

Heckler

Week 4 Published 2 October 2020



HECKMONDWIKE
GRAMMAR SCHOOL

HGS Esports

Introducing HGS's Esports Teams 20/21

We'd like to thank all students who applied to be a part of the school esports team. When applications closed, we had a total of 99 responses all eager to participate in the British Esports Championships. After great deal of deliberation, we've reached a conclusion and selected the students who will be representing Heckmondwike Grammar School in Rocket League, League of Legends and Overwatch:



Rocket League Team 1:	Rocket League Team 2:
<ul style="list-style-type: none"> Corey Penn Ali Musa Alfe Eyre 	<ul style="list-style-type: none"> Adwick Singh Asim Loonat Yusha Jeena
League of Legends:	Overwatch:
<ul style="list-style-type: none"> Omar Jesry Imran Hossain Daanyaal Nawaz Ty Chatterton Haadi Hassan 	<ul style="list-style-type: none"> Wiktor Liskiewicz Oliver Mollitt Connor Hansen Hrishikesh Venkatesh Jazib Imran Dylan Bonham

We'd also like to extend a thank you to sixth formers Cody Lee, Dileep Darjipati, Thomas Hunter and Michael Marples who have kindly volunteered to help run and organise the events alongside staff.

Thank you once again to **everyone** who volunteered their time to take part. We'll be keeping a record of all applicants in case we need people for last minute substitutions. If you would like to follow the competition, please follow the British Esports twitch channel where they will be broadcasting select games live every week (<https://twitch.tv/britishesports>).



Mr Parsons and Mr Stokoe

Department Focus: Design & Technology

The Design and Technology department is celebrating another year of fantastic academic performance despite the challenge and disruption of the Covid 19 pandemic. As a school we were well prepared and quick to embrace the world of digital learning as we quickly slipped from our traditional classroom based education into a new and exciting world of apps and resources. Whilst it was difficult to anticipate the full extent of the lockdown, our students continued to surprise and amaze us with their creativity and ingenuity as teaching and learning moved online. Despite the obvious limitations of not being in a Food room or DT workshop, many of our students highlighted a tremendous level of flair and creativity that truly epitomised the spirit of our subject. In this week's Heckler we will look at some of the fantastic student projects that have been completed!

From Microsoft Teams to live lessons and Seneca, our day to day lives were changed in a way that was almost unimaginable a year ago. In Design and Technology all students were allocated teaching groups, with remote learning tasks set for students to complete at home.

One task that we set both our Year 7 & 8 students was the marble run assignment which was loosely based on the Dyson Foundation Marble run challenge. In this activity, students (and perhaps a few parents and grandparents!) were challenged to produce a marble run that would take exactly 30 seconds for a marble to complete. We saw some phenomenal responses from students with over 400 students completing and submitting a video response of this task.



Alice Kernick Marble Run Year 8

Students used a range of means to interact with teachers including the use of mobile phones to access assignments, photograph their work and submit the assignment. A teaching and learning revolution. Youtube GCSE video guides that have been shared by the OCR exam board were also a good tool during lockdown, some of these were live lessons for students to engage with teachers. This saw whole families getting involved and it was excellent to see team building at home. Really good!

Final iterations AO2.3

...e and scale of my product I set about making a scale model of it so that I could see it to be. This was as accurate as I could make it, with working mechanics and helped envision that I had in my head. The holes in the side of the model show how it will be made from acrylic. The wooden dowels are also in place of the bamboo and were stuck using double sided tape so I could change the positions easily and reuse them with the model.



...le of issues with the model, noticeably that the dowels did not run parallel to the front support from the tape, and that the front was an odd shape. Luckily both these were fixed when proper materials are used as the rigidity of the acrylic will mean the front will be the same shape and the glue used to attach the dowel to the back will be much stronger. It is now right with enough space to fit birds or the user's hand without being too hard to open and too much wind.

(will keep these for the final product):

ht – 20cm

th – 25.5cm

lh – 20cm

di – 3.5cm

di – 3.5cm (big enough for most garden birds to fit though)

Dimensions – W14cm x L25.5cm (ample space to fit the electronics needed on the inside)

...isions as well as the dimensions for my electronics I set about 3D modelling my design to see how everything would look when put together. After some practice on google sketchup about digitalising my design. I made the roof transparent so I could see the intruding parts into the wood but it will not look this way in real life.



Drawbacks and solutions

Though 3D modelling a few issues cropped up that were not highlighted in cardboard modelling.

1. Because of the thickness of the wood for the roof (3cm, in order to house the electronics) the front panel had to extend much further out than I first made the product use more acrylic as well as being much less smooth and pleasing. To solve this I trimmed down the front so that there was more space under the roof.



Re-designing the front panel to cut off much of the excess material under the roof and hanging over the sides.

Drawbacks and solutions

Though 3D modelling a few issues cropped up that were not highlighted in cardboard modelling.

2. The edge where the front panel meets the roof exposed an area that could easily seep through any small gap and into the box. This could cause rotting of the wood, electronics, rotting of the wood and condensation that would mean the roof is not transparent.

To solve this problem two ideas came to mind. :

- Add two extra wooden slabs to the roof which would hang over the front to stop water getting in. In order to stop this from preventing the front from opening one of the slabs would be attached to the roof, and so be stationary and the other is attached to the front panel and so will swing away from the front when it opens.
- Use small 2mm diameter neodymium magnets imbedded in the front panel the thickness of the main body of the house. These magnets would hold the front panel in place under an overhanging roof but not hold the front panel would not fall off.

I felt that the first idea with the wooden slabs on the roof would be more effective than the magnet one. Introducing magnets adds extra weight to the product, as well as increasing the risk of breaking the main body of the house. Adding the holes to house the magnets would be a very precise and difficult task. Adding the slabs on the roof, however, would use materials I already had and be simple and effective.



Altering the roof to include a hangover that will stop water getting into the bird house.

Assessment

I addressed the problems identified through modelling my design in a CAD software.

Next steps

To draw up my final design with dimensions and create a plan for producing it.



Joshua Scaife

Countryside To involve adults and children in the countryside by promoting biodiversity and wildlife

2.1 Generation of Initial Ideas

① After completing my research and forming an idea for my product, I began to sketch my initial ideas.

Positives:

- Made of a durable and wipe-clean material that is also water-resistant
- Separate recycling and general waste sections.
- Easy to use- colour coded and labelled
- Will hold a days worth of litter
- Good for litter pickers

Negatives:

- Large and bulky- not very compact
- Wouldn't be able to use with a backpack, which is a necessity for most walkers and campers.
- I would struggle to make it
- Not eco-friendly material

②

Positives:

- Made of washable material that can be reused (polypropylene)
- Compact when not in use
- Multiple ways of carrying- versatile, inclusive design
- Separate general and recycling bags
- Colour coded and labelled for high usability
- Potential for graphics to be printed on

Negatives:

- No double usage- no other USP
- Not highly waterproof- water could potentially seep through

③

Positives:

- Lots of room- good for litter pickers and conservation workers
- Colour coded and labelled for high usability
- Can fold down for more compact storage
- Separate recycling and general waste sections
- Made of biodegradable material, will not have a negative impact on the environment at the end of its life span

Negatives:

- Very bulky to carry
- Shorter life span
- Not washable
- Potential for litter to escape into the surroundings with wind

Mine and my stakeholder's thoughts:

- Fits in with a lot of my stakeholder needs however, it is a bit big and excessive for carrying only litter and would also be difficult for me to make. My stakeholder says that she wouldn't be able to wear her backpack if she was using this as well
- Offers multiple ways of carrying, is compact and washable. My stakeholder liked the idea of these and would like to see me develop this into something which was more multi-purpose
- Biodegradable and can fold down. My stakeholder said that she wouldn't personally use this as it would be difficult to carry as it is so bulky but she can see how this would be appropriate if my target users were nature conservationists who frequently did litter picking



Hannah Grayson GCSE Project - Countryside Design Brief - 'Encouraging people to be responsible with their rubbish when visiting the countryside'

Cora Smith

GCSE Project - Countryside Design Brief - "To help bring the countryside to urban areas"

In this design Cora designed and developed a gardening station that children could use to plant and grow a variety of plants at home or at school.



It is pleasing to see that some of the greatest successes have been the work that students have produced as part of the remote learning.

As a school we know that we are now far more prepared to deal with future remote learning.

Well done to all students



Diary Dates

W/C 12 OCTOBER - YEAR 11 REVISION WEEK

19 OCTOBER - ENTRANCE EXAM - SCHOOL CLOSED TO STUDENTS

23 OCTOBER - STAFF TRAINING DAY - SCHOOL CLOSED TO STUDENTS

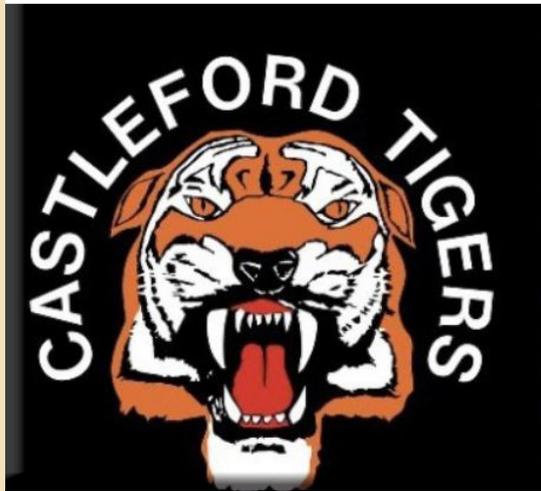
26 - 30 OCTOBER - SCHOOL CLOSED HALF-TERM WEEK



TOUR DE FORCE

This Weeks Stellar Students

Woody Walker 10H2



Woody has been signed for a scholarship with the Super League club, Castleford Tigers. He will train and play amongst their youth set-up.

Absolutely fantastic news!!

Miraya's Marvellous Maths



Year 7 student Miraya Vyas (7B1/7.1) demonstrated her knowledge and understanding of indices last weekend when she successfully solved the weekly puzzle of a National Maths Newsletter which has 3732 (or $22 \times 3 \times 311$) subscribers from all over the UK. Ms Jarvis, who posted the puzzle on the Virtual Maths Club Teams page on Friday afternoon, shared Miraya's working out with Chris Smith, the author of the newsletter and Scottish Teacher of the Year 2018, and he responded in gif form (below). Miraya now has her sights set on the 19th Annual National Cipher Challenge which launches later this month. This year's challenge has a WWII theme and is enticingly called Tinker Tailor Tourist Spy.

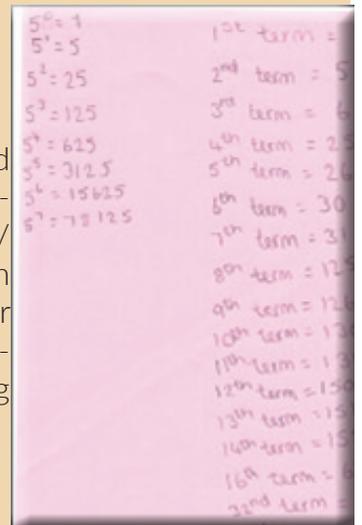


Miraya now has her sights set on the 19th Annual National Cipher Challenge which launches later this month. This year's challenge has a WWII theme and is enticingly called Tinker Tailor Tourist Spy.

THIS WEEK'S PUZZLE:
The increasing sequence
 1, 5, 6, 25, 26, 30, 31, 125, 126, ...
 consists of positive integers that can be formed by adding distinct powers of 5.
 That is, $1 = 5^0$, $5 = 5^1$, $6 = 5^0 + 5^1$, and so on.
 What's the 75th integer in this sequence?

Watch this space!

If you are interested in joining the Virtual Maths Club and/or taking part in the National Cipher Challenge www.cipherchallenge.org please contact Ms Jarvis.



NOTICES

HOUSE ART COMPETITION

Create a large scale Artwork design based on your House community.

Think about your house colours, values, strengths and winning events. What makes your house community so special?

This can be a collaborative piece, but both team members must be from the same year group.

The winning entries will then be created on a much larger scale to be featured in the House Display Boards!

There are two competitions within this event

Junior – Year 7, 8 & 9

Senior – Year 10, 11 & 6th Form

Ask your tutor or Miss Bannister for a registration form.



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	12:45-13:15
Year 7	Fri	12:45-13:15

You can email the team on careersteachers@heckkarammar.com in 80:13

HWSG North Leeds Parents & Children Group
Invites You to
Online Trivia Night
All proceeds goes to Heckmondwike Grammar School

FEES: £5.00 PER PARTICIPANT

Saturday, 31st Oct 17:00 to 18:00 Hrs

ALL REGISTRANTS GET A CERTIFICATE OF PARTICIPATION

Win amazing prizes including Covid-19 Hygiene Kit and fantastic Surprise gifts

RSVP at:
<https://tinyurl.com/yyg49dk9>

OR Just scan the QR Code in your phone camera

TEMPEST
PHOTOGRAPHY

**Deadline for orders
10 October**

****Please order online****



Please could we ask that parents picking up their child kindly respect the local residential areas and do not block driveways, or make movement for local residents impossible. If you could consider parking a short distance from the school, rather than directly outside this may ease some of the congestion and keep everyone safe.

Thank you

NOTICES cont



HECKMONDWIKE
GRAMMAR SIXTH FORM

UCAS

Application deadline

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.

University widening participation schemes (Y13)

• See the separate presentation for more detail.

Newcastle PARTNERS

- Add a 'P' in the further details section on Ucas.
- Apply online after your Ucas form has been sent. Select Mr Oxby from the drop-down menu.
- Deadlines:** Thursday 15 October (Medicine and dentistry); Friday 15 January (other courses)

Access to Leeds

- Complete your section of the [application form](#) and e-mail to Mr Oxby.
- Once he has returned it, upload onto Leeds' web portal.
- School deadlines:** Thursday 15 October (medics and dentists), Friday 15 January (other courses)

York Access

- Download and complete the [application form](#).
- Ask Mr Oxby to write a supporting reference.
- Return to York before or at the same time as your application is sent off. access-scheme@york.ac.uk
- School deadlines:** Thursday 15 October (medics and dentists), Friday 15 January (other courses)

All other programmes... to let Mr Oxby know of any requirements from the school... week to turn around a reference/online verification.

QUEEN'S UNIVERSITY BELFAST

UNDERGRADUATE VIRTUAL EVENTS

Autumn/Winter 2020/21

DISCOVER A WORLD OF OPPORTUNITIES

RUSSELL GROUP

Register at go.qub.ac.uk/ugevents

Volunteering opportunity

The Kirklees Volunteer Befriending Service is currently looking for volunteers to support adults with mild to moderate mental health needs to help to reduce social isolation. Volunteers will be matched to a client to encourage access to support within the community to build confidence and social skills.

The role will require both face to face and phone support; should volunteers need to access the community you will be provided with respective PPE as per government guidelines.

The Service can consider applications from students aged 18 or due to turn 18 over the next few weeks.

Further information can be [found here](#).

Lancaster University subject resources

Why not stretch your engagement with your favourite A levels by exploring Lancaster's new [Subject Resources page](#).

It features lots of **online lectures and reading** aimed at aspiring undergraduates in a **range of disciplines**.

Need Money?

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