Node, AV Node, Bundle of His, Purkinje Fibers.

Heart Blood Flow: Systemic circulation (oxygenated blood to body, deoxygenated blood from body), Pulmonary circulation (deoxygenated blood to lungs, oxygenated blood from lungs).



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Our Co-curricular Offer

Students are invited to join a wide range of activities there is something for everyone:

Trampolining, football, rugby, netball, basketball, badminton, table tennis, gymnastics, hockey, cross country are just a few of the activities we offer!

Past trips have included:

Paris Netball tour, Canada Rugby tour, Austria Ski trip, Valkenberg Football tour





Frequently Asked Questions

1. *How many hours a week of PE do you have a week? Ans: Students have 2 hours of PE a week which consists of two different sports.*
2. *Do you have to be invited to the co-curricular clubs? Ans: No you just turn up whenever you want week to week.*
3. *Do we compete against other schools? Ans: Yes we compete against schools in our borough, county and nationally.*
4. *Do you have any house sports competitions? Ans: Yes we have inter house events where you compete against other houses in different sports and we also have our Sports Day at the end of the year.*



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**We look forward to meeting you in
September 2024!**