

Newsletter – Friday 9th February 2024

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Forthcoming Dates

Ski Trip to Italy – Sunday 11th February to Saturday 17th February

Half-term – Monday 12th February to Friday 16th February

Year 9 Options/Parents' Evening - Thursday 22nd February

Year 9 School Leaver's Booster Vaccinations – Friday 23rd February

School show – Tuesday 27th February to Friday 1st March

Year 11 - NEA 2 - Food Practical Assessments – Monday 4th March, Tuesday 5th March and Thursday 7th March

Year 11 Geography Trip to Carding Mill Valley – Tuesday 5th March

INSET day – Wednesday 6th March

Year 10 Parents' Evening – Thursday 7th March

Y10 Speak Out Challenge – Friday 8th March

Year 11 Drama - Practical Exam – Wednesday 13th March

Year 11 - Dance Practical Exam – Friday 15th March

Year 10 - Dance Practical Exam – Friday 22nd March

Spring term ends – Thursday 28th March

Summer term begins: Monday 15th April

Click here - Term Dates and INSET Dates

LC Assessments

Year 11 LC5 Window — W/C 18th March & W/C 25th March

Year 11 LC5 Report – Friday 26th April

Year 13 LC5 Window — Thursday 21st March to Wednesday 27th March

Year 13 LC5 Report – Friday 26th April



Let Us Pray



Lord, we thank you for our talents and gifts. Help us strive to use them wisely for the benefit of our special community. Guide us to fulfil your plan for each of us. Give us the grace to be humble, respectful and tolerant this day and all the days of our lives.

Amen.

Message from the Principal



Dear Parents/Carers

As you can see from this packed edition of our newsletter, this half term at Bishop Walsh Catholic School has been jammed full of activities for our students.

From day trips to guest speakers, student leadership roles and sports fixtures, it's clear to see Bishop Walsh students have a plethora of opportunities to choose from. Please encourage your children to get involved as much as possible in these additional

opportunities. The extracurricular timetable is included in this edition of the newsletter.

Over the last couple of weeks, pupils in Year 11 and 13 have received their mock examination results back. I know that they are all working as hard as ever to keep up the momentum until the exams start in May. School staff have really enjoyed meeting parents in our virtual parents' evenings and excellent conversations about your child's progress have been taking place. We look forward to the live Year 9 parents'/options evening after half term.

I thank parents and pupils for their support with our practice 'lockdown' this week. This has supported our school community in understanding what we would have to do in the rare case of needing this in an actual event.

Happy half term everyone and I wish you all a fantastic break. This half term has been extremely busy, and it is lovely to read about all the activities that our pupils have been involved in within this newsletter.

> Mrs Brodie Principal



Important Dates in the Liturgical Calendar



Ash Wednesday - Wednesday 14th February Feast Day of St David - Friday 1st March Feast Day of St Joseph - Tuesday 19th March Palm Sunday – Sunday 24th March Maundy Thursday – Thursday 28th March Good Friday – Friday 29th March Holy Saturday – Saturday 30th March Easter Sunday – Sunday 31st March

Catholic Life of the School

Please <u>click here</u> for the most recent Catholic Life, Mission and Prayer Life update.

Mrs Moakes Assistant Principal i/c Catholic Life

Celebration and Rewards

43,000 achievement points have been awarded since the start of the academic year.

We are so proud of our pupils who work hard and live out the gospel values each day.

A special well done to pupils in each year group with the most achievement points!

Year 7 - Sophie H

- Year 8 Daniel W
- Year 9 Oliver C
- Year 10 Thomas B
- Year 11 Samuel S
- Year 12 Luke D
- Year 13 Amy C

Mrs Tallett Vice Principal i/c Personal Development, Behaviour and Attitudes



Teaching & Learning

A successful bid was secured by Mrs Brodie in order to equip each teaching location within the school with a brand new state of the art visualiser. This replacement of our previous lower quality visualisers means that teachers are able to 'live model' responses required and display techniques and skills that we want our learners to acquire. Feedback from teachers and students has been really positive about the new equipment that we have in place.

Our school's team of lead practitioners together with myself conducted a wholeschool home learning review. We captured student and teacher voice regarding the frequency and volume of home learning that is set via Google Classroom as well as its meaningfulness and expected duration of completion. We also looked at a vast sample of student planners to see how these are being used. In light of our findings, some changes will be made and communicated to you in the summer term, ready for next academic year.

As well as this, the lead practitioner team and I have conducted a number of lesson drop-ins and we are delighted to see a wealth of effective teaching and learning strategies that are aligned to our whole-school philosophy being adopted. We are encouraging our teachers to use Iris Connect - a digital program for filming oneself teaching in order for teachers to reflect critically upon their own practice.

In whole-school CPD, we have been exploring a strategy called 'positive framing', which is a technique for establishing and maintaining high expectations through the use of positive reinforcement, encouragement and affirmative language.

Finally, our heads of department and post-holders have worked hard to analyse mock-performance from our Year 11 and Year 13 cohorts. They have identified students who have underperformed and a number of initiatives are being enacted to best support these students in reaching their full potential. We would like to thank the parents and guardians of our cohorts for whom public examinations are looming this academic year for their continued support. With only a matter of weeks in school remaining, it is imperative that these examinations are taken seriously and students work as hard as they possibly can. Teachers are here to help assist students with their revision and examination preparation. Please be advised that students can contact their teachers directly via email or Google Classroom with any concerns they may have or additional support they require.

Mrs Marston-Smith Assistant Principal i/c Curriculum



Bishop Walsh Catholic School Production 2023-2024



'OH MY GOD! YOU GUYS' Excitement is running high as we are well on our way with rehearsals for the school show. We have had two late night rehearsals and one all day, where we were able to run the whole show with stage crew and sound. We still have lots of tweaking to do but the cast of actors and dancers are, as always, so committed and give their all. We would like to thank all parents and carers for your continued support of our crazy, but very rewarding adventures in music, dance and drama.

Tickets are available on ParentMail for £9 and the dates are as follows:

Tuesday 27th February – 7pm

Wednesday 28th February – 7pm

Thursday 29th February – 7pm

Friday 1st March – 7pm

There are no seat numbers.

If you have any special requirements, please contact the school.

We look forward to seeing you there.

Mrs Priestnall & Mrs Jones School Show Coordinators

Pencil Case Restock

Over the half term break, please take the opportunity to restock your child's pencil case. A fully stocked pencil case includes pencils, biro pens, a white board marker, an eraser, a pencil sharpener, a ruler, coloured pencils, three highlighters, a purple biro, a scientific calculator, a glue stick, school scissors and a geometry kit.

An equipment check will take place after the half term break.

Pastoral Team



Physical Education

Extra-Curricular

Please see below the physical education department extra-curricular activities, which will start on Monday 19th February. We are excited to offer pupils some new opportunities as we move into term 2B. We are thrilled with the response so far this year to our extra-curricular activities, having now recorded 2,296 total attendees. Well done to all our pupils who have attended a club or fixture. We look forward to seeing even more in attendance next half term.

Bishop W. Catholic Se	aksn	Physical Education Extra- Curricular 2023-24- <u>Ter</u>	Activities	
	JSC	SPORTS HALL	FIELD	LUNCH
MONDAY	Girls Football Years 7-13 (LR)	Badminton Years 10-13 (SBU)	Football Years 7-8 (CST)	Table Tennis- Gym Early lunch (LR)
TUESDAY		Badminton Years 7-9 (PE)		Table Tennis - Gym Week A- Early lunch Week B-Late lunch (LRO)
WEDNESDAY	Hockey Years 7-13 (LR)	Yoga/Aerobics Year 7-13 (LRO)		Table Tennis- Gym Week A- Late lunch Week B-Early lunch (CST)
THURSDAY	Netball Years 7-13 (ECN)	Basketball Years 7-13 (LRO)		Basketball- Gym Early lunch (S80)
FRIDAY		Intra-school fixtures Years 7-13 (CST/ECN)		Basketball- Gym Week A- Early lunch Week B-Late lunch (ECN)

Football

We have continued to have a fantastic turnout for girls football and it has been brilliant to see the girls improve and gain confidence week on week. This half term, the girls have thoroughly enjoyed the experience of being coached by Year 12 pupils (Joe Bailey & Mary Whitty), who have worked hard planning and delivering skill specific coaching sessions for them as part of their Cambridge Technical in Sport & Physical Activity course. We are looking forward to seeing them put their new honed skills into action next half term!

Congratulations to our Year 9 and 10 teams who have both had excellent cup campaigns as both teams look forward to District Cup final matches week beginning Monday 26th February. Good luck to our Year 10 boys team who will play Arden Academy in the quarter finals of the Birmingham Schools Cup.



Physical Education Basketball



Key Stage 3 - On the 25th February, our KS3 Basketball team competed at the Sutton School's Basketball competitions. Each game was highly competitive, with Bishop Walsh Catholic School playing brilliantly. Our pupils showed resilience, hard work ethic and sportsmanship throughout the competition, representing our school with pride.

Key Stage 4 – The 1st February was Bishop Walsh Catholic School's KS4 basketball teams turn to compete in the Sutton School's basketball tournament. On show was skill, determination and passion, played in the spirit of the game. Our KS4 team maintained an unbeaten record in the 4 highly competitive fixtures they played.



Physical Education Indoor athletics



On Tuesday 6th February, Bishop Walsh Year 7 and Year 8 girls took part in the Sutton School's Indoor Athletics Competition. All the girls were fantastic and a special mention to the year 7 team who finished 3rd overall.

On Thursday 8th February, our boys entered their competition. The boys competed excellently and represented Bishop Walsh superbly.

Well done to all our pupils who took part and represented Bishop Walsh so well!





Physical Education

Rugby



Last week, the Year 9 rugby team travelled to Bishop Vesey's Grammar School to play against the toughest opposition they have faced. All 15 boys performed admirably, showing a fantastic level of commitment, and as a result they were deserved winners by a score of 24-14. This is a brilliant result against an established rugby school and is testament to their hard work in training. The stand out players were Isaac Upton and Sid Clifford.

After half-term, Y7, Y8 and Y9 all have home matches and it will be great to see how the boys' improvements in training sessions translate to matches.

Wednesday 21st February - Y9 vs Fairfax Wednesday 28th February - Y8 vs Fairfax Monday 11th March - Y7 vs Bishop Challoner Wednesday 13th March - Y8 vs Bishop Challoner



Netball



It has been brilliant to see the pupils thriving in game practice and developing game tactics and technique. Year 7 and 8 teams have started to form a connection when playing, which was applied in their tournaments. In each tournament, the pupils represented themselves well and performed incredibly. Each pupil who participated enjoyed themselves thoroughly. Practice will continue to occur each Thursday afternoon, 3:20pm-4:20pm, as well as our friendly intra-house competitions.



Bishop Walsh Lourdes Enrichment group presents Bingo Night!

As part of our commitment to answer Our Lady's call, we will embark upon the Birmingham to Lourdes Archdiocese of Birmingham's Pilgrimage in May half term. When we are there, we will live out our gospel values by putting the needs of the vulnerable first through caring for the sick, assisting them to Mass and deepening our own faith.

We invite you to support our fundraising efforts by attending our Bingo Night on **Friday 19th April 2024**. The event will go live via ParentMail for tickets to be purchased after half term, and there will be an opportunity to pre-order fish and chips as well! There will be snacks available to purchase and plenty of prizes to be won from Bingo and our raffle!

We hope you can join us for this fantastic night of fundraising and Bingo fun! The event is limited, so please book quickly to avoid disappointment!

Thank you for your continued support with our fundraising efforts.

Miss Hickson Trip Leader

Message from West Midlands Police



The online platform Telegram, is legal and used for many reasons. However, it's the largest type of social media used within the extreme right wing terrorism space. Therefore, the advice is if school teachers or parents notice that young people are using Telegram, that they are more intrusive about the purpose of them having it and to remind them of the risks of using it.

Also, please be aware of the "Text Me" app that is appearing. It generates phone numbers, so people can text anonymously from them. It is regarded as unsafe as it encourages anonymous texting, messaging, and exposure to explicit content on the internet. It could also be used as a way of bullying and harassment.

Safer Internet Day 2024

UK Safer Internet Centre Tuesday 6th February was safer internet day. To help you and your family navigate the ever-changing digital world, you can use the links here from UK Safer Internet Centre. This includes advice on online issues such as social media, coercion of children online, cyberflashing, bullying and more.



- 11 -

Links to the local parishes

As a school community we are fortunate to have links to many local parishes. The parishes provide the main connection between our families and the Catholic Church. Please click below for links to the local parish websites which includes their current service times: Holy Trinity & Sacred Heart RC Parishes St Nicholas RC Parish Holy Cross and St Francis Parish

Creating period equality for <u>all</u>.

We believe that all girls should have access to free sanitary products because they're a necessity not a luxury.

This school now provides a choice of <u>free</u> sanitary products,

Modibodi period pants/pads/liners/ reusable pads/tights

Here's where you can find a range of <u>free</u> sanitary products:

Pupils can access products from the Heads of Year Office/ Office and Damascus at the following times 8.30am to 8.50am 11.30am-11.45am 3.20pm - 4pm

If you would like your child to take larger amounts

home of these products:

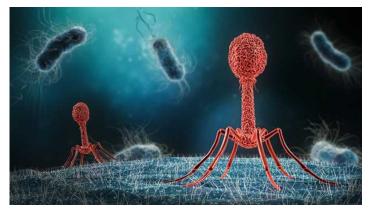
Please email enquiry@bishopwalsh.net For the attention of Mrs Mannion for further information.



As part of sixth form enrichment our pupils have researched, written and edited articles based on scientific publications they have found. Over the past half term the students have rewritten published articles in a manner that is suitable for pupils aged 14+. They have spent many hours taking these complicated scientific studies and making them accessible to pupils within the school. We hope you enjoy reading these articles and appreciate the hard work our students have completed in authoring them.

Usage of bacteriophages in antibacterial treatments

By Ethan Jeffries



Issues with current antibacterial treatments

Current approaches to tackling bacterial infections, while well researched, are becoming less and less effective. This is due to both the misuse and overuse of antibiotics in the past leading to the development of antibiotic resistant strains of bacteria, such as MRSA. While protocols have been established to minimise the misuse of antibiotics to reduce the risk that antibiotic resistant strains are created, it is clear that other approaches must be developed to deal with these strains.

What are bacteriophages?

Bacteriophages are viruses that only target bacteria, often they only target a single species of bacteria, or even individual strains within a species. This fact has resulted in the use of them as biomarkers due to the inability of viruses to replicate without a host, meaning if bacteriophages are present, so are their hosts. The usage of bacteriophages in antibacterial treatments, also known of phage therapy, predates the use of antibiotics, however due to the unreliability of early phage therapy and the discovery and subsequent mass production of antibiotics such penicillin, was left to the wayside in favour of antibiotics.

Advantages of phage therapy

The ability of bacteriophages to only target specific types of bacteria allows for treatments to be specified for only the type of bacteria responsible for a infection, as opposed to antibiotics which can target helpful bacteria within the gut as well as pathogens, reducing side effects and the probability of infection by opportunistic bacteria. This also ensures that in the case of a misdiagnosis phage therapy will have little to no long term effect on the body unlike antibiotics.

Disadvantages of phage therapy

While phage therapy may not have as many side effects as other antibacterial treatments there still remains the potential for them to trigger an immune response, limiting effectiveness and spread of these treatments as well as resulting in other side effects caused by the immune response. Moreover due to the natural threat bacteriophages pose to bacteria many have countermeasures already developed against bacteriophages, such as the crispr enzyme commonly used in genetic modification, and therefore may not be as effective as expected.

Conclusion

In conclusion, while phage therapy presents a potential for effective treatment of antibiotic resistant strains of bacteria, phage therapy by itself may have limited effectiveness. This however does not mean that phage therapy should not be utilised, instead that it should be used in conjunction with other treatments, such as traditional antibiotics, to make up for its shortcomings. Moreover while phage therapy itself may not be utilised, treatments based on bacteriophages, such as those using the enzymes produced by them to break down the cell membrane of bacteria show promise.

Sources Bacteriophages - StatPearls - NCBI Bookshelf

Bacteriophage | Definition, Life Cycle, & Research | Britannica

Bacteriophage therapy for patients with difficult to treat bacterial infections

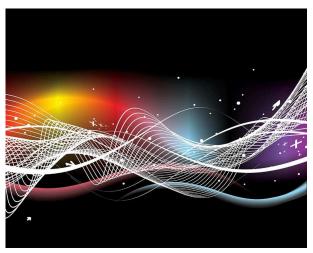
Harnessing bacteriophage to tackle AMR | LSHTM

Music can help you do better in Maths?

By Alice Leung

It is thought that music can make maths more enjoyable, keep students engaged and help ease any fear or anxiety they have about maths. Motivation may increase and pupils may appreciate maths more. But how?

A Turkish researcher - Dr Ayça Akin, from the department of Software Engineering at Antalya Belek University, searched academic databases for research on the topic published between 1975 and 2022, and combined the result of 55 studies from around the world, involving almost 78000 young people from kindergarten to university students, to come up with an answer.



https://goodparentingbrighterchildren.com/math -in-music/

Three types of musical intervention were included in the meta-analysis

- Standardised music interventions (typical music lessons, in which children sing and listen to, and compose music)
- Instrumental musical interventions (lessons in which children learn how to play instruments, either individually or as part of a band)
- Music-maths integrated interventions, in which music is integrated into maths lessons.

Students took maths tests before and after taking part in the intervention and the change in scores was compared with those who didn't take part.

The use of music, whether in separate lessons or as part of maths class, was associated with a greater improvement in maths over time. The integrated lessons had the biggest effect, with around 73% doing significantly better than those who didn't take part. Some 69% of students who learned how to play instruments and 58% of students who had normal music lessons improved more than those who didn't take part.

The results also indicate that music helps more with arithmetic (e.g. fractions and ratios) than

other types of maths and has a bigger impact on younger pupils and those learning more basic mathematical concepts.

"Encouraging mathematics and music teachers to plan lessons together could help ease students' anxiety about mathematics, while also boosting achievement." said Dr Akin, who carried out the research, and based at Antalya Belek University.

References: https://www.sciencedaily.com/releases/2023/06/230629125739.htm

Plant-like Growing Robots

By Jacob Davis

Despite being unable to see their surroundings, plants are able to make their shoots grow upwards and their roots grow down. This helps them grow towards light for photosynthesis and down to reach nutrients. They do this by processes called tropisms, for example phototropism is the growth in response to light and gravitropism is the growth in response to gravity. There are numerous other tropisms that plants use to direct their growth, but these are the main two.

Inspired by this, scientists are creating robots that grow and move independently, using strategies similar to plants to explore difficult to navigate places. These robots use sensors to choose where to grow and are able to grow in many ways, such as using pressurised air to extend their tip forward and additive manufacturing (3D printing).

The robots are able to intelligently choose where to grow to save energy and build strong structures, such as by twisting around existing vertical structures. They can adjust their materials to be light for climbing or tougher for self-support and crossing gaps.

Though these robots are only in early stages of development, they show exciting developments in robotic technology, and could be incredibly useful for exploration. These developments could also lead to the creation of many more currently unforeseen technologies.

References: <u>https://www.science.org/doi/10.1126/</u> scirobotics.adi5908



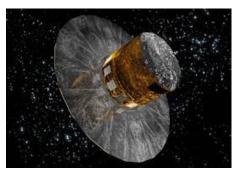


Research on the bar of stars in the centre of the galaxy

By Matthew Newbold-Comyns

The milky way galaxy is approximately 13 billion years old and contains a bar of metal rich stars at its centre.

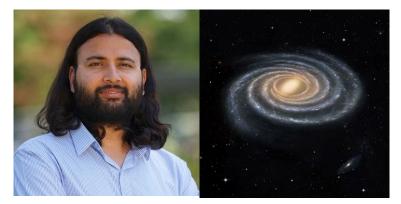
In simulations of the galaxy's creation this bar repeatedly appears in the first few billion years. However new research by a German team using the Gaia telescope shows that it may not have formed until around 3 billion years ago.



Gaia Telescope (Telescope used to study the metal heavy bar of stars)

The stars are metal rich which occurs when the death of a star creates elements higher than iron, these dying stars explode and the metals gather together.

Using the Gaia telescope, Nepal and his team have reasonably deduced a path the bar has travelled. This allowed them to age the stars to be 10 billion years younger than originally thought. The Gaia telescope is a spacecraft sent to make a 3D map of millions of stars in the milky way making it the perfect tool to aid in the study and observation of these central stars.



Samir Nepal

Head Researcher

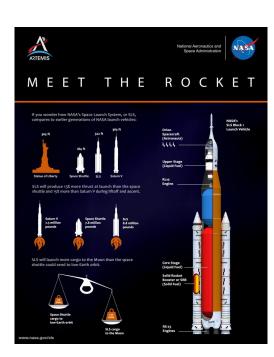
The Milky Way

Bar visible in the centre

Reference: https://www.sciencenews.org/article/milky-way-bar-young-metal-stars

Artemis: Paving the Way for Human Exploration of Mars

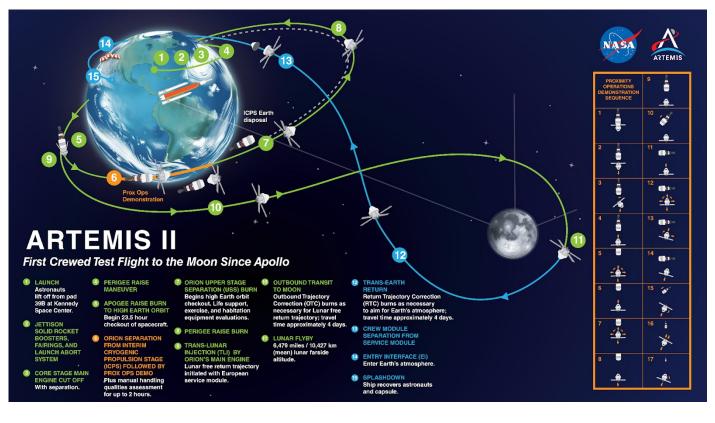
By Clark Thomas



In the vast expanse of space, where mysteries unfold and frontiers beckon, NASA's Artemis program stands as a beacon of innovation and ambition. Set to make history by landing the first woman and person of colour on the lunar surface in September 2025, Artemis marks a significant leap forward in human space exploration, reigniting our celestial aspirations over half a century since the last lunar landing.

The Artemis Missions have a few impressive aims, with significant upgrades in technology to the former Apollo missions on their side. The most ambitious of these is NASA's long term goal to have a way of staying on the moon for extended periods of time. Previously Astronauts would be limited to just a few days on the lunar surface, making the amount of research possible in the 6 moon landings very limited.

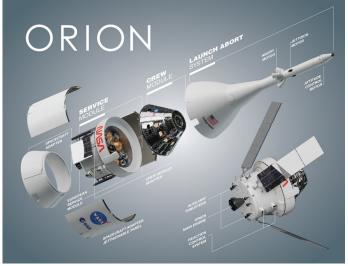
NASA plans to build a base camp on the moon that will allow astronauts to stay on the moon for weeks or even months. They also plan to have a space station orbiting the moon called Gateway, providing easier access to the lunar surface and working as an outpost vital to future missions that aim to put humans on Mars. The research that is to be conducted on the moon is expected to prove essential to the next step of getting humans on Mars.



The SLS (Space Launch System) will be the most powerful rocket in the world, capable of taking astronauts directly to the lunar surface, carrying the Orion spacecraft with it. Astronauts will be transported between the surface and the Gateway space station by the HLS (Human Landing System) marking a proof of concept for future missions to Mars.

How close is NASA to achieving this dream?

The first step in the Artemis missions was Artemis 1 which was launched on 16 November 2022, following several setbacks from adverse weather and technical issues, lasting 25 days before splashing down on 11th December 2023.



Although un-crewed, it proved an important milestone for the project, opening up the doors for Artemis 2, the first Crewed mission around the moon, originally set to launch in November 2024 but has since been pushed back to September 2025.

This mission is the first of its kind in terms of collaboration between NASA and companies such as Boeing and SpaceX and continues to be at the cutting edge of technology, with targets of Discovery, Innovation, Economic Opportunities, and Inspiration

As Artemis charts its course to return humanity to the Moon and beyond, it weaves together the threads of history, innovation, and collaboration. The program's bold objectives, coupled with technological marvels and international cooperation, signify a rebirth in lunar exploration and a stepping stone toward the ultimate goal – Mars. Artemis beckons us to dream big, push the limits of what is possible, and collectively reach for the stars.

Reference: https://www.nasa.gov/specials/artemis/

Tiny red stars can test ideas about the origin of life

By Austin Roche

Dwarf stars have been described as cool stars helping to narrow in on the conditions that might set the stage for life beyond our solar system. This is not entirely true as this article exposes the actual truths about dwarf stars and how close they are to the previous description

Dwarf stars lack the potential and power to completely kick-start life this may seem like non useful information but it is however extremely helpful as it gives us a test bed to demonstrate what other chemical conditions can kick-start life so gives us a great base to start off. It does help us to begin to understand the possibilities of alien life and whether there actually is a possibility that aliens could exist.

Here is some more information about dwarf stars:

- They are roughly the size of Jupiter
- They weigh about a tenth of the mass of the sun
- They are cool and completely dim which allows us to easily see things that orbit around them

e.g. TRAPPIST-1, found that it hosts seven Earth-sized planets, 3 of which could possibly be inhabitable. However scientists will have to conduct further research to find out whether it actually is or not.

Reference: https://www.sciencenews.org/article/dwarf-star-light-origin-life