



Robert Clack School of Science A Specialist College Newsletter

www.robert-clack.bardaglea.org.uk



September 2009

Dear Parents/Guardians

On behalf of all the teaching and support staff, form tutors and pastoral teams, we would like to thank you all for the excellent support we have received this term. Considering the small changes the Governors made to the uniform regulations we have had one of the best starts of any academic year.

We would also like to thank you in advance with supporting your child by regularly checking their planners and newsletters, so we can all continue to work together in supporting your child over this academic year.

Mr R Micek
Deputy Headteacher

Mr R Taylor
Deputy Headteacher

Changes to the science curriculum for years 7-9

There have been many recent changes to the science curriculum which, combined, have led to a major overhaul of the teaching style and content that the pupils will be studying.

- A new KS3 curriculum with a greater emphasis on improving the teaching, monitoring and intervention of key scientific and cross-curricular skills. The reasoning behind this is to make pupils more independent and able to adapt to an ever changing world.

What does this mean for your child?

The new KS3 curriculum has allowed more freedom for the science department and as such we have sought to develop a brand new scheme of learning that will encourage a smoother and more unified 5 year learning experience at Robert Clack. We hope that the new style will encourage pupils

to enjoy science and through this increase their participation and their progress in both knowledge and skills.

- *The key stage 3 will now be taught throughout years 7 & 8.*
- *Pupils will begin their GCSEs in year 9.*

There are three different routes that are available to pupils studying GCSE science.

- *Triple Science*
- *Double Additional Science*
- *Double Applied Science*

The *triple science* route is a strenuous academic route and is particularly useful for those pupils who wish to pursue a competitive scientific career such as a doctor. It is usually reserved for the most able pupils as there is a larger amount of content accompanied by extra examination and coursework workloads. There are currently two classes studying for triple science in year 9. They are 9NEWTON & 9EINSTEIN.

The *double additional science* offers pupils an alternative academic route into which they can study 'A' levels. A large section is the same as the triple science but there is a lighter workload. There are three sets in year 9 studying this route. They are 9GALILEO, 9CURIE & 9HAWKING.

All of the above 5 sets will be taking a GCSE externally marked exam at the end of year 9. After the first year it may be felt that triple science is unsuitable for certain pupils. This may come from the teacher or the pupil. At this time it may be possible for certain pupils to change from the triple course to the double additional course with no loss in terms of their learning.

The final 7 sets will be taking the *double applied science* course. While there is still substantial overlap with the additional and triple courses there is a greater emphasis on how the science is used in the real world. This is complimented by a larger percentage of the course being coursework based. This is a great introduction to the new BTEC course being offered in sixth form for those who are interested in the medical profession but not as doctors. The sets are 9DARWIN, 9JEMISON, 9ARISTOTLE, 9FRANKLIN, 9HIPPOCRATES, 9FLEMING & 9PASTEUR.

The science department looks forward to your continued support
Mr Smith

Homework from the science department

Years 7 & 8

The change in curriculum has had a significant impact on the way in which the science department are using homework. We will now be setting larger pieces of work on a less frequent basis. The homework itself may be a full scientific investigation or detailed research project.

Each piece of homework is tailored to allow pupils to spend at least an hour but is open ended which will allow those pupils who wish to stretch

themselves to do so over several hours of work. The increase in time required for completion is reflected by the reduction in homework being set.

Homework is more likely to be set every two to three weeks and a longer time for completion will be given. You may see homework being written into the pupil's planner every week but this will sometimes be gentle reminders to pupils that the work has been set and its due date is approaching.

An important note is that the teacher may feel the class will benefit from a piece of work unlike that described above. This may also be set from time to time but is in addition to the above rather than instead.

Year 9

Pupils are now entering their GCSEs and as such the homework requirements increase as well. The year 9 pupils will be receiving a mixture of styles including that described above for year 7 & 8. The time spent on the homework will also increase, however, it will be set as and when the teacher feels it is most beneficial to the pupil's progress. Homework will not be set for the sake of ensuring the pupil has work to complete. As a result some weeks the pupils may find they have a small piece but others they have a large investigation to complete. The time allocated to complete this will complement the amount of work required.

Thank you
Mr Smith

Science News

Scientists of the Week

The following students have made a great start to the new term by earning the Scientist of the Week award. Congratulations to:

Clair Hudson (Year 9)

Taya Staff (Year 10)

Nazmal Hoque (Year 11)

Yemi Oredein (Year 11)

With numerous trips to Bedford's Park, Trewern in Wales and Egypt, students and staff in the Science department have been very busy this summer.

Year 9 Visit to Bedford's Park

In June Year 9 pupils based on the Gosfield site had the opportunity to visit Bedfords Park. With beautiful weather and lots of sunshine we were able to make the most of the outdoor activities. The day started with a trip to the pond to collect and identify some interesting insects. Students were also set the challenge of building their own den from a limited collection of materials, an activity that allowed them to display great team work skills. Some students even demonstrated their ability for interior design, by creatively decorating

their dens with a variety of leaves! Thanks to all the staff involved for organising the trip and to the students for excellent participation in the activities.



A-Level Visit to Trewern

Yet again the annual A-Level Biology trip to Trewern, Wales proved a real success. The students had an opportunity to visit a variety of different habitats, including sand dunes, freshwater rivers and rocky shores, carrying out surveys on local wildlife and looking at how they are adapted to their environments. Students were also given the task of comparing a river ecosystem to a canal. On the third day of the trip the students (and some of the braver teachers!) had the chance to go caving. Again thanks to all the staff for organising the trip, and to the students who worked incredibly hard throughout week.



Conservation Expedition to Egypt

After the recent and unfortunate political events in Honduras, our expedition planned to take place in July had to be cancelled. With a little bit of luck and hard work we were able to transfer the expedition to another location – Egypt.

“After two weeks of major depression due to our intended trip to the glorious land of Honduras being cancelled thanks to some dodgy president and a swift military coup we all happily arrived in Sharm El Sheik, destination Egypt, late in the evening on August 1st. Whereas in Britain such a time would perhaps mean the need for a jumper we were instead met by an unnatural and heavily uncomfortable air, meaning that dragging our baggage over to our transport was slightly difficult.

Arriving at Fox Camp some hours later after many police checks and camel sightings, two of which we nearly mowed down, the Bedouin, who could be described as Eskimos of the desert, had laid on slightly less than 5 star accommodation, i.e. a mattress of the floor in some sort of makeshift bivouac. However everyone crashed out anyway, ready for the week ahead which started at 6 in the morning, thanks to Emma making friends with a random dog which stole her roll mat. At this point it would be fair to say no one had predicted the rocky events which would unfold until that blissful Sunday when we would leave for the diving resort, but it all began with our little trip up the very tall Mount Sinai, standing at 2285m.

In the centre of the St. Katherine protectorate the mountain, which is supposedly the one in which Moses received the Ten Commandments and then came back down, smashed them and then had to get nice shiny new ones. Anyway Mr Davis had already attempted to drill into our heads that ‘food is fuel’ and the importance of drinking constantly, water that is, so off we set with full stomachs, and full platypus’ stuffed in our super heavy rucksacks for an apparent three hour hike. About 6 hours



later at 4 in the morning once we had climbed the 300 steps (which ended up being 600 steps) a good sleep even for 2 hours was definitely needed. Wishful thinking... Due to the mountain's celebrity status, of which all the other mountains were jealous, every available space was packed with people, resulting in tiny crevices of rock to lay against in an attempt to get some rest the only option. Consequently many of us didn't even bother and simply watched the sunrise across the landscape, perhaps the most blissful moment of the experience.



Skipping forward slightly to gloss over the hours coming back with rationed water supplies and complete exhaustion, we were greeted with lunch back at camp and had managed to stay awake for 31 hours. The next few days went by with drives to a local visitor's centre and St Katherine's Monastery (the oldest working Christian monastery in the world), many card

games, some lectures given by some of the world's experts, in preparation for our desert research, in a wadi and clay flute making.

To arrive at our new desert location where water was allocated to the point of not washing if possible (thank god for baby wipes) we all jumped into the back of jeeps and sped off over the desolate terrain being bounced up and down and side to side as we went. Great fun. To understand how we and the group of Arab students from Cairo who we were working with over the next four days felt about our new living conditions just imagine a big hole, picture one, then fill it with toilet roll, and excrement, add a million flies and bingo you've made our toilet. Lovely.



Once we had settled in however by simply picking some floor space for sleeping we could begin our research tasks.

This varied from mammal studies, to plant identification, bird watching or the capturing of bats. Some were more interesting than others (such as capturing long eared desert bats in the



middle of the night using 12m nets), but the group approached each task with a huge amount of enthusiasm and willingness to get involved, no point wasting all that bag packing effort! So, much contribution was made to Opwall and their ongoing research programme in which a detailed picture of the variations and densities of wildlife is being constructed. Some of the photos that the group took were requested by the Opwall staff due to the quality and detail that they showed, and in some cases, just because they showed animals that were very difficult to capture on camera.



All of the research was carried out in the morning and evening in the cooler parts of the day and so it allowed time for the group to interact with the Arab students. This varied from learning some Arabic, if you have Mr Smith next year expect random Arabic science words to turn up in lessons, to games similar to duck, duck, goose, you never get too old, and even teaching the actions to 'agadoo' and having a Wayne's world bohemian rhapsody moment in the back of a jeep.



At the end of the very long four days it was time to move off once again and say goodbye to Bedouin hospitality which was fantastic even after working through a 16 year long drought. A week camping in minimalistic and conservative conditions coupled with the prospect that a hotel was round the corner for the second week expectations were shooting through the bivouac roof to dangerously high levels. However we now considered a flushing toilet a luxury so we would be content. Whatever happened.



Situated a short distance from central Dahab on the red sea coast the Happy Life Village was heaven compared to previous experience and the sudden change in food quality and quantity made the time spent down in our small beach hut on Sunday surreal to the point of being too good. This was too true as karma hit us all and virtually everyone was struck down by the 'how dare you be happy and have fun' bug. With our 'food is fuel' leader out of the picture for the first two days of the week a bit of team spirit, some rehydration salts and the magical healing powers of diving pulled us through as the days progressed.

To complete the PADI open water course five, confined water dives in the shallows of the red sea containing a number of key skills, plus four open water dives to a maximum depth of 18 meters needed to be completed on a tight schedule with such a large group. If you have ever been scuba diving before you'll realise how surreal yet exhilarating the alien experience is, if not there is no point me trying to explain as only once you



take your first few comfortable breaths under the surface can you appreciate the feeling of complete freedom in water.

Of the 18 on the trip only 6 eventually managed to gain the full qualification showing the complexity and difficulty in mastering every area of the course from the dreaded controlled emergency swimming ascent to the first time the regulator and mask had to be removed underwater. However once these had been mastered the variety and density of coral wildlife to see was incredible, from the clown fish seen in the anemone, to the black barred surgeon fish and the creatively named big red octopus.

Sidelining the reef's wildlife the week was one massive laugh, chilled out and exciting. Frequent trips into central Dahab for a bit of haggling, two dives a day, reef ecology courses and shooting off to the hotel's generally dead disco until we arrived, caused the five days to speed by yet allowed everyone to knit even closer together.

Before we could even grasp everything we had managed to cram into 14 days, a years' worth of planning, fundraising, teambuilding, cancelling and re-organising were over. The whole group had hit Egypt and now it was time to head back home after an immense experience full of ups and downs, dehydration, re-hydration, beautiful Bedouin bread, a million flies and a number of stray cats and dogs. Small highlights have to include Margaret spilling food on herself, priceless, Kieran and Karishma nearly pushing each other over a cliff, Alaa's 'Peter' bread, everyone trying to wiggle into their wetsuits, a nice slice of Mr Smith's birthday cake and the looks on people's faces as we jumped the queue at the airport.



Rounding off I just want to put a big thanks out to all the staff especially Mr Davis, Miss Stone and Mr Smith who managed to turn the worst news around and plough tonnes of effort into getting us all to Egypt and so without who the experience would never have happened. Miss Grimshaw and Mrs Reeves who stepped in at the last minute to help out and brave the wilderness of Egypt, and also Stu and Becks, our diving instructors, who will probably never read this but were the most patient people in the world creating a miracle in getting us through to the end of the PADI course. Cheers.

Sam Bale



At this point Mr Smith, Mr Davis and myself would like to thank all those involved in helping the students, supporting them with fundraising and assisting them in achieving such a remarkable goal. We would also like to thank the students themselves for their hard work, incredibly positive attitudes and for making the expedition such a remarkable experience.

T Stone

Literacy focus: capital letters.

As part of the school's focus on improving literacy standards, students and staff will focus on a different area of punctuation, spelling or grammar every fortnight. Currently we're looking at the way students use capital letters. Our two targets for students are:

1. Always use capital letters at the start of a sentence and for proper nouns (names of things).
2. Never use capital letters after the first letter of a word

Most students know how to use capital letters, but they do often need reminding that the rules must always be applied. Students should check their work and remember to use a capital letter if it is...

- the start of a sentence
- someone's name
- the day of the week or a month
- something marked on a map like a town, a country, a river, a road, a mountain or a special building
- a shop and the brand name of something sold in the shops
- a title of the pupil's own work or the work of other people (stories, plays, poems, Films and TV programmes)
- the letter I on its own

Students should also check their work and make sure that they are not using capital letters at random e.g. Never use cApital lETTERS aFter tHe fIRst letter oF a woRd.

Literacy is the most vital skill our learning community can give our students. The school needs the help of parents, carers and families to support our aims by checking students work for capital letters and other basic errors.

Thank you,

M. Mullen, Skills for Life Coordinator.

Year 9 Mathematics 2009/10

Due to the abolition of Key Stage 3 exams last year the teaching of year 9 groups will be much more focussed on their GCSE examinations which begin in November 2009.

Due to the spiral nature of the mathematics curriculum pupils will be taught numeracy, algebra, data handling and shape & space in year 9. There will now be a much bigger emphasis on functional mathematics, developing problems solving skills and applying mathematics to the real world. To support this, pupils will complete a project at the end of each half term designed to develop these skills.

Year 9 pupils will begin to think in terms of Key Stage 4 grades rather than Key Stage 3 levels and will be internally assessed at the end of the year with a GCSE examination paper.

L Owen

The mathematics department set homework weekly; pupils should aim to spend between 30 minutes and 1 hour per week on their homework. We will aim to set it for each class on the night(s) in the table however this may vary slightly.

Homework Night:

	7	8	9
Archimedes	Tue, Wed	Wed, Thur	Wed
Babbage	Thur, Fri	Mon	Mon, Tue
Cantor	Tue, Wed	Fri	Thur, Fri
Descartes	Wed, Thur	Thur, Fri	Thur, Fri, Mon
Euler	Thur	Thur, Fri	Thur, Fri, Mon
Fibonacci	Thur, Fri	Mon, Tue	Thur, Fri
Galileo	Fri, Mon	Fri, Mon	Tue
Hypatia	Thur, Fri	Fri, Mon	Mon, Tue
Irwin	Tue, Wed	Fri, Mon	Fri
Jaśkowski	Thur, Fri	Thur, Fri	Fri
Kovalevski	Wed, Thur	Thur, Fri	Mon
Pythagoras	Tue	Mon	Wed

English Homework

Students in Years 7 – 9 will receive a piece of English homework every week. Homework tends to vary in task but is often linked to the unit of work being studied or otherwise may be a list of spellings to learn for a test, a grammar and punctuation activity or a general literacy task. English teachers will make students aware of how long they have to complete the homework when setting the task.

English GCSE

This year, Year 9 pupils across both sites will be starting their foundation GCSE English and English Literature courses. During the year, students will shadow the existing GCSE syllabuses. Students will study a range of GCSE texts including:

1. A Shakespeare play - Romeo and Juliet
2. A Modern Drama - An Inspector Calls/The Crucible
3. GCSE Prose Fiction – Comparing short stories from the literary canon
4. A GCSE Novel – Lord of the Flies/Roll of Thunder, Hear my Cry
5. A range of poetry both pre and post 1900

In addition to these texts students will undertake:

- A range of Speaking and Listening activities assessed according to GCSE criteria
- A range of GCSE writing activities including, writing to persuade, argue, advise, describe, explain and inform.

During this year the school will receive more information about the new GCSE syllabuses for English which are due to start in September 2010. As more information is received, we will of course, adapt the Year 9 curriculum accordingly.

Mrs P Parkash
Subject Leader – Key Stage 3 English

European Championship success

On the 5th September 2009 Houda , 17 year old brown belt and her younger brother Nassime Vernege-Fanus , 12-year-old black belt participated in the Tang Soo Do European Championship at the Kelsey Kerridge sports centre in Cambridge. There were over 300 participants of all ages and form all over Europe. Tang Soo Do is Korean martial arts run by the Grandmaster Jae C. Shin and is approximately 2000 years old.

This competition was a continuation from the National championships, which was held in Birmingham earlier on this year. In which Houda and Nassime both secured a place in the



European championships. Houda won two gold medals and Nassime were awarded two silver medals and a bronze respectively.

The competition was tough because both siblings had been placed in categories where there were either higher belts or older people in them. Nassime earned two silver medals in weapons and form techniques and one gold medal in fighting; becoming the European champion in his category even though he had to fight against boys up to the age of 15. Houda however after a hard hit to the groin by a women who was in her thirties, won two gold medals in weapons and form techniques and a bronze medal in fighting despite being the youngest in my category which was 17 and above.

Credit must go to their Tang Soo Do teacher Mr Harrt, without him this achievement would be impossible. He is an outstanding man and teachers, who loves seeing his students do well.

Overall it was a great experience and both students were delighted with their achievements. Now the hard work really starts as the Dagenham pair aim towards the World Championships in America next year July 2010. Watch Out Here Come The British!

The art of Tang Soo Do is still under funded and both Nassime and Houda will require sponsorship to compete at the worlds next year. If anyone is interested in helping the dynamic duo please contact Mr Goyette via the Robert Clack School address.



For Sale in the Information Centre

The Information Centre sells items of stationery to pupils at cost price. I have attached a poster to the back of the newsletter listing items available and prices.

PLEASE NOTE THAT HIGHLIGHTERS, DIVIDERS, LEVER ARCH FILES AND RING BINDERS ARE ONLY AVAILABLE AT UPPER SCHOOL.

Mrs Monk

School Uniform

The School aims to develop in its pupils a corporate identity. All pupils in Years 7 to 11 are expected to be appropriately dressed in school uniform at all times. All students in Year 12 and 13 are expected to follow the Sixth Form dress code.

For Girls	For Boys
Black Blazer with school badge	Black Blazer with school badge
Black tailored trousers (6-8" hem width) or	Black trousers
Black knee length skirt box pleated from the waist	White cotton shirt with collar
White cotton shirt with collar	School tie worn to waist length
School tie worn to waist length	V necked black jumper (optional)
Plain black or flesh coloured tights or black ankle length turnover socks	Conventional black leather shoes. *
Conventional flat leather black shoes with fitting heel and toe (no 'fashion shoes' e.g. stiletto heels, platforms or ankle straps). *	
V necked black jumper (optional)	
Narrow hair bands, which are in keeping with school uniform colours (Red, black or white)	

*Kicker shoes can be worn in school only if all the stitching and soles are black and any Kicker tags are removed. **KICKER BOOTS ARE NOT ALLOWED.** Boots, "Timberland", Lacoste, trainers, baseball caps and cardigans/tank tops are not allowed. Jewellery, including earrings, is not permitted. It may be confiscated and kept in a safe place until collected by parents. Also, extremes in appearance cosmetically such as make-up, false nails and unnatural hair extension or dye are not allowed. The Governors reserve the right to send pupils home who are inappropriately dressed

The following items are also not allowed onto the school premises: chewing gum, cigarettes, lighters, matches, correction fluids, aerosols, mobile phones, pagers, laser pens and portable music devices including MP3/4 players and

iPods. (The Governing Body allows all students in emergency circumstances to use the phone to contact home free of charge).

Medicine

A reminder to parents/guardians that if your child is on medication, this should be given to the school medical office who can then administer the medicine to your child and consequently instances of medicine being lost/not taken will be reduced. Many thanks for your cooperation.

Bicycles

A reminder to pupils that bicycles should not be brought to school. Also we have been informed by local residents living in the vicinity of the back entrance of the Green Lane site that they have been advised to lock the footpath which runs parallel to the area behind the lower school kitchens. Bicycles should not therefore be stored in this area. Any bikes in this area can be removed.

Medical Appointments

Whilst we understand that sometimes it is necessary for students to attend medical appointments during schools hours, we would ask that you keep such appointments to a minimum as it can be detrimental to your child's education for them to regularly miss lessons.

In addition please can parents be aware that if students are to be withdrawn from school part way through the day the school needs to have this in writing. It is important for our records that students' withdrawal is not requested over the phone. We thank you with your support in this matter.

Homework Club

Please can we make you aware that the Information Centre on Lower school is now open for students to complete homework and research until 6pm. It is staffed by two members of staff who are very happy to help with any homework queries your child may have. In addition the information centre has access to computers and research facilities which should enable all students to complete the homework they are set.

Dates for your diary

Thurs 1 October

New intake open evening for prospective pupils & parents (School closes at 2pm)



Mon 9 November

4.30-7.30pm Year 7 Parents meeting with Form Tutors

Holiday Dates

Friday 23 October

Break up for half term

Mon 2 November

Return to school

Thurs 17 December

Break up for Christmas

Tue 5 January

Return to School

Fri 12 February

Break up for half term

Mon 22 February

Return to school

Thurs 1 April

Break up for Easter

Mon 19 April

Return to school

Mon 3 May

Bank holiday

Fri 28 May

Break up for half term

Mon 7 June

Return to school

Tue 20 July

Break up for Summer

