

CLASS OF THE WEEK!

Mrs Lavender would like to award 9M/Ma2 with our 'class of the week' award.

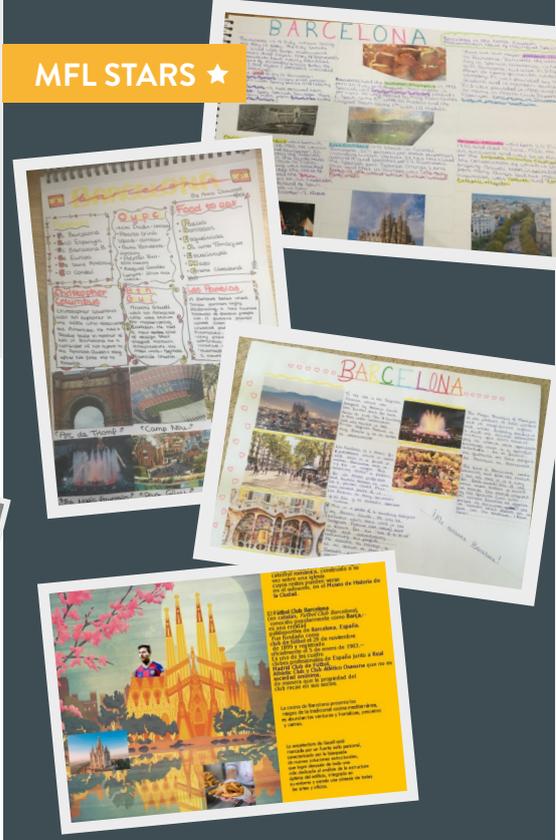
This Year 9 class have been actively using their independent learning skills to work through new topics and are working at a high level as a result. They are happy to ask questions to check their understanding with their teacher and have produced some creative posters to aid their future revision.

CLUBS & ACTIVITIES:

Over 50 pupils and teachers joined last week's remote debate to discuss the motion: 'This House would arm the police', which was opposed with 24 against, 9 in favour and 5 abstentions.

Following last week's music quiz, with questions written by the Dean, this week Year 13 pupil Michael D puts us to the test [here](#).

MFL STARS ★



BOARDING

Alongside their studies, our remaining Wilmot House boarders have been supporting their boarding family (Charlie and Theo F from Hereford Cathedral Junior School) with their learning at home tasks by acting as customers for their 'shop'.



For those boarders who have returned home, remote learning has presented different challenges - not least the different time zones - and we have been pleased to receive some very positive feedback on their experiences, including the following message: "Jerry's mum just would like to say a massive 'Thank you!' to everyone from HCS who has worked so hard during this difficult time. Jerry's family really appreciates all the effort and the pastoral care that HCS has given to the international students to make sure they can still receive their quality education, and also caring about everyone's mental health etc. We all hope this crisis can be over soon and to see a super lively campus like before."

ENGLISH: Year 10 have responded creatively to one of their GCSE set texts: Louis MacNeice's 'Prayer before Birth'.



REMOTE PRACTICALS:

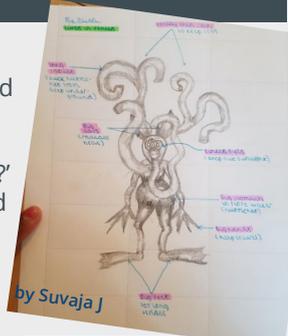
Year 10 chemists have undertaken experiments at home looking at combustion of hydrocarbons.



Well done to our MFL Stars of the Week: Year 9 have been working on 'What to see in Barcelona' in Spanish, with Ella B, Lily B, Anna D, Tobias W-H, Oliver B and Otis J creating some brilliant pieces of work. In French, Isabella H (also Year 9) made macarons and wrote her opinion on them as an outstanding extension task.

PHYSICS:

Year 8 have concluded their 'Space' topic by investigating 'Are we alone in the universe?' They have researched exoplanets, and designed aliens adapted to life away from Earth.



CHEMISTRY: Our Year 12 chemists have made a head start on next year's studies with their 'Transition Metal Complexes' topic. They have been gaining vital independent learning skills through conducting their own research into different compounds, their appearance and uses.

Lara M-G 6L2

TRANSITION METAL COMPLEXES:

1 - Cisplatin

$Pt(NH_3)_2Cl_2$

Cisplatin has a square planar shape

What is the metal ion?
Platinum, in a 2+ oxidation state

Are there any relevant counter ions?
No, cisplatin is a neutral complex

What is the systematic name?
cis-diamminedichloroplatinum(II)

What is the co-ordination number?
4

Are there any isomers?
As the name might suggest, cisplatin is the cis isomer of the complex. The trans isomer equivalent is transplatin

What are the uses of this complex?
Cisplatin is a chemotherapy drug used to treat various cancers, and can be used alone or in conjunction with other medications to slow/stop cancer cell growth

What colours might it appear?
Cisplatin can appear from white to light yellow

Co-ordination number - 6

Prussian Blue

Iron(III) Hexacyanoferrate(II) Metal - Iron (ON of +2)

Navy blue colour

Octahedral shape

$Fe_3[Fe(CN)_6]_4$

Six CN ligands

Used as a pigment in oil and watercolor paint and in dyes as it is bright, cheap, and nontoxic, it has been used in paintings including Van Gogh's *Starry Night*. In medicine it is used in treatment for people with heavy metal poisoning including from Thallium and Cesium. Prussian blue can be used to detect iron in biopsies by pathologists. It can be used for spotting metal surfaces as it doesn't abrade the surface.

Dichlorobis(ethylenediamine)cobalt ion

In the form of dichlorobis(ethylenediamine)cobalt(II) chloride, cis isomer: violet solid, Trans isomer: green solid

Metal - Cobalt (ON of +3)

Co-ordination number - 6

Usually forms Dichlorobis(ethylenediamine)cobalt(II) chloride

Octahedral shape

$[CoCl_2(en)_2]^+$

Dichlorobis(ethylenediamine)cobalt(II) chloride is used in the developments in coordination chemistry. When the trans isomer is heated, the cis isomer can be formed. Both isomers have uses as intermediates for the preparation of cobalt salt complexes, and in stereochemical studies.

5 MINUTE FUN!

This week pupils have enjoyed:

- Trickiest French and Spanish pronunciation challenges from our language assistants
- OH Will Ford's 'Wall-Sit' challenge
- Mr Howell's 'Name That Designer' challenge

5 minute fun

CONGRATULATIONS TO...

Holly C (Year 8) who won the Headmaster's Weekly Challenge with her explanation of why Mr Smith's tin can was able to balance. Also, Ella B (Year 9) who won the Bird Identification Challenge.



Jack H (Year 10) who has won the Herefordshire Key Stage 4 category of the 'Poetry by Heart' competition with his recitations of 'If' and 'A Verandah Ceremony'.

Gedas V (Year 9) who is the PE Department's Remote Learner for this first half of term.

