

# NEWSLETTER – 21<sup>ST</sup> APRIL

## MESSAGE FROM MRS SARAH RICHARDSON, HEAD



On 22 April 1993, at the age of just 18, the South London schoolboy Stephen Lawrence was murdered in an unprovoked racist attack. After the initial police investigation, five suspects were arrested but not convicted. There were serious questions about the way in which the case was investigated and a public enquiry followed, resulting in the 1998 publication of the Macpherson Report, which has been called ‘one of the most important moments in the modern history of criminal justice in Britain’.

In March 2023 Baroness Casey published her review into the Metropolitan police, commissioned following the murder of Sarah Everard in March 2021 by a serving police officer. This independent review into the standards of behaviour and internal culture of the Metropolitan Police Service found that racism, homophobia and misogyny are institutionalised in the Met. Although the Macpherson Report led to significant changes in attitudes to racism, to the law and to police practice, it also paved the way for a greater understanding of discrimination of all forms and new equalities legislation. Baroness Casey makes it very clear that there are many fantastic police officers, but at the same time that the Met has not dealt with the challenges it faces in the areas of racism and discrimination.

The School has had two recent assemblies on this subject matter: last term on the Casey review; and this week a brilliant presentation from the House of Equality on Stephen Lawrence.

Taking responsibility for our behaviour towards others starts at school. ‘Banter’, in any form, is unacceptable. We look to Mount House students not to allow such behaviour to go unchallenged, difficult as this might be. It is important that students are not bystanders, but instead are upstanders. They should – politely – point out that racist, homophobic and misogynistic comments are not acceptable.



To those celebrating Eid today, we wish you  
***Eid Sa’id.***

## SCIENCE WEEK

After all of the excitement of science week, Mount House School students were challenged to complete their own British Science Week projects at home during the holidays.

### *Seasonal Sensory Mandalas*

A Mandala is a geometric shape (the word means circle in Sanskrit). As part of the community pack, the British Science Association challenged students to create their own seasonal sensory mandalas from things they can find in nature.

Isabela Dugdale Year 7

I decided to do this as my British Science Week Easter Challenge as we had just cut all our rhubarb in our vegetable patch. When we cut it, we always throw the leaves away into the garden waste as they are poisonous so there is nothing you can do with them. I decided I would use them as the main element in my mandala. We had also bought some plants from the garden centre we had not put in pots so I could also use them and I collected other bits from the garden to use. As it was a community project I did it with my brother. Below is the design we made.

As it was a science challenge I also decided to research if the leaves are poisonous as you can eat the stalks so I wanted to see what was in the leaves and not the stalks that made them poisonous. This is what I found out: rhubarb leaves are considered poisonous to humans and animals because they have a high concentration of oxalic acid. Oxalic acid can cause difficulty breathing, nausea and even kidney stones. However, you would have to eat a large number of leaves to reach these toxic levels. The oxalic acid is not found in the stalks of the rhubarb so they are safe to eat.

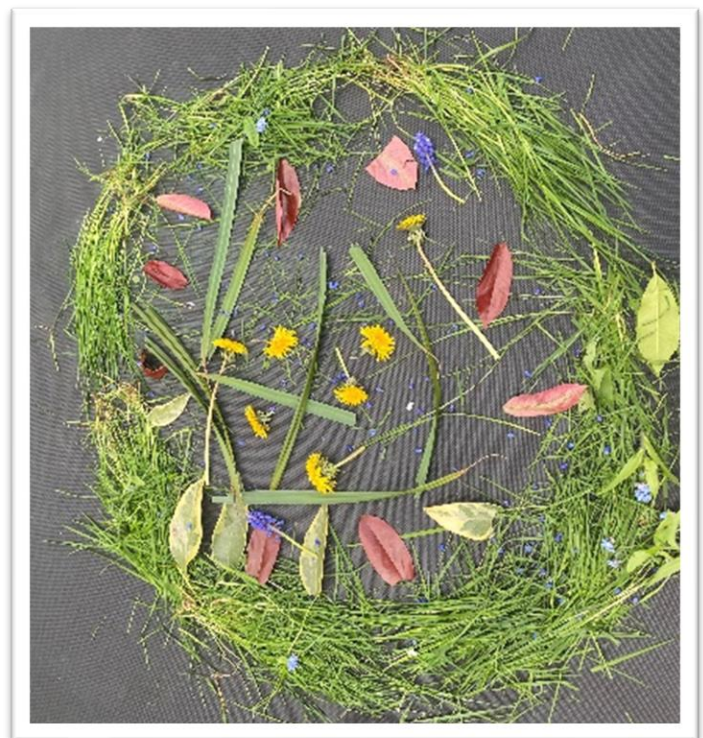




More seasonal sensory mandalas:



Y7 Tatiana Moss busy working on her mandala



Seasonal mandala produced by Tilly Hale

Some other examples of the exemplary science work by students include:

Y7 Jasmine Price's paper plane.  
A design challenge set by Brooklands Museum



Science week

Connections are what link everything together.

**Learning: It's ALL About the Connections**

- Neural Connections
- Human and Social Connections
- Connecting with Oneself
- Connecting of Concepts
- Connecting with the Internet
- Connecting Past, Present, & Future
- Connecting of Objects to One Another - Making
- Connecting of Human Networks (PLNs)

A personal connection is a genuine bond formed between two people wherein each person feels seen, heard and known. Whether or not we're able to acknowledge it, each of us carries an innate need to connect with others. A neural connection is called a synapse.

The links between neurons are called synapses. What is a synapse, and what happens there? It's basically a connection: one cell

Y7 Purity Sigei and Maria Ratcliff created a poster based on the British Science Week theme of "Connections"

1. Radioactivity refers to a type of atom which has too much energy, making it unstable. It gives off energy as it tries to become stable. It is this energy we can detect – yes
2. What comes to mind when you hear the word 'radioactive'? - nuclear waste, nuclear power ect.
3. To visualise a radioactive atom, imagine a wet dog. To become comfortable the dog shakes the water off. The water on the dog represents energy; the atom will 'shake off' energy until it is stable.
4. Radiation is all around us. Look at the everyday items you have been given as cards or objects. Do you think they are radioactive?
  - Rock – yes because some emit radon gas
  - Watch – yes because some radium is used to make them, but modern ones are not radioactive.
  - Smoke alarm – yes because ionisation smoke alarms contain a radioactive source called americium 241.
  - Brazil nuts – yes because Brazil nuts are among the most radioactive edible nuts, as they contain high levels of radioactive elements such as radium and potassium.
  - Lo – salt = Salt substitutes are radioactive because they contain potassium chloride, and all potassium contains the radioactive beta-gamma emitter potassium-40.
  - Banana – yes because they contain high levels of potassium, and a small amount of this is radioactive.
  - Apple – yes because all foods do have hints of radioactivity but not that much.
  - Duck – yes because they might swallow things that are for example small rocks.
5. Rank the items from most to least radioactive. Each group should start at the same time, your teacher will time you.
  1. Rock
  2. Watch
  3. Banana
  4. Brazil nuts
  5. Lo salt
  6. Apple
  7. Smoke alarm
  8. Duck

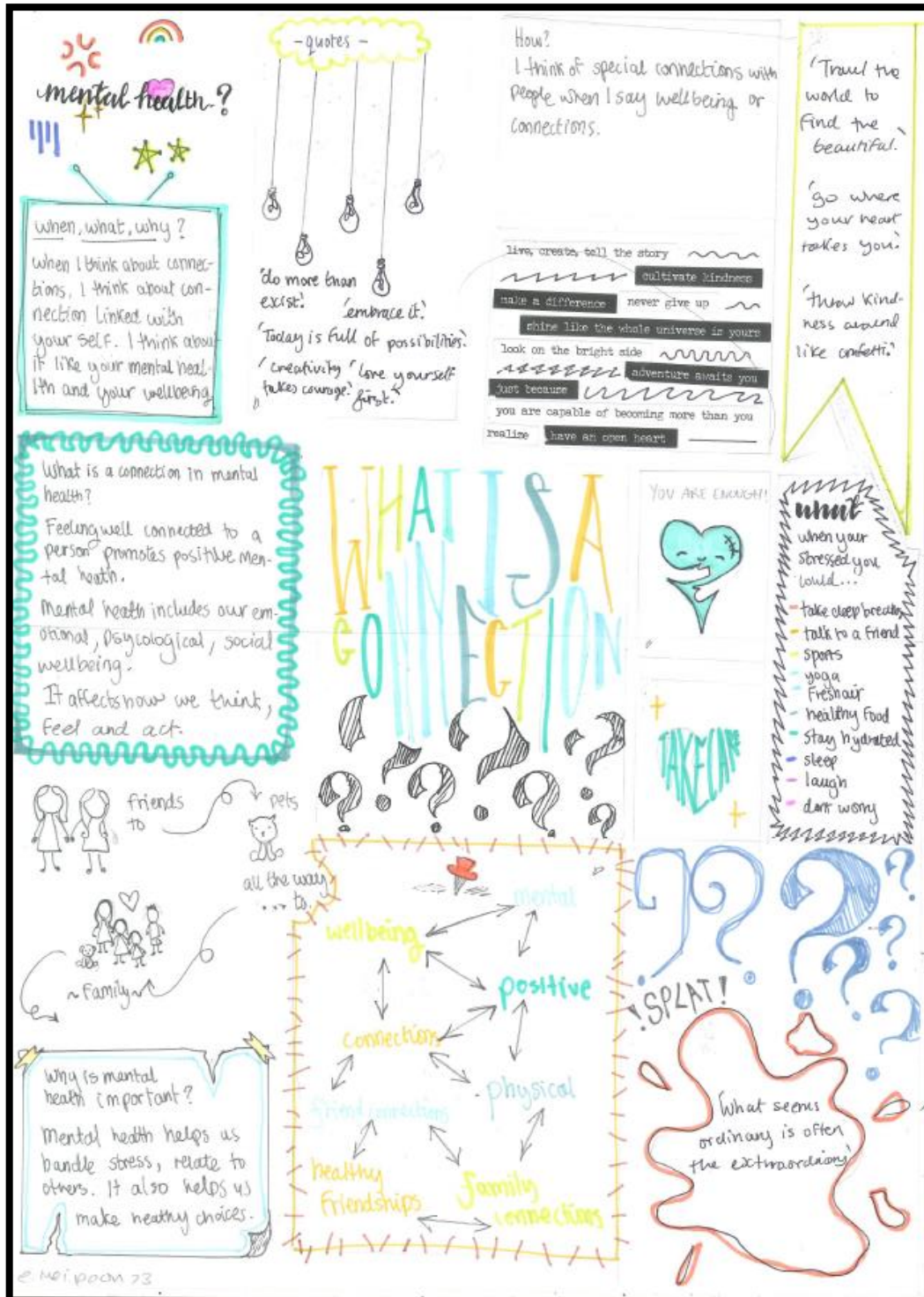


Y9 Will Arnold completed some very impressive research work on radiation.



**British Science Week Poster Competition - Top Five Finalists**

The science department has selected the top five posters that we have submitted to the British Science Association to be judged as part of the science week poster competition. As a reminder, these year's theme was "Connections". Good luck to all our top entrants.



Y7 Erin Poon (What is a Connection?)



# Conjoined animals

**what it means:** Being conjoined means two babies who are born physically connected to each other.

**COOL FACT:** Affected snakes possess two brains with distinct personalities, though one head typically dominates the other, which might lack a trachea, oesophagus, or even eyes.

**Connected!**

Sometimes after fertilisation an embryo wants to split into 2. Normally that would create twins. But if the embryo doesn't separate fully 2 embryo's will stay partly attached, and when they develop they stay attached.

Depending on where and how they are joined they could be able to be separated. Sometimes the 2 separated individuals Only have one lung or one kidney each.

Jasmine and Yuna

Y7 Jasmine Price and Yuna Aro (Conjoined Animals)

# FOOD CHAINS

**INFORMATION:** A food chain is a sort of cycle showing how different animals eat each other. They are important because they show relationships in ecosystems. There are lots of food chains. At the top of the food chain it is the saltwater crocodile, green plants, and some kinds of bacteria are the most important producers! There are primary producers, primary consumers, secondary consumers and decomposers are all part of a food chain.

**did you know?** Animals in water need plankton to survive but not always.

**did you know?** Did you know that in a food chain, energy is passed from one link to the next. Also a predator is carnivore.

**did you know?** Animals that are hunters are called predators but those who hunt are called prey. The largest mammal in the world is the blue whale. Did you know they can grow to over 30m long!

**FACTS:** Food chains and webs show how animals eat each other but some can also form friendships. Plants and algae are so clever they make their own food by using energy from the sun. Plants are called producers because they absorb sunlight and use it to produce their own energy. This process is called photosynthesis. Did you know they need it!

**all about food chains:** Food chains were first introduced by the Arab scientist in the 10th century his name was Al-Jahiz. Producers are organisms that make their own foods. A plant is referred to a producer because it can make its own food. An animal that is at the top of the food chain is called an Apex predator. The Great horned Owl eats rabbits, rats, frogs, snakes, mice and other small prey. If the Great horned Owl did not eat these things, the population would get too high and animals would have nowhere to graze!!

**Grass → Rabbit → Fox**

**Grass → grasshopper → frog → snake → hawk**

**BY Tatiana & Georgie**

Y7 Tatiana Moss & Georgie Gibson (Food Chains)



### FOOD WEBS

→ eaten by

food webs can be quite confusing, but they are a very convenient way of showing the transfer of energy!

leeches, stonefly nymphs, caddisfly larvae, midge larvae, blackfly larvae, mayfly larvae, freshwater shrimp, plankton, filamentous algae, decaying plant remains, mature salmon

Producers/plants, primary consumers, secondary consumers, tertiary consumers are there. If one of the consumers were to die, the energy would be recycled.

### MAGNETS

Some magnets' north and south poles are coloured, like the diagram below, whereas some aren't marked as clear.

Two north sides of a magnet will repel, whereas if a north side is met with a south side it will attract & connect with it, and vice-versa.

Things with magnets include: anti theft tags, doorbells, fire alarms, cars, etc...

compasses use magnetism to show north, east, south & west. there is a magnetic field around earth, which shows north & south. moving metal in the earth creates a magnetic field.

## Connections

Planets & Comets travel around the sun. For this to happen, there must be forces applied to them.

Newton suggested that between any 2 objects, there is always a force of attraction. This attraction is due to the masses of the objects. He called this force gravitational force.

**SOLAR SYSTEM**

These planets that are closer to the sun feel the greatest attraction whereas planets which are further away feel the weakest pull.

Fun Fact: Our sun is massive! taking up over 99% of the solar system's mass!

### DNA

When two gametes fuse in fertilisation, the two nuclei join to form a single diploid cell (a zygote). This cell has all its chromosomes in homologous pairs.

DNA - short for deoxyribonucleic acid.

Only one of the strands of a DNA molecule actually codes for the manufacture of proteins in a cell. This strand is called the template strand. The other strand is called the non-template strand.

DNA connects several nitrogenous bases, such as adenine, thymine, guanine & cytosine. James Watson & Francis Crick created the model of what DNA looks like, whereas Rosalind Franklin had been studying it for a long time using x-ray diffraction.

Definition: the state of being related to someone or something else.

CONNECTION

By: Calypso Malialis, Temidayo Yussuff-Shittu

Y9 Calypso Malialis and Temidayo Yussuff-Shittu (Connections)

How far back does our DNA go?

We can trace the mtDNA back to a woman from about 150,000 - 200,000 years ago that everyone on the planet is related to.

The Y chromosome to a man will be all related to from 60,000 or 70,000 years ago. Scientists have dubbed them Mitochondrial Eve and Y Adam.

Genetic studies allowed us to estimate human genomes from about 500,000 years ago when our ancestors were diverging from other similar species such as Homo neanderthalensis or Neanderthals. So far we have learnt that we still have Neanderthal DNA sequence in our genomes today. These small strands of DNA have been found out to affect whether we are training people or 'night owls'.

Genes

The entire DNA of an organ is known as its genome. The human genome is made up of about 3.2 billion base pairs.

Genes are sections of DNA that control the production of proteins in a cell. Each gene codes for a specific protein. Some genes code for proteins that control the production of proteins in a cell. Each gene codes for a specific protein. Some genes code for proteins that control the production of proteins in a cell. Each gene codes for a specific protein.

Chromosomes

Nearly all human cells contain 46 chromosomes. The X and Y chromosomes are the sex chromosomes. They determine whether a person is male or female. The 22 pairs of chromosomes are the autosomes. Each pair consists of two chromosomes that are similar in size and shape. A pair of chromosomes is called a homologous pair.

# DNA

Base Pairs

Sugar Phosphate Backbone

Double Helix

C = Cytosine  
G = Guanine  
A = Adenine  
T = Thymine

A always goes to T  
C always goes to G

This is known as the base-pairing rule. Complementary bases always 'bond' with each other and never any other base.

How does the genetic code get coded?

It takes place in two stages: Transcription and Translation.

Transcription happens in the nucleus. In transcription, part of the DNA double helix 'unzips' a 'mold'. So that the two strands are separate, exposing the base along the template strand.

The template strand of the DNA forms a framework upon which a molecule of mRNA is formed. The building blocks of the mRNA are RNA nucleotides. They line up opposite the template strand according to the complementary base-pairing rule. One at a time, the RNA nucleotides line up to form an mRNA molecule. They then make the 'mRNA' molecule. Because of the nucleotides, the DNA has been unzipped.

Converting the code in the mRNA into a protein is called translation. It takes place at the ribosomes.

mRNA: Messenger Ribonucleic acid  
tRNA: Transfer Ribonucleic acid

This interaction between mRNA and tRNA is the basis of translation.

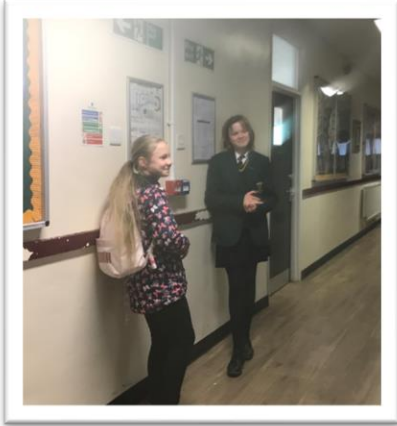
A U G — Codon  
U A C — anticodon

tRNA

base — pairs acid

Y9 Rita Seminas (DNA)

## PEN PAL VISIT



On Monday, Florence Sunderland in Y8 had a surprise visit from her Pen Pal Eleni Will who had come all the way from Wiesbaden Germany.

Eleni was visiting London with her father over the Easter period and took the opportunity to visit Florence at Mount House while also joining Florence in a number of her lessons.

Both students had a memorable time and promised to continue to write to each other.

## ELLEN GRIFFITHS

*We'd like to introduce a (relatively) new member of staff at Mount House, who is already making her mark on both the music and science departments.*

I took up my role in the Music department at Mount House in November, having just completed my Masters in Biology at Lancaster University.

As well as science, I've always had a love of music, playing the violin in orchestras and performing in musical theatre productions. While at university I began taking my singing more seriously and now undertake freelance work as a soloist and ensemble singer for classical concerts and church services across London.



At Mount House I'm really enjoying assisting in Mr Whitehouse's practical classes and co-directing the school choir, which is great experience. We are also currently rehearsing singers for the summer concert and 'Wizard of Oz' production. Outside of the music department, I enjoy supporting Science revision classes and Games lessons.

It is a real privilege to be a part of such a wonderful community of students and colleagues and I am very excited about the term ahead.





## PE REPORT

### CORE PE

In core lessons, the students have finished tennis and are now moving onto cricket.

### GAMES

Moving into the summer term, our sports have changed to athletics, cricket, rounders, golf and tennis.

During Year 9 – 10 Games, the athletics group focused on sprint starts and pace; cricket focused on match play and scoring; and tennis focused on match play and scoring.

Year 10 GCSE students focused on improving their rounders skills in preparations for their exams next year.

During year 7 – 8 Games, the athletics group focused on shot put and sprint starts; cricket focused on ground fielding; and tennis focused on forehand serves and scoring.

### **Athletes of the week**

Year 7:	Jake Hargreaves
Year 8:	Roshan Merani
Year 9:	Oscar Michaels
Year 10:	Grace Gallagher
Year 11:	Ava Athwal

Upcoming Lords Cricket Trip:

A reminder to those selected to take part in the Lords Cricket Trip, this trip is taking place on **Friday 19<sup>th</sup> May** and students must be at school by **7:45**. All students attending must wear Mount House School PE kit, and bring sunscreen and a water bottle as we are hoping for good weather.

## COUNCIL MEETING – MONDAY 20<sup>TH</sup> MARCH

### **In attendance:**

Year 7:	Ben Wrightson, Jake Hargreaves, Max Cute
Year 8:	Hari Chowdhary, Selin Sarayli
Year 9:	Rina Antwi-Agyei, Calypso Malialis
Year 10:	Michael Miltiadous, Krrish Patel, Ruzgar Suyur, Reuben Ward
Year 11:	Darcie Dudding, Hailey Boakye, Aoife Thompson, Iman Salam (Minute Secretary)



Year 12: Rosa Scott-Tatam (Chair)  
Year 13: Mara McNally  
Facilitator: Mr Allman

Apologies for absence from Sophia Koumourou.

The school council representatives have been appointed by their year groups to represent the voices of the students within the school.

Mr Allman provided feedback in relation to the previous minutes.

The school council welcomed our new Chair and Head Girl Rosa to the meeting.

The Chair of the Council along with all the reps thanked Iman (the minute secretary) for being incredible as the school council secretary for the last six months.

Next meeting scheduled - April 21st

## COOKERY



Turkish dish made by Sotirios in his cookery class.

Harvey made a tasty looking Shakshuka, a Turkish dish.



A surprise visit by Florence's pen pal from Germany. She joined Florence in making Shakshuka.



## FRIENDS OF MOUNT HOUSE

### Easter Eggs:

It was lovely to see the excitement on the last day of term, when all the students were treated to an Easter egg or biscuit to enjoy over the Easter break courtesy of Friends of Mount House. For those who weren't in that day, Sheila has an egg waiting for you!



### Outdoor Seating:

Five new outdoor benches made from recycled materials have arrived at the school and will be placed around the school property for the students to use. Friends of Mount House have purchased these using the money raised from the Moveathon fundraiser held back in September 2022.

### Auction of Promises:

As a reminder, the Sixth Form and Friends of Mount House are organising a charity fundraising auction on May 12th. Ticket holders will have a chance to bid for some great prizes while enjoying a delicious Turkish meal at Vadi restaurant found on 314-316 High Street, Enfield, EN3 4HF.

Tickets are only £35 and include a soft drink, a mezze starter followed by a selection of meat and vegetable platters, salad and rice/bulgar wheat, finishing with some delicious pastries for dessert. When you book the tickets can you please let us know if you are vegetarian/vegan or have any allergies so we can cater for you accordingly. There will be the ability to purchase further drinks on the night.

On the night the Sixth Form will be selling the promises that you, the parents, and local businesses have kindly donated in order to raise money for the DEC's Turkey-Syria Earthquake Appeal, a charity chosen by the Sixth Form and Friends of Mount House.

We look forward to seeing you there.

Tickets are now available to purchase. There are limited spaces in the restaurant so please purchase your tickets quickly before they sell out!

Click on the link below to buy your tickets securely from your bank using BOPP.

<https://bopp.app/link/d61h3> or you can scan the QR code below.





# Mount House School



*Friends of*  
MOUNT HOUSE

& 6th  
*Formers*

Invite you to an  
**“Auction of Promises”**  
*Fundraiser*



***In aid of the DEC Turkish  
and Syrian Earthquake Appeal  
& Friends of Mount House***

Tickets £35,  
includes 3 course meal, 1 soft drink,  
and lots of great auction items

**Friday 12th May, 7pm**  
**Vadi Restaurant, Ponders End EN3 4HF**



## CAREERS FAIR



This year students in year 8 – 12 were able to browse stalls from theatre, interior design, the army, the London Institute of Banking and Finance, leisure, Ask Apprenticeships, Oaklands College many more.

## DEBATE CHAMBER

Debate Chamber is offering summer courses which may be of interest to students.

<https://debatechamber.com/summerschools/>

## MONKEN HADLEY COMMON NEWS

Monken Hadley Common started the installation of wooden bollards along the stretch of Camlet Way beside the cricket pitch. Their aim is to deter vehicles from driving on the common, as occurred when the Camlet Way/Hadley Common Road junction was closed this winter due to a burst water main.

It is possible that there may be some effects on set-down and pick-up until parents become familiar with the new configuration.

## UPCOMING EVENTS

- |                                |                                 |
|--------------------------------|---------------------------------|
| Monday 24 <sup>th</sup> April  | British Film Institute Trip Y10 |
| Tuesday 25 <sup>th</sup> April | Y12 & Y13 Psychology Conference |
| Saturday 24 <sup>th</sup> June | Mount House School Open Day     |