Heckler

HECKMONDWIKE
GRAMMAR SCHOOL

Lees Cup Resumes

Let the Games Begin

I am very excited to share the House Calendar for the first half term with you!

Due to the current restrictions placed on schools, we are limited in the number and range of events that we can offer – however we are still determined to have a very active House System whilst keeping all staff and students safe. Boys sports will take place this half term, with girls sports next half term – alongside a range of other events such as House Art, Spelling Bee, E-Sports, Chess and more!

To get involved, students should speak to their Form Tutor or House Leaders!

Mr Peacock
Head of House System

The provisional days for football are:

HOUSE EVENTS
AUTUMN TERM ONE

BRONTE
CLARKE
HOULDSWORTH
PRIESTLEY

WC 14 SEPTEMBER	**Student House Leaders Named**
WC 21 SEPTEMBER	**Year 11 Boys Football**
WC 28 SEPTEMBER	**Year 10 Boys Football**
WC 5 OCTOBER	**Year 9 Boys Football**
WC 12 OCTOBER	**Year 8 Boys Football** **Year 7 E-Sports**
WC 19 OCTOBER	**Year 7 Boys Football** **Year 8 E-Sports**

OTHER EVENTS COMING UP: House Art, Spelling Bee

Notices

Due to the new timetable, it is difficult to run boys and girls events together, so girls events will be next half term.
If you wish to sign up for anything, please see your Form Tutor / House Leader.

- Wc Monday 21 September Y11 Boys football – Thursday & Friday (Lunch A)
- Wc Monday 28 September Y10 Boys football – Tuesday & Wednesday (Lunch B)
- Wc Monday 5 October Y9 Boys football – Tuesday & Wednesday (Lunch B)
- Wc Monday 12 October Y8 Boys football – Monday & Tuesday (Lunch B)
- Wc Monday 19 October Y7 Boys football – Thursday & Friday (Lunch A)

Year 11 Boys House Football Results

The House System kicked off to a roaring start, with Year 11 boys football being the first event this year. Due to Covid, football has now changed to 12 minute games of 7-a-side in Year group teams, which presented a new faster playing format for the boys.

The first round saw both games end two nil, with Priestley and Clarke coming out on top. The battle continued into round two with two draws after some stunning fast play and fantastic goalkeeping from the boys. Houldsworth and Clarke Houses were well motivated by new House Leaders Mr Mullaney and Miss Sutcliffe.

It was all to play for as we headed into Round 3 on Friday as Clarke played Houldsworth and Bronte took on Priestley. A strong performance from Clarke led them to victory for Year 11, with Priestley coming in second, followed by Bronte then Houldsworth.

Full scores:

Round 1 - Houldsworth 0 – Priestley / 2 Clarke 2 – Bronte 0

Round 2 - Houldsworth 1 – Bronte 1 Clarke 0 – Priestley 0

Round 3 - Clarke 2 – Houldsworth 0 Bronte 1 – Priestley 0

1st – Clarke 2nd – Priestley 3rd – Bronte 4th - Houldsworth

Department Focus: Computer Science

One of the fundamental concepts of Computer Science is algorithms, these sets of instructions that are designed to complete a task or solve a problem are the building blocks of all computer programs. Over the summer there has been a lot of bad press about algorithms and how they are used. This has given us in the Computer Science department the opportunity to explain to the students that there it is not the algorithms fault when it does not produce the results that were required. It has helped us to re-iterate the importance of good designs and thinking about what data you are putting into the algorithm and what you expect to get out. We are determined to give algorithms a good name again!

In Computer Science we like to set challenges to stretch the logical thinking skills of our students. We are constantly amazed at how well our students can pick apart puzzles that would stretch many people. At the end of last year, we set an escape room challenge to the Y9 students where they had to use a mixture of their problem-solving skills with their understanding of the Computer Science course. As always it was impressive to see how well they did and the students demonstrated the determination, commitment and above all resilience we expect from our excellent students and solved all the puzzles to complete the escape room
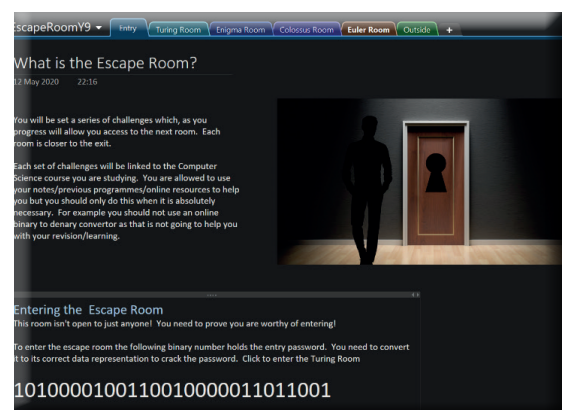
Maya Khan - Year 8

Maya Khan achieved reading the Holy Quran with (Tajweed) in less than 10 Months. She had 1-1 lessons for 30mins for 5 days a week by using Skype, Maya's teacher was based in Karachi, Pakistan. Below is what was achieved and how the correct way of reading and it's meaning.

Tajweed and its application can only be learned with a qualified teacher. The rules themselves can be studied independently, but their correct application can only be done by listening to, reciting to, and being corrected by, a qualified teacher of the Qur'an.

The purpose of the science of Tajweed, in essence, is to make the reciter proficient in reciting the Qur'an, observing the correct pronunciation of every letter with the rulings and characteristics, which apply to it, without any exaggeration or deficiency.

A child (5–8) of an average IQ could be able to read Holy Quran within three years . As it takes time to make them learn rules first "Qaida e Tajweed". For a child of 10 - 13 with average IQ,it may take 1 and half year or 2. For elders, it could be 1 year or less, depending upon the interest, time they give to learning.

What an acheivemnt Maya - Well Done!

Flynn McDougall Year 7

Flynn was a finalist in this year's AstroPi Mission Space Lab Project from the European Space Administration and Raspberry Pi.

This is a project where young people write code that runs an experiment on the International Space Station. Flynn's project was attempting to find out what percentage of the Earth's water is stored in cloud form at any one time.

His project and report was graded as Highly Commended, and as a reward he got ask an astronaut a question during the finalists' webinar.

Some of the results of his project are displayed in the report overleaf, and the webinar was hosted here: https://youtu.be/HNiCbp-j9X4Y (Flynn & his little sister Lotte were featured from 53:21 – they got a really great answer from Luca Parmitano, the astronaut).

Excellent Flynn, Great News!

Mission Space Lab Phase 4 Report

Name: Creative-Coders

Team Chosen theme: Life on Earth

Team members' names: McDougall, Flynn;   McDougall, Lotte; McDougall, Bob
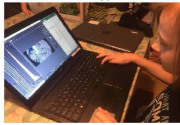
Organisation name: N/A

Country: United Kingdom

Introduction

In our experiment, our team (Creative-Coders) came up with the question "What is the average percentage of the Earth's water stored in cloud formation at any given time?" Looking at it now it seems like an extremely complicated question! We know that the vast majority of the Earth's water is stored in waterbodies on the surface, so, it would be interesting to find out the percentage of the water that is in the clouds. We were expecting to find a small percentage of the Earth's water is stored in clouds.
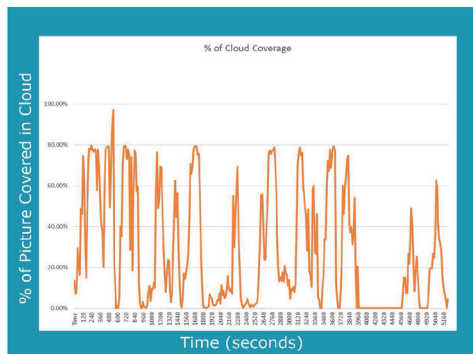
Method

We came up with our question after having a discussion about possible themes and ideas. We then decided to choose this question because of its relevance to our planet's changing state with regards to climate change. Furthermore, we thought it would be interesting to see if the answer will continually change over time. After choosing the question we then started to think about how we could answer this hypothesis. We later opted for the solution of taking a series of pictures, 1 every 15 seconds. As most of the project would be done on Earth, the coding could be simple and minimal. As we have been attending Leeds Library Code Club, we got some help and advice on stopping the code after it has been run for the 3 hours allowed (something we overlooked until then).
We analysed the pictures when they arrived back on Earth by using GIMP's histogram tool to discover

how many pixels were taken up by clouds in each individual picture. We input this number into a spreadsheet and applied a calculation to give us a percentage of cloud coverage in the whole image. We repeated this process until all our photos were analysed.

Results

The percentage of cloud coverage in the complete set of photos was **28.36%**. We worked this figure out by applying the following formulae:

For working out the percentage: $X=(Y/2073600)/100$ (2,073,600 was the number of pixels in the whole image file.)
For finding the average percentage: $X=SUM(D2:D350)/349$ (349 being the total number of visible images)

Pic #	cloud pixels	% of image			Results
1	281779	13.59%			
2	149357	7.20%			28.36%
3	167266	8.07%			
4	609476	29.39%			
5	429831	20.73%			
6	339105	16.35%			
7	1009431	48.68%			
8	954915	46.05%			
9	1545673	74.54%			
10	1270101	61.25%			
11	593768	28.63%			
12	311592	15.03%			
13	1091967	52.66%			
14	1519390	73.27%			
15	1621855	78.21%			
16	1606280	77.46%			
17	1652725	79.70%			
18	1604356	77.37%			
19	1589359	76.65%			
20	1614098	77.84%			
21	1602459	77.28%			
22	1199713	57.86%			
23	1610845	77.68%			
24	1444414	69.66%			

Above: a visual of our spreadsheet ↑

28.36% is just relevant to our images, not the Earth's total cloud coverage, as we did not have enough data to work this out (we only have the images from our 3-hour experiment, and we do not know what distance was covered).
Our method does not actually help us see the density of the clouds however, so it is hard to know how much water there actually is held in the cloud formations. As our percentage is just based on the visible cloud coverage, we feel that our results are not as accurate as we would have liked.

Above: a graph of cloud coverage compared to time ↑

The graph above is a visible representation of the information we collected, and it displays the percentage of cloud coverage over the 3 hours for which the experiment was running. There is a pattern we can see in this graph: the maximum percentage goes down over the time of the experiment, but because the experiment was run over a relatively short amount of time, we doubt it has any major meaning.
Overall, although rather basic, we feel like the results of this experiment give us a good basis to build upon. In our conclusion we will theorise more about what elements of our experiment we could have enhanced to have gained a more precise result.

Conclusion

We quickly became aware that our experiment was rather limited. We believe this would be a better experiment if we had more data for it to be accurate. Aspects that this experiment failed to address were:
- not being able to use the images that were taken at night. We are not sure how we would take photos of cloud cover at night, but these images should definitely form part of our calculation.
- we would need to measure the density of the clouds which would mean we would need more specialised equipment.

- longer airtime and a greater selection of geographical regions covered would help us get a more accurate global figure.

The experiment brought to light a number of questions such as:
- would the season in which we did the experiment make a difference?
- would our results change over a dramatically longer time-frame, for example; five, ten or even twenty years?
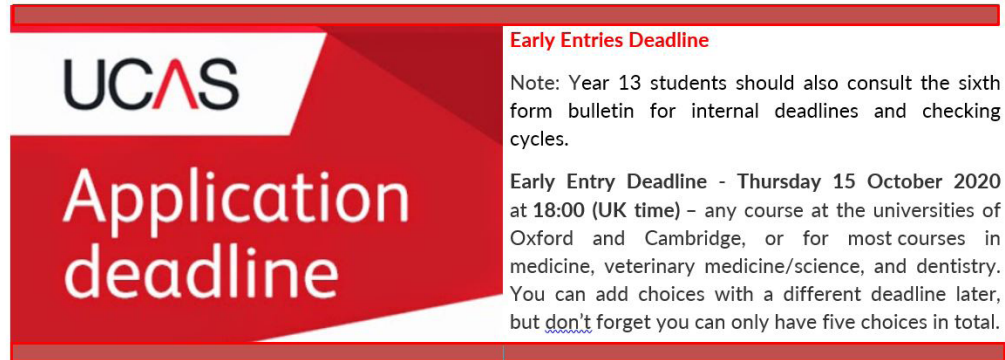
These are definitely factors we would like to explore if ever we got the opportunity to run the experiment again.
In short, while we enjoyed the experience tremendously, we conclude that a lot more data and detail is needed to answer the question we posed.

-Creative-Coders

Notices

Sixth Form

Early Entries Deadline

Note: Year 13 students should also consult the sixth form bulletin for internal deadlines and checking cycles.

Early Entry Deadline - Thursday 15 October 2020 at 18:00 (UK time) – any course at the universities of Oxford and Cambridge, or for most courses in medicine, veterinary medicine/science, and dentistry. You can add choices with a different deadline later, but don't forget you can only have five choices in total.

Notices For All

Latest Information From Department for Education

If your child has:
a high temperature
a new, continuous cough, or
a loss of, or change in, sense of smell or taste

This could be a sign of coronavirus

Book a test

If your child has:
a runny nose, is sneezing or feeling unwell
But they don't have:
a high temperature
a new, continuous cough, or
a loss of, or change in, sense of smell or taste

These are
not normally symptoms of coronavirus

Seek advice from a pharmacy, dial 111 or see your GP

Careers

Want to know more about apprenticeships?
Have questions about your options?
Need to talk about university or careers?
Need a CV or help with interview preparation?

Call into **Careers Drop-in**

Year 13	Mon-Thurs	11:00-11:30
Year 12	Mon	12:45-13:15
Year 11	Mon-Thurs	10:00-10:30
Year 10	Tue	13:45-14:15
Year 9	Wed	13:45-14:15
Year 8	Thurs	13:45-14:15
Year 7	Fri	12:45-13:15

in B0:13

You can email the team on
CareersTeachers@heckgrammar.co.uk

Need Mon£y?

For books or kit?

For school or college?

Live in Dewsbury?

Under 25?

APPLY FOR A GRANT

By: **31st October 2020**

From: **The Wheelwright**

Old Boys War Memorial Fund

Parkinson922@btinternet.com

The fund is there to support the education of students under the age of 25 years who are, or whose parents are, resident in the former County Borough of Dewsbury.

In short, any of your students that live within the WF12 and WF13 postcodes could be entitled to money.

The trustees can make grants

For outfits, clothing, tools instruments or books.
To facilitate travel in furtherance of courses (but not travel expenses to and from home)
Applications must be made in writing by post via the Application Form. Applications via e-mail will not be accepted or considered. Applications will not be acknowledged individually.

The trustees are next due to meet in the second or third week of November. Applicants will receive written confirmation of the outcome of their application by the end of November.

Areesha Aziz (13 SHL) is fundraising for Rafah International, a charity dedicated to supporting humanitarian relief for Yemen.

She has already raised £730 towards her target.

Check out her 'Walk for Yemen' Just Giving page.

You can read more about the devasatating war in Yemen at
https://www.amnesty.org/en/latest/news/2015/09/yemen-the-forgotten-war/

Diary Dates

Wed 30 September - Year 12 Virtual Information Evening - Further information to follow
Mon 12 - Fri 16 October - Year 11 Revision Week
Tues 13 October - Year 7 Remote Pastoral Parents' Evening