

Year 12 A'level Physics students had the opportunity to spend the weekend 27th -29th March at CERN, Geneva in Switzerland exploring the world of Particle Physics. The tour began with a visit to the The Globe of Science and Innovation, a unique visual landmark by day and by night. The Globe of Science and Innovation is a symbol of the Planet Earth. It is CERN's new outreach tool for its work in the fields of science, particle physics, leading-edge technologies and their applications in everyday life.

and other accelerators.

Inside the Globe was the Universe of Particles, an exhibition that took the students on a journey deep into the world of particles and back to the Big Bang by immersing them in a unique and spectacular ambiance. Students learnt that the entire Universe is made up of particles. But where do they come from? What laws govern their behaviour? The purpose of the "Universe of particles" exhibition is for visitors to confront the great questions of contemporary physics, currently being explored by the CERN via the LHC

They also had a chance to visit the "Microcosm" exhibition at CERN through multimedia exhibits, machines, games and experiments. They discovered the amazing "CERN adventure", from the infinitely large to the infinitesimally small, Microcosm gave pupils the key to understanding the secrets of matter. In this exhibition they explored the mysteries of the universe and discovered the massive apparatus used by physicists, the accelerators and detectors, and saw how each part works!

This was then followed by a talk given by CERN research staff lasting three hours. We went across the border into France

to visit an experimental area, the AMS Payload Operations Control Centre (POCC) working on the Alpha Magnetic Spectrometer (AMS-02). This is a particle-physics detector that looks for dark matter, antimatter and missing matter from a module attached to the outside of the International Space Station (ISS). It also performs precision measurements of cosmic rays. The AMS detector was assembled at CERN and sent into space in 2011. In one year 17 billion cosmic-ray events are detected and data is received by NASA in Houston and then relayed to the AMS Payload Operations Control Centre at CERN for analysis.

After the tour of the AMS we were fortunate to have the opportunity to see the accelerator complex at CERN. This is a succession of machines that accelerate particles to increasingly higher energies. Each machine boosts the energy of a beam of particles, before injecting the beam into the next machine in the sequence. In the Large Hadron Collider (LHC) – the last element in this chain - particle beams are accelerated up to the record energy of 4TeV per beam. The two beams are brought into collision inside four detectors - ALICE, ATLAS, CMS and LHCb. During March 2014 the detectors were undergoing scheduled maintenance and Queenswood students were taken 100m below ground level to visit the CMS detector one of the largest experiments at CERN. The Compact Muon

LHC. It is designed to investigate a wide range of physics, including the search for the Higgs boson, extra dimensions, and particles that could make up dark matter. The CMS experiment is one of the largest international scientific collaborations in history, involving 4300 particle physicists, engineers, technicians, students and support staff from 182 institutes in 42 countries.











My name is Mrs Robinson I am a
T.A at Farmors School. I have a
therapy dog called Millie who I
bring into Farmors with me every
Wednesday and Thursday. I run a
voluntary mindfulness session in E10
on Wednesday lunchtimes at I pm.
I have been asked to write a small
piece about Mindfulness.

Take a quick look at this 3 minute intro to mindfulness for teenagers on



#### What is mindfulness?

Mindfulness is a technique you can learn which involves making a special effort to notice what's happening in the present moment (in your mind, body and surroundings) – without judging anything. It has roots in Buddhism and meditation, but you don't have to be spiritual, or have any particular beliefs, to try it.

#### How can mindfulness help me?

More than ever, people are talking about mindfulness. But what is it and how could it help you? Mindfulness can help you manage your wellbeing and mental health. It can enable you to:

- · feel less overwhelmed
- · improve your sleep quality
- positively change the way you think and feel about your experiences (especially stressful experiences)
- increase your ability to manage difficult situations
- make wiser choices
- reduce levels of anxiety
- reduce levels of depression
- reduce levels of stress
- reduce the amount you chew things over in your mind
- have greater self-compassion

Mindfulness is not fluffy nonsense or silly, nor is it a passing fad. But, it does take effort and work to develop mindfulness skills and time to practice them. You can find more helpful information by visiting www.nhs.uk & www.mindful.org.

#### **Science Success!**



Huge congratulations to Y12 students Lydia Watson and Max Cole for their successful application to the competitive and prestigious Nuffield Research Placement. They will spend 4-6 weeks on a project that relates to an area of science, quantitative social science, computing, technology, engineering or maths (or a combination of these) over their summer holiday. This is a unique opportunity that will boost their University and future job applications.

# Y9 Battlefields trip





Mr Speake is seen here at a reconstruction of a trench network at Hooge.



# Y9 London Av Tip

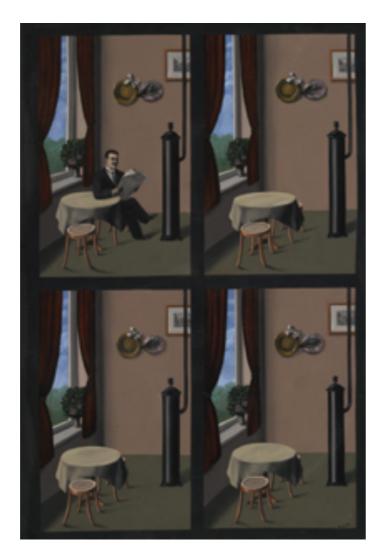
On the 23rd of January we went on a school trip to visit the Tate modern and Tate Britain in London. We were going there as our current topic is Surrealism and the two galleries gave us inspiration and ideas for our current project. It also introduced us to different art styles and forms.

By Rosanna Howroyd and Gabriela Lara-Moreno

Our day started at around 5:30 am when we had to wake up! This was because we had to drive all the way to Fairford from Swindon in order to be at school by 7am. When we got to school, we were put into groups and were told which bus to get on. This was annoying as some our friends were on different buses and it took a while for everyone to get to school on time.

After a three hour journey (which felt like forever) we finally approached our first gallery, the Tate Modern. When the bus stopped the teachers gave out sheets explaining the activities we were going to do in the gallery. In this gallery we had to go around in pairs and search for the surrealist paintings on the sheet. We also had to pick one of the paintings and do a colour study of all or part of it. Inside the gallery it looked endless, it was a tall structured building with a sloping floor in the middle. The first thing we did there was the teachers again told us what tasks we had to do and gave us a quick safety briefing about what to do in case of an emergency. We then made our way up to level 2 of the Natalie Bell building. A while later we finally found the International Surrealism studio. As we were doing activity I (looking for certain art works) we found out that the angel

Below: Man with a Newspaper 1928 by Rene Magritte on display at Tate Modern.





of anarchy by Eileen Agar was not in the gallery anymore. We did though manage to find the rest of the art works, but not being able to see it was a disappointment. After completing activity one, we started the second one. We both chose to do a study of the "Annunciation" by Rene Magritte. We probably annoyed a lot of members of the public as we were all sitting on the floor. We did try to not be in the way, but there were no benches to sit on and nobody wanted to stand and draw. We didn't like it as well; the floor was all dusty and dirty.

As we were the first people to finish both activities, we got to go around the rest of the gallery. There was a wide variety of paintings there, even one of Monet's water-lilies. Once we got bored of looking around, we met up with some of our friends by the entrance and waited for everyone else to finish. A half an hour later everyone else started to appear at the agreed meeting point.

wOnce everyone arrived Ms. Badger asked us to lie down on this floor. We laid there awkwardly wondering what we were doing. We then found out that the heat of our bodies was meant to make a portrait on the floor. This unfortunately did not work meaning that we took our shoes off and laid down for nothing. Then we were told that we could go into a room where there were some chemicals in it that made you cry. Before you went in you got stamped on the hand with a number like 926577101000. It is a memory of bodies, the number going up with each visitor. It is also an ascending number recording the number of people who migrated last year from one country to another, plus the number of migrant deaths recorded from the start of project to now. It made everyone's eyes tear up and it made your



Above: Interiors of Tate Britain

nose really clear which felt quite nice (not the crying part, that was weird).

After the crying room we got on the bus and we finally got to eat our packed lunch which was so delicious we shared a pack of M&M's which was the best part of lunch. We then arrived at Tate Britain.

On the outside of the building there were two giant leopard slugs that lit up. When we got inside, we were given another sheet which contained more activities for us to do. Activity one was to find a painting that you liked, and you had to describe the painting to your partner who was facing away from it. We had to reproduce a sketch of the chosen painting based off only our partners description of it. The second activity was to pick







Above: Metamorphosis of Narcissus 1937 by Salvador Dali. Right: Carnation Lily Lily Rose, 1885-86 by John Singer Sargent. Both on display at Tate Britain.

three words from the sheet and to find an artwork that described each chosen work.

Activity one made you realise how hard it is to thoroughly describe a painting, and it also made you look at the painting in more detail. Activity two made you realise how paintings portray different emotions and it made you really think about what was going on in it.

Once we had finished the activities, we could look around the rest of the gallery and go in to the gift shop. In the gift shop there were lots of postcards that were cheap, T-shirts, pencil cases, books about artists and even paints so you could create your own art work.

Out of both galleries we preferred The Tate Modern as it had more contemporary art work whereas the Tate Britain had more old paintings which were quite boring. They were both very different galleries though so it was very hard to pick a favorite.

The whole trip was very interesting, and it gave us a wider outlook on art and was altogether an enjoyable experience.



### Year 8 at the Museum

By Isobel Stewart Year 8

In February, Year 8 went on a trip to the Haida Art Museum at Pitt Rivers, attached to the Natural History Museum in Oxford, and I would like to share the experience with others.

We walked into the Natural History Museum and there was so much in front of us; there was a huge skeleton of a T-Rex and two life-sized models of bears. We walked around for a bit admiring the beautiful displays. My favourite display was the butterfly case near the front of the museum where all the butterflies were displayed, wings shining in the light. They were really colourful and they came in so many sizes. When we went into the Pitt Rivers Museum itself, there was a different atmosphere. It was much quieter and quite dark compared with the Natural History Museum – probably to illuminate the many artefacts crammed into 3 floors. We

had a short talk from one of the experts and learned some new and interesting facts about the surrounding displays. We then had a chance to look around. The most impressive collection was the wall of masks on the ground floor. There were as many masks as there were butterflies in the other museum. My favourite mask was the "child-catcher" which looked terrifying in the low light. The main attraction in the museum was the large totem pole that reached to the third floor! It had an eagle sitting on top of it with its wings out. All in all, it was a great day and worth going to see even more.

#### **Year 9 Science Creations**

Well done to our Y9B1A students for their creativity and careful thought designing 3D models of bacteria and specialised animal and plant cells. These models helped us to appreciate the differences, the similarities and the unique adaptations of different plant, animal and bacterial cells.





## focus on sport





#### **Badminton**

Contiued From Back Pg.

Since the last edition of Focus more fixtures have been played and the KS4 boys team have attended the County finals.

Against Sir Thomas Rich's Grammar School, a school with an extremely strong pedigree in the sport, the results sadly did not go the way we wanted (see table below). However, all the boys involved gained a lot from playing against such strong opposition and left having enjoyed themselves!

In the next fixture, versus Thomas Keble School, we fared much better. A slightly weakened KS4 boys team performed very well against the Thomas Keble A team, but eventually lost I-7. Similarly, the KS3 girls team lost a very close game 5-3, but acquitted themselves extremely well. Pleasingly, both the KS3 boys' teams performed really well in their matches and won 6-1 and 6-2 respectively.

In another very tough fixture, this time versus

Marling Grammar School, there were some fantastic matches. The KS4 boys A team drew a very tight match against the Marling A team 4-4, but lost narrowly on count back (89-91). Wow!! Then the KS3 boys A team played the Marling B team, which consisted mainly of KS4 players, and lost 1-7 (the boys learnt a lot from this fixture). The KS4 boys B team then played the Marling C team and narrowly lost 3-5, with a total points difference across all their games of only 6 points. Close!! Finally, the KS3 boys B team played really well to beat the Marling D team 6-2.

A few weeks later the KS4 Boys' team (made up of entirely year 10 students) attended the County finals, again held in Cheltenham. The team, having qualified twice before, knew it would be a tough day and upon arrival it quickly became apparent that they would be playing teams made up entirely of year 11 students, making the day that little bit tougher! Despite this the boys warmed up and prepared themselves mentally for the day.

In their first two matches the boys faced Sir Thomas Rich's School and Balcarras School, who the boys had already played and lost to this year. Sadly, both of these games were lost again, but not before scaring Balcarras School. In this game the boys played extremely well and managed to

# Team Result (Games) Total Points:

KS4 Boys Lost 1-5 83-122 KS3 Boys 'As' Lost 1-4 38-72 KS3 Boys 'Bs' Lost 0-5 36-75 KS3 Boys 'Cs' Lost 1-4 48-75 KS3 Boys 'Ds' Lost 2-3 53-71

go into the last game with the scores level at 2-2. However, in the final match Balcarras, a team full of County standard players, really upped their game to eventually beat the boys by 3 games to 2.

The boys were inevitably a bit deflated at this point but recovered well in their next two matches, beating Rednock School 3-2 and Forest High 3-2. These victories left them placed 3rd overall, earning them another Bronze medal to add to their collection. Well done boys!

To finish the 2018-19 badminton season off we have one more fixture to go, against Archway School, as well as an improved and expanded House badminton.

#### **Swimming**



## Katie Stratford had another successful day at Day 3 of the Wiltshire championships in January.

This means she won gold in all her freestyle races - she is the fastest 12 year old girl freestyler in Wiltshire!

50m, 100m and 200m backstroke and 50m, 100m and 400m freestyle. We wish her loads of luck!

#### Katie's results

400m freestyle - gold and a regional qualifying time

200m individual medley- silver

50m backstroke- silver and a regional qualifying time

#### Basketball

Basketball rebounding at Farmor's... Basketball at Farmor's has not had a high profile at for many years, but since January a small, but growing band of boys from Years 7, 8 and 10 have been regularly attending basketball club on a lunchtime. With many of the boys having not experienced the sport before, and only a sprinkling of boys having played before, the standard of play was not particularly high to begin with. However, the standard of play has gradually improved as time has progressed and the boys are certainly ready for some fixtures next year.

#### Football

Y7

Year 7 football has seen huge numbers at training this Spring, on average we have had around 40 boys out there week in week out playing and developing their skills and game understanding. With such high numbers we have been able to consistently field a strong A, B and a C team in certain fixtures!

The Year 7 A and B's kicked off their season with a friendly against Kingshill School which saw the A's lose narrowly 3-2 in a high-quality game. Both teams are tipped to be some of the strongest in the district for this year group which puts the result into perspective. The B's enjoyed their match and won 3-2 in a highly competitive contest which is pleasing as it shows our strength in depth, which is always key to a team's success and the fact the boys will be playing 11 a-side next year.

The A's and B's led by captain's Kelsea Muburi and Ben Laramoreno, respectively, then played Deer Park school on the 7th March in two further very competitive friendlies which saw both the A's and B's come out on top with 2-5 and 0-1 wins, respectively.

By this stage we were starting to get a real sense of our strongest 9-12 players, and also where further strength and depth could come from in the B team.





## focus on sport

#### Football Continued.

#### Y7 Cont.

On the 11th March the A's, B's and C's played Katherine Lady Berkeley's School (KLB) from the West side of the district in a block friendly fixture. This is a school where football is their strong suit and who always produce good teams across the age groups. This proved to be another great night for Farmor's football, where it was pleasing to see over 36 Y7 boys out representing the school and enjoying the competition. The results were as follows; A's drew 2-2, B's lost 5-2, C's lost 1-0.

On the I2th March the A squad travelled to Thomas Keble for the Cotswold District Tournament which saw us compete against; Kingshill, Deer Park, Sir William Romney's and Thomas Keble. The boys stayed true to form and won the competition in a fast and furious I4 minute match round-robin tournament which means they went through to Finals night at Rednock on Tuesday 19th March to play the top two sides from the West district tournament. All players played their part, Rresults were as follows; won I-0 vs SWR and Thomas Keble, drew I-I vs Deer Park and drew 0-0 vs kingshill.

One more friendly followed against Warneford School on Wednesday 13th March where the boys lost a very competitive match 0-3, against a very good side. The boys were now fully prepared for Finals night the following week!

On Tuesday 19th March the boys took their spot as winners off the East District tournament and played Marling School in one of two semi-finals at Rednock School. This proved to be a very tough game for the boys which resulted in a 5-0 loss. A third and fourth place play-off followed vs Arvhway, were the boys lost a competitive game 3-0. The standard of football at this level is incredibly high, more so than other sports due to the sport's popularity. All four teams were full of Junior Premier League and various academy players. This was another very positive term of sport for this year group, and we will look to seriously challenge every year going forward in the football.

Special Note: A special thank you must go to Mr Robins and Mr Clark, two of our teaching assistants at Farmors, who have selflessly given up their free time to assist in coaching and managing the football this term.

#### Y8

It has been an excellent term with almost 30 boys regularly attending Football Club, most of whom have had the opportunity to play for the school team in league or friendly matches. A few boys have also stepped up to help the Y9 team out on occasion as well so thank you to those boys.

In the league we had a good win vs Thomas Keble but a 3-3 draw against Deer Park and a heavy defeat against Kingshill (5-1) left us just short of qualification for the District Semi Finals.We hope the boys have enjoyed the opportunities they have had and would like to thank them for their excellent commitment again this year

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#### Y9

This season has been a struggle as we pitted our wits against some very strong local school teams in the District League. After a well fought 2-2 draw vs Thomas Keble, we suffered heavy defeats against Marling and Kingshill – the later having made it through to the last 4 in the country in the National Cup indicating the gulf between us. Thanks to half a dozen very committed boys we have managed to honour all of our fixtures. Next year we will review our opposition in an attempt to get a better match of opposition and hope that we can get more commitment from some others and have a more enjoyable season.

#### Y<sub>10</sub>

Numbers at Year 10 football training this year have been really pleasing, with over 30 boys regularly out at practice every week. The squad was cut down to 22 boys, with as many boys being rotated and getting game time, whilst maintaining the spine and strength of the team.

The team was captained and led very well by Cameron Thomson (District football representative).

The season kicked off with a friendly against Cotswold School, where the boys grinded out a 1-1 draw. This was followed by their first league game of the season vs Thomas Keble School, where once again, two evenly matched sides met, resulting in a 2-2 draw.

On the 26th February, the boys travelled to Deer Park School, where effective squad rotation played a major part in a dominant performance, resulting in a convincing 0-3 win. This was followed by a crunch game vs Kingshill School, where we required a draw at worst in order to advance to a district semi-final. With a 1-0 lead ten minutes into the second half, the momentum started to switch, and Kingshill dominated the rest of the game, snatching two late goals to secure the win, and thus advance themselves to a district semi-final.

The Y10 season ended with a friendly vs Warneford School on Thursday 21st March, which was another opportunity for a lot of the boys who couldn't make the starting side in league fixtures, to have a run out for the school.

Hopefully, next season, the boys can push for a district Semi-Final.

#### Football Continued.

#### YII

A fantastic show of commitment again from this year group has seen 20+ at practice each week and over 25 boys representing the school in league matches and friendlies. After being the 'nearly' team in recent seasons, a good win at Rednock was backed up with possibly our best performance as a year group in 5 years when beating a very strong KLB team 2-0 in our last group game. That win sees us through to the District Final against KLB again. The final will be at the home of Fairford Town FC on Monday 1st April – 7pm kick off.

#### 6th Form

A good group of around 14 lads have regularly attended football club and have had a couple of good games in the county cup group stages. We beat Rednock 3-1 before losing 2-0 to Marling. With other schools slow to be organised we wait to see if we have done enough to make the Quarter Finals.

# Representative School Football

Two of our boys have been selected for representative school honours this year. Cameron Thomson in Year 10 was selected to play for the Stroud & Cotswold District and Freddie Merrett in Year 11 has made the progression up to County Schools Football representing Gloucestershire Schools FA this year. Both boys have performed well and enjoyed the experience.

We wish all of our boys who play out of school a successful end to their seasons with their clubs and look forward to next year's school football season.

# Girls Sports Write-Up

#### **Y7**

The Year 7s have enjoyed three main sports this term - Netball, Hockey and Football. We have also added in a Badminton Club which has been very popular and Mr Simpson is about to run the House Badminton competition which many girls have entered.

The start of term began with the re-run of our Y7 District tournament which had been cancelled back in December. The girls were excited to play against all the teams in our local area and worked hard as a team to beat everyone in their group and come out as overall winners! Well done Year 7s - ones to watch for in the Future!

They have continued to play Netball here at school and have had a few friendly Netball matches which have kept them ticking over during this half of the year. We took two teams to Rednock to play them and both teams won their matches convincingly showing real signs of gelling together and working hard to secure their positions.

In Hockey we have been slightly blighted by the weather but have managed to get a strong team out for the matches we have played. Against Archway we saw a great performance from the team taking a convincing 4-1 win. These girls have some serious skills. Bethan Manning captained the team and lead from the front showing some excellent skill and games sense to take on players and make decisive moves to score goals. Zoe Thomas also worked really well to skilfully get past players and play hard up front to attack the D and score. Hannah Easton was also able



to transfer her defensive Netball brain onto the Hockey pitch and was making great tackles at the back and securing the ball in our possession. Well done girls. A great start to the Hockey season.

The year 7s also entered a Football tournament against other local schools. The girls enjoyed competing in a sport that a few of them play regularly outside of school.





## focus on sport

#### Girls Sports Write-Up Continued.

## South West (North) Region State School Netball tournament – **CHAMPIONS!**

We took a large squad of Year 10 girls to this annual tournament and used it to play many of our GCSE girls in a competitive scenario. We saw some great performances on court from Sophia Forde, Saskia Raja and Jess Modica. The girls adapted to change every half game and played in new players with confidence and a supportive nature. A true team performance and a medal each to boot!



#### Y8

The Year 8s have unfortunately been blighted by the weather for a few of their matches. However, they have had some solid Hockey performances. In the Netball season the girls played in the District tournament and were runners up, showing a real improvement for them. They also entered the National Cup along with other year groups and had a strong game, narrowly losing out to Pates Grammar.



#### Y9

The Year 9 Hockey team has been a joy to work with this year. They have been committed to practice, organised and motivated to succeed.

There have been some brilliant individual performances in matches but most notable has been their team spirit and support of one another. The defensive unit has consisted of a variety of players but Beth Tuke-Hastings, Isla Chapmanlones and Lydia Balloch have shown that they are a hard force to beat at the back! Issy Imeson has had a great season and is developing some strong individual skills. Elizabeth Payne goes from strength to strength and has been awarded player of the match by various oppositions throughout the season.

#### May Dent Invitational U15Netball tournament -

#### **CHAMPIONS!**

The May Dent Tournament is an invitational tournament to allow the girls a chance to prepare for the next County tournament at U16 where they can progress to Regionals.

This is a really important goal for this team as they have already played in the Regional tournament at U14 level. We were delighted to be greeted by a beautiful spring day so early on a Saturday morning!! Lots of parents helping support the team made for a great atmosphere. The group games were challenging at the beginning where we won against Stroud High 8-5 and Pates 10-6 - this really gave us confidence and allowed us to play a wide variety of combinations so that all girls had plenty of match play. The next few matches gave us an opportunity to go for goal difference in case we needed it heading towards the semi-final. Against Chosen Hill we won 16-6; Balcarras 9-0; KLB 14-0 & Cleeve

12-4.All great wins and credit to all of the girls for continuing with their excellent work rate and concentration.

The semi-final match was against Wycliffe which we won 9-8 in a very tight match. This was great preparation for the final against a tough Denmark Road High School team. Our shooting duo of Hannah Clark and Rose Orgill slotted some amazing shots to keep the scoreline goal for goal but we let Denmark Road get a couple of goals on the run and within an instant we were drawing 8-8 just as the time ran out – the girls knew this was golden goal territory and we had possession but I didn't want that to thwart the shooters. Fortunately there was no need to worry as the winning goal sailed through the post and we took one step closer to getting our team to Regionals in September. A fantastic day of team endeavour, great support and fantastic Netball!





The Year II hockey Girls played their last match of their school hockey careers this week.

This team have been fantastic throughout their time here and finished with a suitably close game! We were playing against Archway School at Stratford Park in Stroud. Unfortunately we were missing a key player, Ella Tuke-Hastings due to a serious injury — our well wishes go to her and we hope she makes a speedy recovery. The match itself was very close, the first half involving a lot of hard defensive work to hold off a strong Archway attack. However, Jemima Merrington scored a breakaway goal to give us a 1-0 lead. The girls worked hard as a team to maintain this lead and were delighted with the win to finish off a great season.



Farmor's
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# Badminton Success

Badminton continues to grow as a sport at Farmor's School, with the demand from students seemingly increasing as each term passes. Already we have reached the point where students are rushing to get to the sports hall because if they are not there quickly enough they are turned away because the hall is full by the time they get there. If only we had some more hours in the day (or some willing volunteers to help supervise more sessions...

Continued on pg. 10

#### Cross Country

Kiya Dee - Ran for England Schools in the Home international cross country on the weekend in Dublin, Ireland. She came 2nd in her race! What an outstanding achievement.

Full Sport round-up.

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