

Pulp Loop



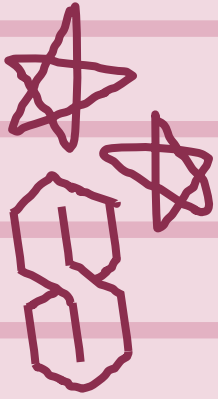
*This Valentines edition of 'Pulp' features
YOU!*

*From your responses & answers
from the questionnaires!*

I ♥ U!

CONTENTS!

PAGE NO.	ARTICLE NAME & WRITER
1-3	Front cover, contents, editors' note -The Pulp team
4-9	Responses from the form about love
10	Stained glass Valentine's cookies - Wiktorja Marszalek
11	Valentine's marshmallow bites - Grace Martin
12-13	Puzzle period - Rafhael Pulmones
14-15	Things I love about 10 things I hate about you - Lena Wlodarczyk
16-17	Psychology of love & origami hearts - Wiktorja Marszalek
18-19	Poetry: for and against love - Lena Wlodarczyk
20-21	The physics of unavoidable attraction - Grace Martin
22-23	Eman Hussein's flower designs - Lena Wlodarczyk
24	Bible verses about love - The Pulp team
25	White day: A unique valentines in Japan - Lola Rackstraw
26-27	Zof's favourite Shakespeare couples - Zofia Sliszka
28-29	The history of St. Valentine's day -Emily Lowther
30-31	A kiss from Gustav Klimt - Lena Wlodarczyk
32	Back cover - The Pulp team



EDITORS' NOTES!

Happy new year, fellow students!!

Welcome to the Valentines copy of *Pulp*. We appreciate everyone's support and responses to the form for this edition of the student magazine, it's been really great help to kick start the forth edition of *Pulp*! We all hope you enjoy reading!!

"Hey reader!! Thank you for reading our newest edition of *Pulp*! I've loved writing so much for the magazine, I put quite a bit of time making sure the writing and formatting is ready for when we publish so I hope you enjoy. It's my pleasure to do this for you all and I hope we get as much support as we did with our Christmas copy, it was really great hearing from you all!!! If you have any ideas that you'd like to see in the magazine, let me know via my email (20lewodar@ndhs.org.uk) and I'll try my best to take up your input! Thanks a bunch and best wishes to everyone this term and I hope you all have a happy Valentines, when it comes!

All the best..." - Lena Wlodarczyk :)

"Hello readers! Loads of work has been poured into this edition, so we really hope you enjoy reading it. This publication is obviously very valentine centric, but we've tried to make it so that anyone, whether they're in or out of love, can find something for them. During this dreary, monotonous time of the year, it is easy to lose sight of what brings us all happiness. I implore anyone who bothers to read the editor's notes of all things, to remember that the sun will rise again, and the good days are faster approaching than you might think. Try to appreciate the love that surrounds you, whether that's with a loved one or friend, and find the joy in the unextraordinary things; Be open to the possibility that the universe has your back.

Have a nice February and celebrate the love!!" - Grace Martin

"Hiya! I hope you guys enjoy this valentines edition as much as we have enjoyed making it. We are so grateful for all the responses to the form we have gotten, we hope you felt included in this edition. Valentines is a hard time for some people, so remember that it's not just about romantic love, but love for friends and family too. Enjoy!" - Wiktoria Marszalek <33



WHAT DO YOU THINK OF LOVE?

YOUR ANONYMOUS RESPONSES!

When both have seen each other at their worst and best and still have chosen to stay.

Love is a many wonderful love lifts us up where we

You have to work for it but that's what makes it special, the willingness to work through anything because you know you wouldn't want to be with anyone else.

It's but a lie for the lonely - a rarity that happens when you least expect it

Only love can drive out hate mate

It's super duper rare for it to be TRUE LOVE, but when it works, it really works!

I think it's a beautiful and wonderful gift that God has given us here on earth. Among all this chaos and strife, the quietness and gentleness of love brings peace and serenity.

Embrace love as much as you can, it's what makes us human.

It's difficult but always possible

Very, very complicated

It's something to be worked for

I think it's too overrated.

Not keen on love, especially romantic books and movies.

I hate it

It's interesting—I hope it happens to me one day.

It's amazing when you find the right one for you

It's the scariest emotion you can have it's mixed with vulnerability and exhilaration

Oh brother

I think finding people you truly love, both platonically and romantically, is rare and difficult to find, but it's something everyone deserves to have.

Love is great! Familial love is the most important to me with close friendships following this. In terms of romantic love, I don't involve myself in it but it is fun to think about (kinda hate seeing couples doing PDA though).

I think it's the strongest feeling a person can experience but despite that it's also the most fragile and the one that hurts the most

I don't know what I'd do without it, it's a part of my day to day life, I hope it stays that way and that the people I love feel loved by me.

ARE YOU IN LOVE?



Yes



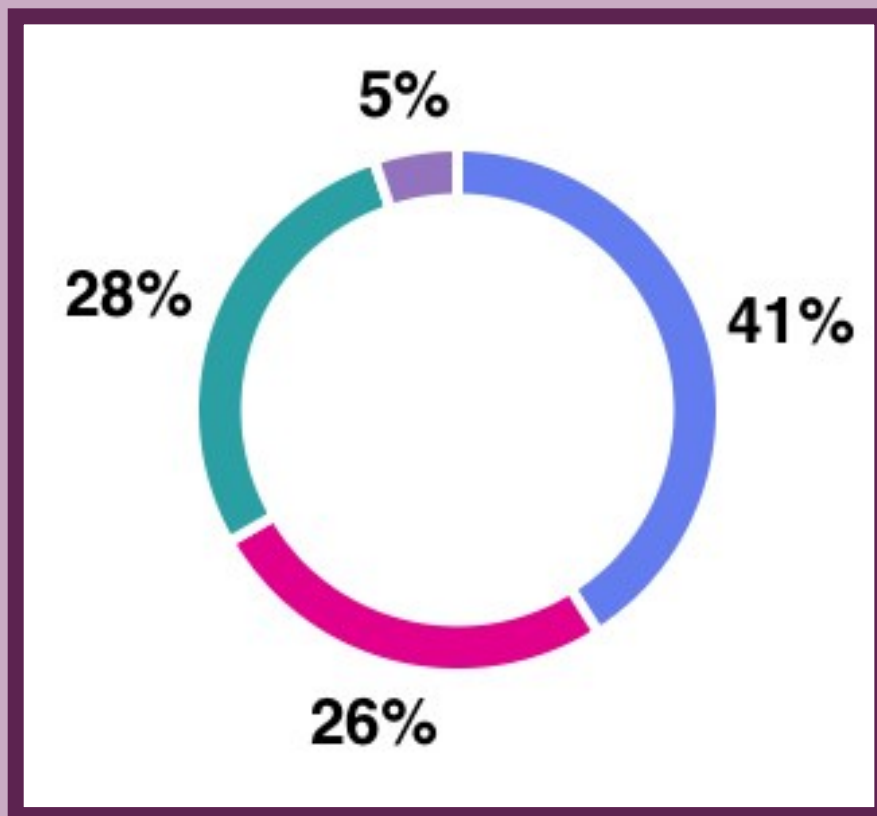
No



It's complicated



Never have been,
never will be!



Total responses: 39!!!



16



10



11



2

I seriously would not be able to get through school or life in general without your existence and that's why you're my favourite person.

Love ya bestie boo, I don't say it enough!!!

It's okay to not be perfect, everything will fall into place better than you think

i respect you too much to do anything about it

It'll all work out.

i appreciate you

To the gang, I appreciate and love you all very dearly, in a non-romantic, completely platonic kind of way. Love ya'll

Friendship in my opinion is the purest kind of love. It is the building of your own family; Family is the most important connection we can have. Friends are your safety net and the nourishment to your soul in dark times. Pookie, you know who I'm talking about, I love you girl. In other news, and in a slightly more profound sense, for a love in the more 'mainstream' illusion, in the vain hope you might know of me I hope I bump into you some time soon.

There are basically 0 odds that this love is reciprocated, cause I've had it confirmed. Sad.

Not loving for fear of suffering, it's like not living for fear of death. I love you now and probably forever even though we must go down our own paths. I don't regret any of it. I love you.

Ever since the day we met, I've always admired you!

You are awesome sauce on a plate of bodaciousness

Thank you.

hey you I think you're super adorable

To my sister. I don't know what I'd do without you, you really are the best person ever. I hope you always remember that I love you.

I got so lucky with you. I can't thank God enough for you. I'm glad I made the first move because you really are the best. I love you.

I love you so much my handsome man



Why can't I get over you?

I love you mum. Thank you for everything you've done xx

Anonymous messages...

How do I tell you that I like you when we never talk?

...to people you love!



If you know who you are, you know. Since primary school, I have always though you were THE GREATEST best friend.-L

Seen 14th February

Maybe one day I'll have enough courage to tell you, but today's not that day.

I love you so so much you're so comforting to be around and I love having you in my life.

I love you and want you to be OK ♥

To my one and only love:
I love you, music.
(honourable mention to The Beatles, icons)

It'll all work out.

Love ya! ♥
(*^ε^*)

LOVE
YOU

You're so pretty!

Who am I without the gorgeous divas I get to call my friends?
ILY ALL SM

If there was more people as amazing as you, the world would be a better place xx

To all my friends, of the past and present. You are my love. Every day and night a thought of you lingers in the back of my mind, like faint whispers of moonlight on a winters eve. Without you the world is dark, and dull and grey. Without you everything feels melancholy and distant. Please, never stop shining, if not for me then for the whole world to feel the warmth of your presence. Thank you, for everything you've ever done, I needed it all like a plant needs its sun.

Love you dad, thank you for everything

You look so good from a distance but we both know that we must keep the distance and move on.

Hey, pretty stranger. I always see you in the city and you look so cool but I never have the guts to tell you that...

You're the reason I believe in love.

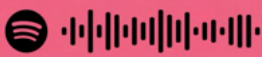

Not a day goes by where I don't think about you. I have a crush on you, even if we're already together (I want to keep it that way)

YOUR SONG RECCOMENDATIONS:

	f0oL f0r YoU by ZAYN
	Feels Like by Gracie Abrams
	Babydoll by Dominic Fike
	No Machine by Adrianne Lenker
	Slow Dance by Clario
	Missing Out by Maya Hawke
	bad idea! by girl in red
	Fool by Frankie Cosmos
	No One Noticed by The Marias
	Super Freak by Niki Minaj
	zombie girl by Adrienne Lenker
	I wanna be yours by Arctic Monkeys
	Love You to Death by Type O Negative
	Perfecto miserable by King Krule
	God by Jake Daniels
	Chasing Cars by Snow Patrol
	2 You by Mariah the Scientist
	Anyone Else But You by The Mouldy Peaches
	Ordinary by Alex Warren
	Just the Way You Are by Bruno Mars
	I'm Not In Love by 10cc
	So Easy (To Fall In Love) by Olivia Dean
	I THINK by Tyler, the Creator
	Take Me Out by Franz Ferdinand
	L'AMOUR DE MA VIE by Billie Eilish

	I Want You by Mitski
	She Moves In Her Own Way by The Kooks
	Lovesong by The Cure
	Hold me tightly by Jamie Paige
	L-O-V-E by Nat King Cole
	Lady brown by Nujabes
	Every Breath You Take by The Police
	BEST INTEREST by Tyler, the Creator
	First Love/Late Spring by Mitski
	For the First Time by Mac DeMarco
	Everybody here wants you by Jeff Buckley
	Bad Habit by Steve Lacy
	Harvey by Her's
	Cornerstone by Arctic Monkeys
	The best part (feat. H.E.R) by Daniel Caesar, H.E.R
	ARE WE STILL FRIENDS? by Tyler, the Creator
	Harness Your Hopes — B-side by Pavement
	Perfect pair by beabadoobie
	Angel by Shaggy, Rayvon
	Snap out of it by Arctic Monkeys
	Glue Song (feat. Clairo) by beabadoobie, Clairo
	Everyone Adores You (at least I do) by Matt Maltese
	Falling Behind by Laufey
	Killing my love by Leslie Parrish
	Roommates by Malcom Todd

SONGS ABOUT LOVE!

	This love by Panteras
	Sakura kiss by Chieco Kawabe
	Who are you? By Saga Faye
	Die With A Smile by Lady Gaga, Bruno Mars
	Superpowers by Daniel Caesar
	This Side of Paradise by Coyote Theory
	Baby I'm Yours by Arctic Monkeys
	A Night To Remember by bea-badoobie, Laufey
	Always Forever by Cults
	Sofia by Clairo
	Heaven Knows I'm Miserable Now by The Smiths
	Television / So Far So Good by Rex Orange County
	I Want Someone Badly by Jeff Buckley
	violet by Zach Templar
	All I Need by Radiohead
	Better in the Dark by TV Girl
	No One Noticed by The Marias
	Romantic Lover by Eyedress
	Lovefool by The Cardigans
	I Love You So by The Walters
	anything by Adrienne Lenker
	Robbers by The 1979
	Say Yes by Elliot Smith
	Honey, Honey by ABBA
	Jealous by Eyedress

Scan the QR code below to listen to all the songs on our Spotify playlist!

SONGS ABOUT LOVE FROM PULP RESPONSES!



Thank you to everyone who submitted any responses. We loved hearing from you all!!

STAINED GLASS VALENTINES COOKIES

serves ~25

INGREDIENTS

250g unsalted butter

125g golden caster sugar

2 tsp vanilla extract

375g plain flour

200g crushed candies, any colors. You can prepare 50g of four colors, for example, or mix colors to make a cool effect.

METHOD

-Preheat oven to 160° C (Gas mark 2/325° F).
Line 2 baking trays with baking paper.

-Place the butter, sugar and vanilla extract into a large mixing bowl, then whisk together with an electric whisk until pale and fluffy.

-Sieve in the flour. Whisk again until the mixture comes together to form a dough (you may need to pull the dough together with your hands as it can be quite crumbly).

-Roll the dough out on a lightly floured surface to around 1cm thick. Cut heart shapes from the cookie dough using a large heart shaped cookie cutter, then cut smaller hearts in each cookie and remove the heart-shaped centres.

-Repeat until you have used all the dough and add the crushed candies into the middles. Carefully transfer to baking trays and bake for 10-15 minutes until golden.

-Once cooked, remove cookies from the oven and leave to cool on the baking trays for a few minutes, then carefully peel off and serve.



VALENTINES MARSHMALLOW BITES:

Ingredients:

- 6 Tablespoons unsalted butter - salted butter is fine too!
- 10 cups mini marshmallows - divided, see notes
- 6 cups rice Krispy cereal
- 1/2 teaspoon kosher salt
- 1/2 1/2 teaspoon vanilla extract
- 1 cup milk chocolate M&M's - sometimes I like to freeze them so they don't melt as readily. This is optional though.

Method:

1. Line an 8x8 *pan with foil. Gently cover with cooking spray. Set aside.
2. In a large pot, melt the butter over medium low heat. Once melted add 8 cups of the mini marshmallows to the pan. When the marshmallows are just melted, add the vanilla, kosher salt, and Rice Krispies cereal. Remove from heat. Stir.
3. Once the Rice Krispies cereal is mostly covered with the melty marshmallow mixture, add the remaining 2 cups of mini marshmallows and the M&M's. Stir to combine.
4. Place the Rice Krispies treat mixture into the foiled pan. Gently press into an even layer.

Notes:

- 8 cups of mini marshmallows equals roughly 330 grams. 2 cups equals roughly 102 grams.
- An 8x8 pan will yield thicker Rice Krispies. Using a 9x9 inch pan works perfectly too. Use whatever you have on hand.

When pressing the Rice Krispies down, don't press too hard! You don't want them to be too compact. Also, if the mixture is sticking to your hands, gently rub butter onto your hand and then use your hand to press the mixture into the pan. It might be hot so be careful! But this will prevent it from sticking to you.

Puzzle Period

Cryptic Crossword Clues



Context and Composition

Cryptic crossword clues are, as the name suggests, enigmatic clues given in crossword puzzles. Often identified by irregular structure or convoluted answers, they serve as break points from the more accustomed crossword clues and rely more on abstract creativity rather than general

The Definition £1	The Fodder £2	The Indicators £3
Part of the clue the answer means / synonym of.	Parts of the clue used to find the answer.	Parts of the clue that tell how the Fodder is manipulated

Cryptic crossword clues may require words to be replaced by others such as the **Phonetic alphabet, Roman numerals, Foreign words or semantically identical words**. Fortunately, it is common practice to keep the complexity of these gimmicks to a minimum.



Types of Clues

Generally, punctuation does not help at all in deriving the answer and are merely added to make the phrase read better, but **in some cases** they can help by signalling further obscurity.

Contextual Clues £1	&lit Clues £2	Rebus clues £3
Question marks (?) The answer is more broadly tied to the definition / not a dictionary definition	Exclamation marks (!) The entire clue is the answer / entire crossword clue is the definition.	These clues aren't notated by any punctuation. The answer is wordplay itself and describe the physical form of the clue.



Types of Indicators

Method // Identification // Examples

- Reversing the order of letters** // Similar to inversion or turning // "Back" "Flip" "Return"
- Anagramming the letters** // Similar to destruction or movement // "Wild" "Broken" "Bananas"
- Removing certain letters** // Similar to disposal or disappear // "Gut" "Shed" "Evacuate"
- Keeping certain letters** // Similar to placement or location // "Head" "Initial" "Tail"
- Replacing words with a homophone** // Similar to hearing or voicing // "Yell" "Heard" "Call"
- Surrounding or inserting letters** // Similar to encapsulation or put // "Injects" "Has" "Circles"
- Searching for a group of letters** // Similar to parts or secrecy // "Patch" "Has" "Vaults"

Puzzle Period

Cryptic Crossword Clues



Example Clues

Hot ex cropped out of sexy cuddling photo (5) Letters

First, “ex is cropped out of sexy”. With ‘cropped’ meaning to trim/remove, the letters ‘ex’ are removed from ‘sexy’, leaving the letters ‘sy’. Next, those letters are “cuddling photo”; another way of saying ‘photo’ is ‘pic’ and with ‘cuddling’ meaning to embrace/surround, the letters ‘s’ and ‘y’ surround ‘pic’. This gets us the word “Spicy”, which is another word for “Hot”.

12 - 55 + n = 9 - 12 (5) Letters

The number 12 spelt out is “Twelve”. This is then “-” or negated by “55” which in Roman numerals is ‘LV’. Removing letters ‘l’ and ‘v’ from “Twelve” gets ‘Twee’. Finally, “+” or adding the letter “n” gets the answer “Tween”, the word that “=”, describes or equals “9 -12”. The minus symbol doesn’t represent arithmetic but range, as in the age range that “Tween” represents.

“Ludicrous!” I interjected. “Ludicrous, ludicrous!” (10) Letters

The first “Ludicrous” has “I interjected”, literally; If you “Interject” or insert the letter “I” into the word “Ludicrous”, you get some variation of ‘Ludiicrous’. If you then anagram it by the second instance of “Ludicrous” (As ludicrous means disorderly or wild), you can get the word “Ridiculous” which matches to the definition of the third and last “Ludicrous” in the clue.



Practice Clues

Easy - Initial trouble in making eight shiny products (5)

Intermediate - Little tune I’m playing (5)

Hard - Starting October 11 side hustle dropped charges (7)

Complex - St_len_rom Af_resco!?! (6, 3)

Grand

“Loved quilt in mirror - literally said you too, left after?” (5)

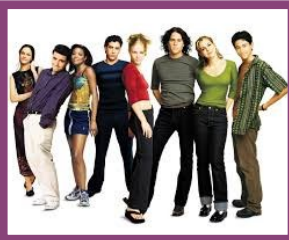
Happy Valentines~

THINGS I LOVE ABOUT *10 THINGS I HATE ABOUT YOU (1999)*

By Lena Włodarczyk

Few romcoms have managed to stay as effortlessly charming as *10 Things I Hate About You*. More than two decades on, this modern high school retelling of Shakespeare's *The Taming of the Shrew* still feels sharp, funny and surprisingly heartfelt. It is the kind of film that makes you laugh, swoon and immediately want to rewatch it with friends.

Summary



Set in an American high school, the film follows sisters Kat and Bianca Stratford, who could not be more different. Bianca is popular, sweet and eager to date, while Kat is fiercely independent, outspoken and uninterested in playing by anyone else's rules. Their father enforces a strict dating policy that links the sisters' love lives together, which leads to an unexpected plan involving new student Cameron and the mysterious Patrick Verona. What unfolds is a clever mix of teenage chaos, fake dating schemes and genuine emotional growth.

Three Things I Love About the Film

1. Kat Stratford as a RomCom Icon

Kat is refreshingly unapologetic. She is sarcastic, intelligent and not softened to be more palatable. Watching a female lead who is allowed to be angry, guarded and still deeply romantic feels timeless and empowering.

2. The Perfect Balance of Comedy and Heart

The film is packed with quotable lines and comedic moments, but it never forgets the emotional core of the story. Beneath the jokes, it explores vulnerability, trust and the fear of getting hurt, which makes the romance feel earned.

3. The Soundtrack and 90s Aesthetic

From the iconic musical moments to the unmistakable late 90s fashion, the film captures a specific era without feeling dated. The soundtrack alone adds so much personality and energy to the story.

Similar Vibes: What to Watch Next

If you loved *10 Things I Hate About You*, here are a few films that carry a similar mix of romance, humour and heart:

- **Clueless** for another smart, stylish high school classic
- **She's the Man** for Shakespeare inspired chaos and comedy
- **Love, Simon** for a modern teen romance with emotional depth
- **The Half of It** for a quieter, more introspective take on young love



Final Verdict & Rating Breakdown

10 Things I Hate About You is a Valentine's essential, whether you are celebrating love, friendship or just a great movie night. It proves that rom coms can be funny, sincere and emotionally honest all at once. With unforgettable characters and a romance that still resonates, it earns its place as one of the most beloved teen films of all time. Perfect for a Valentine's rewatch and even better when shared.

Story and Writing: 8.5/10 - The script is witty, clever and emotionally grounded. Its modern take on Shakespeare feels accessible and still resonates, even decades later.

Cinematography and Visuals: 7.5/10 - While not visually groundbreaking, the film makes great use of its setting and classic 90s style to create a warm, nostalgic atmosphere.

Cast and Acting: 9/10 - The performances are a standout, especially Julia Stiles and Heath Ledger, whose chemistry and charisma elevate the entire film.

Pacing and Editing: 8/10 - The story flows smoothly, balancing multiple plotlines without dragging or feeling rushed.

Sound and Music: 8.5/10 - The soundtrack is iconic and perfectly captures the tone of the era, enhancing both the comedic and romantic moments.

Themes and Symbolism: 8/10 - The film thoughtfully explores independence, vulnerability and authenticity beneath its light-hearted surface.

Final Score: 8.4/10



Kat (Julia Stiles)	Patrick (Heath Ledger)	Verona (Larisa Oleynik)	Bianca (Larisa Oleynik)	Stratford (Joseph Gordon-Levitt)	James (Joseph Gordon-Levitt)
Kat is the sharp-tongued, fiercely independent older sister who refuses to conform to her school's social expectations. Julia Stiles brings depth and vulnerability to Kat, making her one of the most memorable and relatable teen characters of the era.	Patrick is the mysterious bad boy with a reputation that precedes him. Heath Ledger's performance is effortlessly charismatic, blending humour, softness and sincerity in a way that turns Patrick into an instant rom-com favourite.	Verona is popular, bubbly and eager to experience romance, but she slowly learns there is more to life than approval and attention. Larisa Oleynik gives Bianca warmth and growth, preventing her from becoming just another stereotypical popular girl.	Stratford is the sweet, slightly awkward new student who believes wholeheartedly in romance. Joseph Gordon-Levitt plays him with genuine charm, making Cameron an easy character to root for from the very beginning.		

Short psychology behind crushes

- by Wiktoria Marszalek

Experiencing attraction is a natural part of the human experience and often happens quickly and subconsciously. While feeling “butterflies” around a crush might seem like an embarrassing teenage experience, we all know that it’s a normal thing. Literally most of us have one, there is nothing to be ashamed of. But what is happening in the brain when we experience attraction, why do we develop crushes on certain people and not others, and is there any purpose or benefit to these feelings?



What's happening in the brain?

While it can take less than a second for someone to develop attraction towards someone else, the neuroscience behind the chemical changes happening in the brain is complex. When we experience attraction or develop a crush, chemicals are released in the brain creating a stress and reward response. The first spark of attraction happens in the “ventral tegmental” area of the brain which produces the “feel good” neurotransmitter commonly known as dopamine. These chemicals may cause one to be giddy, euphoric, and even to experience suppressed hunger and sleep cues. Activating that part of the brain actually also regulates stress, that is why thinking about someone you love can calm you and reduce stress! Nevertheless, the evolutionary purpose of these chemical responses for attraction and attachment are to increase the likelihood of survival and reproduction.

But why does it sometimes feel like torture???

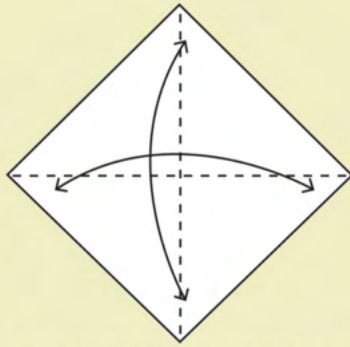
While dopamine and endorphins are generally known as “happy” chemicals, there’s also a good reason why crushing hard can feel a bit anxiety-inducing. A change in serotonin levels can lead to mood swings. Oh, and we can’t forget the uncertainty and fear of possible rejection that comes with a new crush. And also, there’s the amygdala, the brain region critical for emotional processing, which becomes more active. All of this keeps you in a state of heightened alertness and anxiety, which can further contribute to the feeling of confusion and destabilisation. It’s basically FIGHT OR FLIGHT!!!!



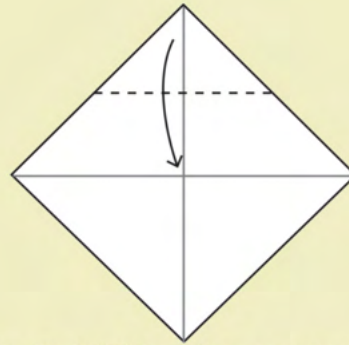
Familiarity & mere exposure effect

Crushes are more common if you see the person often, like a friend or a classmate. Our brains are wired to like what we recognise. It causes us to feel safe, so familiarity grows into attraction. Because of this wiring, repetition tends to grow into attraction, it is obsessed with familiarity. Research shows that people tend to pick partners that remind them of their parents, but not because of looks, but because of behaviours, mannerism and emotional patterns that feel familiar

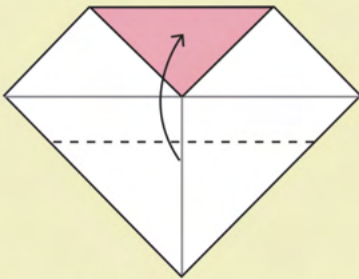
ORIGAMI HEARTS



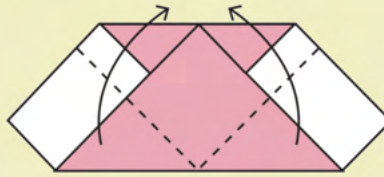
1. Fold all the corners together and unfold



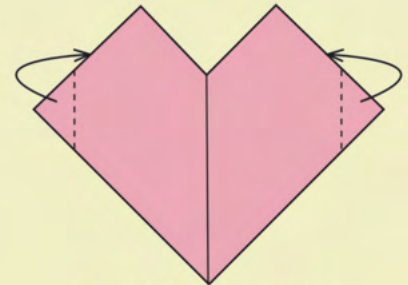
2. Fold the top corner down to the centre



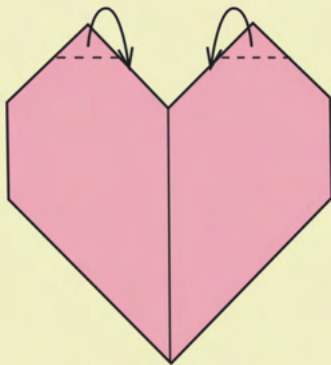
3. Fold the bottom corner up to the edge



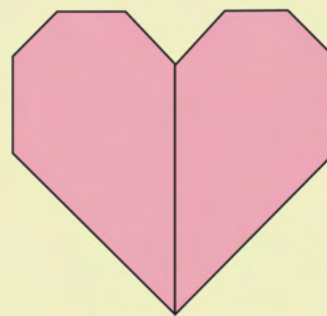
4. Fold the bottom edges into the middle



5. Fold the side corners back



6. Fold the top corners back



DONE!

Against love

Poetry: for and against love

I hate love.
At least, I say I
do.
It's easier than
explaining
What you did to it.

Love shows up
everywhere
uninvited.
My parents at the
dinner table,
Laughing like the
world never taught
them loss.

My friends holding
hands
As if it's not a
personal attack.
Strangers kiss on
street corners,
Like they're trying
to prove something.
I look away.
I always look away.
Because love used
to be quieter.

It used to sound
like promises
That didn't echo
back broken.

Now it's loud,
careless,
And always in my
line of sight.

I roll my eyes at
romance,
Mock the clichés,
Pretend I'm above
it all.

But sometimes I
wonder
Why everyone else
got the version
That didn't ruin
them.

So no, I don't
believe in love.
Not anymore.
But if it's so
fake,
Why does it keep
finding me
Just to show off?

For Love

Poems written by Lena Włodarczyk

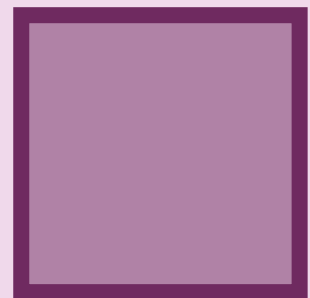
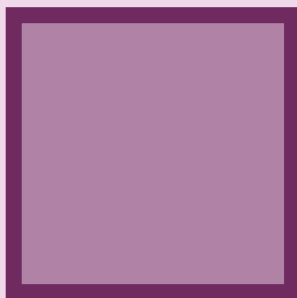
Love tiptoes in like starlight
That's snuck out past midnight's
gate,
Sprinkling glitter on the ordinary
Just to see what it creates.

It hides in teacup swirls of steam,
In moonbeams tangled on the floor,
In the flutter of a maybe
And the hope of something more.

Love hums in the hush between
heartbeats,
Dances barefoot through your day,
Turning simple moments golden
In a softly mischievous way.

No permission, no announcement,
Just a wink from up above.
That's the magic, sweet and
wandering,
Of the little trickster known as
Love.

We want to hear from you!
Vote on the form below:
which poem do you prefer?



By Grace Martin

THE PHYSICS OF

UNAVOIDABLE ATTRACTION

AN ARTICLE ON BINARY BLACK HOLES

What's this article about?

This article explores the fascinating prospect of binary supermassive black holes. This is where two supermassive black holes become locked in a tidal formation, usually occurring during the collision of two galaxies. I will endeavour to explain how they form, their inevitable cosmological fate, why we should all be a lot more excited about them, and why they can teach us a thing or two about love.

What are binary black holes?

Binary black holes are systems in which two supermassive black holes become bound by gravity, meaning their total energy is negative and they cannot escape each other. Instead of acting independently, they behave as a single dynamical system governed by gravity and spacetime curvature. Each black hole typically has a mass ranging from 10^6 to 10^{10} times the mass of our Sun. Their enormous mass produces very strong spacetime curvature, making relativistic effects important and distinguishing them from stellar-mass black holes.

Rather than one black hole orbiting the other, both black holes orbit a common centre of mass called the barycentre. The position of this barycentre depends on their relative masses. Their orbital motion can be described using gravitational dynamics and, at small separations, general relativity.

Binary black holes usually only form when two galaxies collide. Observations show that most large galaxies contain a central supermassive black hole. When galaxies merge, their central black holes are brought together within the newly formed galactic nucleus, providing the conditions necessary for a binary system to form. These systems are among the most extreme in the universe, involving enormous mass, acceleration, and gravitational fields. As a result, they are capable of producing powerful gravitational waves and serve as a natural laboratory for testing fundamental physics under conditions far beyond those achievable on Earth.

What's the science around how they form?

Let's dive into the science of how these systems actually form. To start with, most large galaxies contain a central supermassive black hole. Observational evidence shows that the mass of this central black hole correlates with properties of the host galaxy, such as bulge mass and stellar velocity dispersion. This suggests that the growth of galaxies and their central black holes are closely linked.

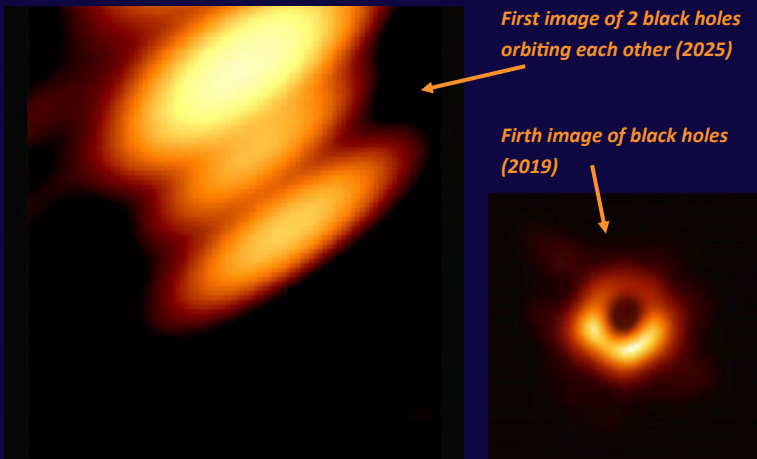
During a galaxy merger, gravitational interactions cause the structures of the galaxies to combine. Their central supermassive black holes are drawn toward the centre of the newly formed galaxy, moving within a dense environment of stars, gas, and dark matter.

As each black hole moves through the surrounding matter, its strong gravitational field pulls nearby stars and gas slightly towards it, creating a trailing overdensity known as a "wake". The gravitational attraction of this wake exerts a force opposite to the black hole's motion, causing it to lose momentum and kinetic energy. This process is known as dynamical friction. As a result, the black holes spiral closer together and form a gravitationally bound binary.

As energy continues to be lost, the separation between the two black holes decreases. Eventually, their mutual gravitational attraction dominates over the influence of the surrounding galaxy, and they orbit a shared centre of mass.

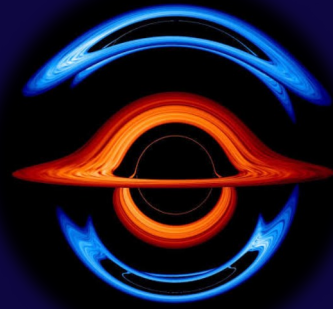
The system then loses energy through several mechanisms, causing the orbit to shrink further:

- Ejecting nearby stars (loss-cone scattering): Stars that pass close to the binary can undergo gravitational slingshot interactions, gaining energy and being ejected from the galactic centre. The energy carried away by these stars comes from the binary's orbital energy, causing the black holes to move closer together.
- Interactions with surrounding gas: In gas-rich galaxies, the binary interacts with dense gas and accretion discs which are flattened, rotating discs of gas, dust, or plasma that form around massive objects when material falls in under gravity while retaining angular momentum. Friction and viscous forces within the gas transfer energy and angular momentum away from the binary, further reducing the orbital separation.
- Emission of gravitational waves: At very small separations, the rapidly accelerating black holes emit gravitational waves, which are ripples in spacetime predicted by general relativity. These waves carry energy and angular momentum away from the system, leading to a rapid inspiral and eventual merger.



First image of 2 black holes orbiting each other (2025)

Firth image of black holes (2019)



What then?

Now comes the defining moment. What will happen to the star-crossed lovers? As described before, energy is steadily lost through interactions with the surrounding galaxy and later through gravitational radiation. As the total orbital energy decreases, the separation between the two black holes reduces, causing the system to tighten.

Once the black holes are sufficiently close together, the changing mass distribution of the system produces strong gravitational waves. At this stage, gravitational-wave emission becomes the primary mechanism by which energy and angular momentum are lost.

The power emitted as gravitational waves increases rapidly as the separation decreases. This creates a runaway effect, where smaller separations lead to stronger radiation, ultimately resulting in an exponentially faster inspiral.

Eventually, the dancing binary merges into a single, larger black hole. The two event horizons combine to form one black hole with a greater mass, although slightly less than the sum of the original masses due to energy lost as gravitational waves.

The merger releases an enormous amount of energy and violently distorts spacetime. For a brief moment, the system releases more power than all the stars in the observable universe combined, in the form of gravitational waves that propagate through spacetime itself.

Why would I even care?

Below are some reasons why I think you should care about this:

- Because binary black holes let us test the laws of physics at their limits: Binary black hole mergers create the most extreme gravitational environments ever observed. During a merger, spacetime is distorted so strongly that objects move at relativistic speeds, allowing physicists to test general relativity under conditions that cannot be recreated on Earth. The fact that observations match Einstein's predictions confirms that our understanding of gravity still holds true, even in the most violent events in the universe.
- Because they reveal how galaxies (including our own) were built: Most large galaxies are thought to form through mergers, and binary black holes are a natural consequence of this process. Studying these systems helps astronomers understand how galaxies grow, how matter is redistributed in galactic centres, and how supermassive black holes reach their enormous sizes. In other words, binary black holes help explain the history of the Milky Way and the structure of the universe itself.

- Because they allow us to observe the universe in a completely new way: Binary black holes emit gravitational waves, which carry information that light cannot. These signals allow scientists to detect events that would otherwise be invisible, opening a new field known as gravitational-wave astronomy. This means we are no longer limited to seeing the universe; we can now listen to it.

Why are you even talking about this?

It's Valentine's Day soon, so I should probably link this back to relationship advice, because who wouldn't ask a pair of supermassive cosmological anomalies about their love life?

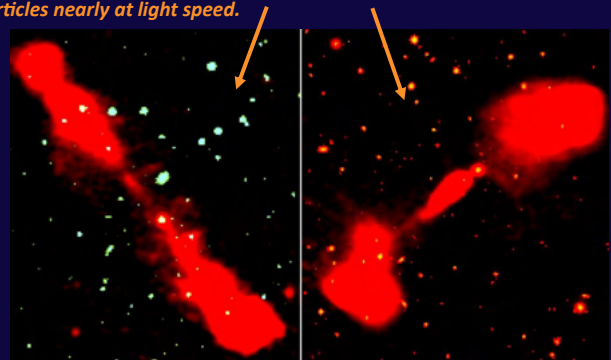
Despite the fact that binary supermassive black holes are purely physical systems, they seem uncannily romantic if you look closely enough. Two black holes don't meet by accident alone; circumstance and gravity bring them together, much like how timing, chance, and shared paths draw people into relationships. Once paired, both objects must pull on each other equally to form a stable barycentre. Love works the same way: effort cannot be one-sided.

Healthy binary systems don't collide immediately. They maintain stable orbits for immense lengths of time, showing that closeness still requires space and boundaries. When energy is lost and problems go unmanaged, the inspiral phase begins; conflict intensifies and distance closes too quickly. Even then, the system sends gravitational waves outward, reminding us that how we act in relationships affects more than just the two people involved.

No binary system is perfectly understood. Parts of each black hole lie beyond the event horizon, unseen and unknowable, just as no relationship offers complete transparency or certainty. Over time, change becomes unavoidable. In a merger, both black holes transform, becoming something new and equal rather than remaining separate versions of what they once were.

And not all systems last forever. Some merge, some break apart, and some evolve into new configurations. That doesn't mean they failed; it means they followed the physics of change. In that way, love is less about permanence and more about the meaning of the shared orbit. It's romantic, really: two massive bodies locked in a cosmic dance, shaping each other until the universe itself feels the echo.

Astronomers discovered 53 giant radio quasars with jets so massive they reach up to 7.2 million light years in length. This is roughly 50 times wider than the Milky Way. These objects are powered by supermassive black holes that feed a surrounding material and unleash enormous streams of charged particles nearly at light speed.



Eman Nussein: Fashion in Full Bloom

By Lena Wlodarczyk

Nussein's Style Summary

Eman Nussein is a fashion designer best known for her elegant approach to modest fashion, particularly through her iconic flower dresses. Her work combines femininity, cultural awareness, and modern design, creating clothing that feels both expressive and respectful. Rather than following fast fashion trends, Nussein focuses on thoughtful design, using clothing to explore identity, confidence, and self expression.



Her flower dresses are a perfect example of her style.

They often feature long flowing silhouettes, soft fabrics, and bold floral patterns that immediately draw attention. Flowers in her designs are not just decorative. They symbolise growth, beauty, and individuality. By placing floral imagery on modest, fully covered garments, Nussein challenges the idea that modest fashion has to be plain or restrictive.

Nussein's work celebrates the idea that fashion can be personal and meaningful. Her designs allow wearers to feel stylish without compromising their values, which is why her work resonates so strongly with a younger generation looking for representation in fashion.

How to Spot an Eman Nussein Flower Dress

Eman Nussein's flower dresses are instantly recognisable once you know what to look for. One of the most noticeable features is the full length silhouette. These dresses are usually long and loose fitting, creating a graceful and confident shape rather than a tight or revealing one.

Another key feature is the use of floral patterns. The flowers are often large, bold, and detailed, sometimes covering the entire dress. The designs feel expressive and artistic rather than delicate or subtle. Nussein often uses strong colours alongside softer tones, creating contrast and visual impact.

The fabric and movement of the dresses also stand out. Many of her flower dresses are made from lightweight materials that flow as the wearer moves, giving the garment a sense of elegance and calm. Sleeves are usually long and slightly oversized, adding to the dramatic but modest effect.

Finally, there is a clear sense of confidence and intention in the design. Nussein's flower dresses are not meant to blend in. They make a statement while still remaining modest, proving that covered fashion can be bold, expressive, and powerful.

*My verdict:
Five stars,
very beautiful*



"For God so loved the world, that he gave his only Son, that whoever believes in him should not perish but have eternal life," - John 3:16

"Love is patient, love is kind. It does not envy, it does not boast, it is not proud. It does not dishonour others, it is not self-seeking, it is not easily angered, it keeps no record of wrongs. " - 1 Corinthians 13:4-5

"A new command I give you: Love one another. As I have loved you, so you must love one another. By this everyone will know that you are my disciples, if you love one another." - John 13:34-35

"Above all, love each other deeply, because love covers over a multitude of sins. " - 1 Peter 4:8

"And now these three remain: faith, hope and love. But the greatest of these is love. " - 1 Corinthians 13:13

For the love Of God:

Bible verses about love

"Dear friends, let us love one another, for love comes from God. Everyone who loves has been born of God and knows God. " - 1 John 4:7

"We love because he first loved us." - 1 John 4:19

"Greater love has no one than this: to lay down one's life for one's friends. " - John 15:13

"Bear with each other and forgive one another if any of you has a grievance against someone. Forgive as the Lord forgave you. " - Colossians 3:13

"Therefore encourage one another and build each other up, just as in fact you are doing. " - 1 Thessalonians 5:11

WHITE DAY: A UNIQUE VALENTINES IN JAPAN

By Lola Rackstraw

White day is a romantic holiday celebrated in Japan and other oriental regions such as Taiwan, China, South Korea, and other southern eastern countries. However white day is of Japanese origin. It dates to exactly one month post valentines day (March 14th), and acts as the sister-holiday where men give reciprocal gifts to women, as in Japan, women give men gifts on Valentines day (February 14th).

White day follows from Valentines day as a romantic opportunity for men to show their reciprocated feelings, or simply to conform to social pressure. Men are typically expected to return a more extravagant and special gift back to the lady, aiming to thank her for the initial profession of love and generosity, or even as a platonic gift of appreciation. The annual holiday acts as a romantic feature in the mundane months of the early year to incite a warm spirit of love and affection through out the air, helping people to have something to look forward to in the new year.



Why 'White' Day? Initially, white day began as a business opportunity to bring new marketing to Japan, following the western tradition of Valentines day. This business scheme involves confectionery profits as chocolates, marshmallows, sweets and general deserts are customary gifts on valentines day. Soon after this proposal in the 60s, heart shaped treats began appearing in stores and bakery's all across Japan.

However, the scheme took an unexpected turn as women proved to be the primary buyers of these treats, making many women feel unappreciated and let down. so in response to this one-sided affection, Japan reacted by introducing a new, original holiday known as 'Marshmallow day'- but wait, isn't it called white day? Yes! Today it is commonly referred to as 'white day', this is because marshmallows were a cheap and readily available confectionary treat that was encouraged and promoted for purchase, meaning more men could afford it and bestow upon a lucky lady. However as the years passed and recognition for the additional holiday progressed, other white gifts became customary to gift women, such as white chocolate, which caused the name shift from marshmallow day, to white day as we know it now.

How to celebrate!

Due to the common notion of 'Snbai Gaeshi', meaning triple the return, many men find white day to be too financially daunting as a very expensive or meaningful gift is expected. Therefore, usually men now spend white day as a date with their partner/love interest such as going to restaurants, café dates, or simply by gifting the classic treats!

How would you spend a White Day?

Zof's favourite... Shakespeare couples



Beatrice and Benedick from *Much Ado About Nothing*

These two started the play off hating each other and throwing insults at each other like they were playing ping pong. Both Benedick and Beatrice swore they'd never marry, and Beatrice especially, would not marry a man with a beard. However, during the play their friends manage to convince both that the other is in love with them, and then they start to question their own feelings. They obviously fall in love towards the end, which is something they thought at the beginning to be



Romeo and Juliet

The Capulets and The Montagues are two families that have had years of an ongoing feud. When Romeo Montague sneaks into the Capulet's masked ball, he lays his eyes on the most beautiful girl he's ever seen (apparently) and falls in love with her with a glance. This was Juliet. And she sees him and lowkey does the exact same. They get married in secret and keep their relationship hidden from their families until Juliet drinks a sleeping potion to fake her death. She did she because she was engaged to marry another man, Paris, and she didn't want to. When Romeo sees this, he thinks she's actually dead and so he drinks poison

Rosalind and Orlando

Rosalind falls for Orlando at the beginning of the play when she's at a wrestling match. However, she gets banished by her uncle, Duke Frederick, and flees to the forest. She ends up disguising herself as a man called Ganymede. In the forest, Orlando hangs love poems to Rosalind on trees, hoping she'd see them.

When Ganymede (disguised Rosalind) 'meets' Orlando, she asks him to woo her, to cure himself from his infatuation with Rosalind, not knowing that behind the disguise is his beloved. She does this to test his love and loyalty for her.



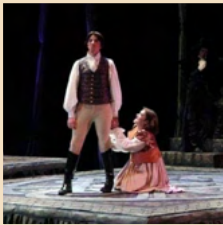
An article
by Zofia
Sliszka

Helena and Demetrius

At the beginning Helena already fancies Demetrius, but he rejects her as he's in love with her best friend, Hermia. So she goes to Oberon, King of The Fairies, and he gives her a love potion that she'll have to give Demetrius to fall in love with her. However, a little mix up happens, and both

Demetrius and Lysander (Hermia's lover) fall in love with Helena. This causes chaos.

But eventually the spell is



Antony and Cleopatra

This dude, Antony, at the beginning of the play, leaves his wife Fulvia for Cleopatra, causing a scandal. He sacrifices a lot for her, whilst she uses her wit to manipulate Antony for her own benefit (whilst also genuinely loving him). When Antony politically marries Octavia, Cleo reacts violently with jealousy. Their love goes to failure, and they both choose death over getting captured by Octavius. Bit historically inaccurate, but

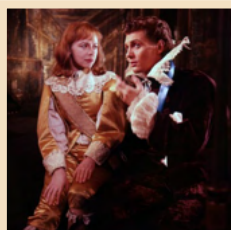
till an iconic couple.



Viola and Orsino from *The Twelfth Night*

When unexpected circumstances occur, Viola has to disguise herself as a young man named Cesario, in order to serve Duke Orsino. She becomes his close and trusted confidant. When she serves him, Viola (disguised), hides her deep and secret feelings for Orsino. To not make it obvious, she

tries to woo Olivia, who Orsino loves. However, when he sees this, he shifts his romantic feelings from Olivia to Viola, once her true identity is revealed (bit

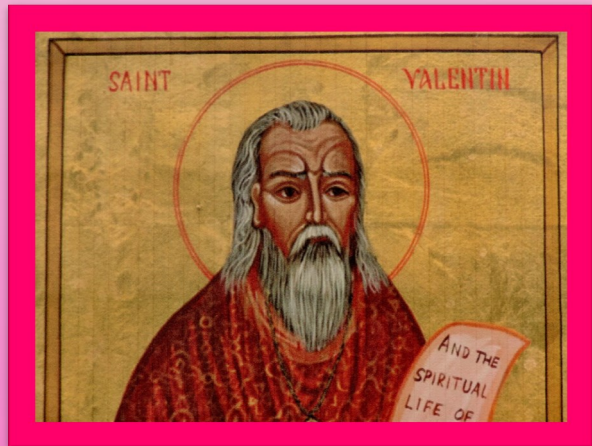


The History Of Saint Valentine's Day

Each year, people around the world commemorate a day of romance, known as Saint Valentine's Day. It is a day of declaring your love and spending time with those dearest to you, but aside from presenting loved ones with bouquets of flowers and greeting cards, why do we celebrate the 14th February? Read on to find out...

Saint Valentine

Saint Valentine's Day originated as a Christian Feast day to honour Saint Valentine – a martyr during the Roman Empire in the late 3rd Century. This martyr experienced difficulties during his life due to being a believer in the Christian faith, at a time when the ruling emperor, Claudius II, legislated strict laws surrounding Christianity. Some stories say the laws included the forbidding of Roman soldiers to marry, which is how Saint Valentine became popular. Rumours suggest that Valentine ministered weddings for Roman soldiers, and even when he was inevitably jailed for his practices, some sources say Saint Valentine continued to be a representative of love by helping prisoners share letters of lust with one another. Unfortunately, Saint Valentine's match-making soon came to an end when he was executed because of his Christian practices, on the 14th February c.AD 270. Before his execution, Saint Valentine is believed to have given a young girl he was imprisoned with a letter expressing his love for her, signed off with 'Your Valentine', which may be where the term used on Valentine's Day comes from. This day was soon integrated into the Christian calendar as a day to celebrate Saint Val-



entine's honourable life with a feast, therefore beginning the tradition. But where did the association with love come from?

Lupercalia

The ancient Roman festival of Lupercalia is often believed to have linked Saint Valentine's day to romance. Taking place on 15th February, the sacrificial festival involved priests known as Luperci making ceremonial sacrifices of goats and a dog to the Roman Gods, as offerings in return for fertility. Once killed, the goats' skin was crafted into whips that the Luperci used to lash out on women, whilst running around the Palatine Hill in Rome. Despite seeming brutal, to be hit by the whip was a sign of a fertility blessing that many women desired. Simultaneously, a luxurious feast took place to mark the occasion. Due to Saint Valentine's day taking place at a similar

time to Lupercalia, and also involving a feast, it is thought that the two ceremonies coincided to unite Saint Valentine's day and fertility - ultimately creating a day of love. Another theory for the day being one about love, originates from the Middle Ages, when it was thought that birds paired with each other in mid-February. This idea may have reinforced Saint Valentine's day as a day of finding love and becoming a couple, which is still believed today.



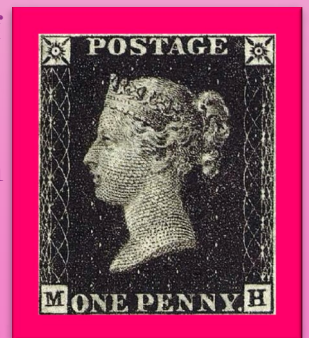
Posting Saint Valentine's Cards

This dedicated day of love, that began in Rome, spread to the rest of the world, and was slowly added to over time through various cultures. Historians say that the custom of sending Valentine's cards started from the German tradition of friendship cards, known as *'Freundschaftskarten'*. They were gifted to friends and family at special occasions such as birthdays and anniversaries, and therefore were ideal to being used on Saint Valentine's day. Others say the first exchange of anonymous love notes dates back to the mid-18th Century, and was developed into greeting cards by the mid-19th Century. Either way, the affordability of sending Valentine's cards improved during the 19th Century in Britain, with the invention of Penny Post by Sir Rowland Hill.

Penny Post was his solution to a highly expensive postage system that had meant people found it too costly to send letters to relatives since 1516. The reformed solution of Penny Post allowed letters to be sent at a standard rate of one penny to anywhere in Great Britain and Ireland, so long as they had a self-adhesive postage stamp on the envelope. The stamp itself was called a Penny Black due to its colour, and a sketch of Queen Victoria adorned it. For heavier letters, the Penny Blue was introduced, and cost two pence instead of one. After a year of their use the Penny Black was replaced with the Penny Red, as the new colour made the mark used to show the stamp had been used for delivery more easy to see, in order to prevent stamps being used more than once. Fast forward to the modern consumerism of the 1950s, and the production of Saint Valentine's cards, and greetings cards in general, was greatly encouraged in Britain. This has transformed into the sentimental selection of Saint Valentine's cards we see in stores every February.

And so, who would have thought that a day once reserved to signify the death of a Roman martyr who died over 1,700 years ago, would have morphed into the celebration of romance it is today?

Written by Emily Lowther



A kiss from



Gustav Klimt was an Austrian painter and one of the most influential artists of the early twentieth century. He is best known for his highly decorative paintings that blend fine art with pattern, symbolism, and luxury. Klimt's work often focuses on the human figure, especially women, and explores themes such as love, intimacy, beauty, and mortality.

One of the most distinctive aspects of Klimt's style is his use of gold leaf, particularly during what is known as his Golden Phase. Inspired by Byzantine mosaics, Klimt combined shimmering gold surfaces with detailed patterns and realistic faces. This contrast creates artwork that feels both flat and three dimensional at the same time.

Klimt was a leading member of the Vienna Secession movement, which aimed to break away from traditional academic art. His work challenged expectations and sparked controversy, but it also helped redefine what modern art could look like.



How to Spot a Gustav Klimt Artwork

A Klimt painting is often easy to recognise because of its rich decoration. Many of his works are filled with intricate patterns, geometric shapes, spirals, and repeated motifs that almost resemble fabric or jewellery.

Another key feature is the use of gold and metallic colours. These elements make the paintings appear luxurious and eye catching, giving them a glowing, almost sacred quality.

Klimt's figures, especially women, usually have realistic faces that contrast with the abstract, patterned bodies and backgrounds. This draws attention to expression and emotion while allowing the rest of the image to feel symbolic rather than realistic.

Themes of intimacy and symbolism are also central. His artworks often suggest deeper meanings related to love, life, and death, encouraging viewers to interpret the imagery rather than simply observe it.



Gustav Klimt's work had a lasting impact on modern art by showing that fine art could be decorative, emotional, and symbolic at the same time. He challenged the idea that paintings needed to be realistic or traditional to be meaningful.

His influence can still be seen today in fashion, illustration, and graphic design, especially through the use of pattern and gold. Klimt also helped open the door for artists to explore personal themes and emotional expression in their work.

By combining beauty with symbolism, Klimt created art that remains instantly recognisable and widely admired more than a century later.



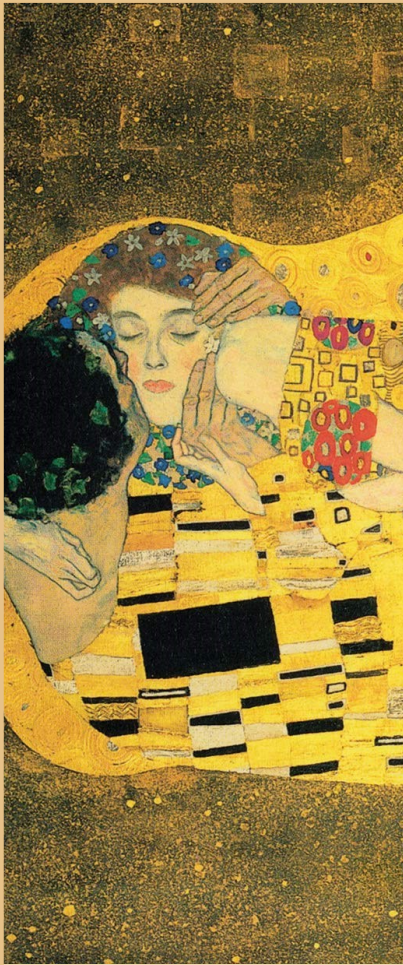
Gustav Klimt

The Kiss by Gustav Klimt (1907–1908)

Overview and Context

The Kiss is one of Gustav Klimt's most famous and recognisable artworks. Painted between 1907 and 1908, it belongs to Klimt's Golden Phase, a period when he used gold leaf extensively in his work. The painting shows a couple locked in an intimate embrace, positioned on the edge of a flower covered meadow against a shimmering gold background.

At the time, Klimt was part of the Vienna Secession movement, which aimed to challenge traditional art styles. *The Kiss* was created during a period of experimentation and artistic freedom, and it reflects Klimt's interest in love, intimacy, and human connection. Despite earlier criticism of his work, this painting was widely admired and was purchased by the Austrian government soon after it was completed.



Visual Features and Style

One of the most striking features of *The Kiss* is the heavy use of gold. Klimt applied gold leaf to the background and clothing, giving the painting a glowing and almost sacred appearance. This was inspired by Byzantine mosaics, which Klimt had seen during travels in Italy.

The figures are covered in intricate patterns rather than realistic clothing. The male figure's robe is decorated with bold geometric shapes such as rectangles and lines, while the female figure's garment features softer, circular, and floral designs. This contrast is often interpreted as representing masculine and feminine energy.

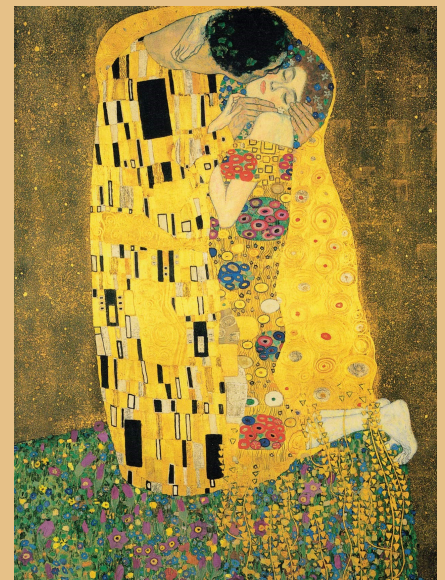
The faces and hands of the couple are painted realistically, drawing attention to emotion and tenderness. This balance between realism and abstraction is a key part of Klimt's style and makes the figures feel both human and symbolic.

Why The Kiss Is Important

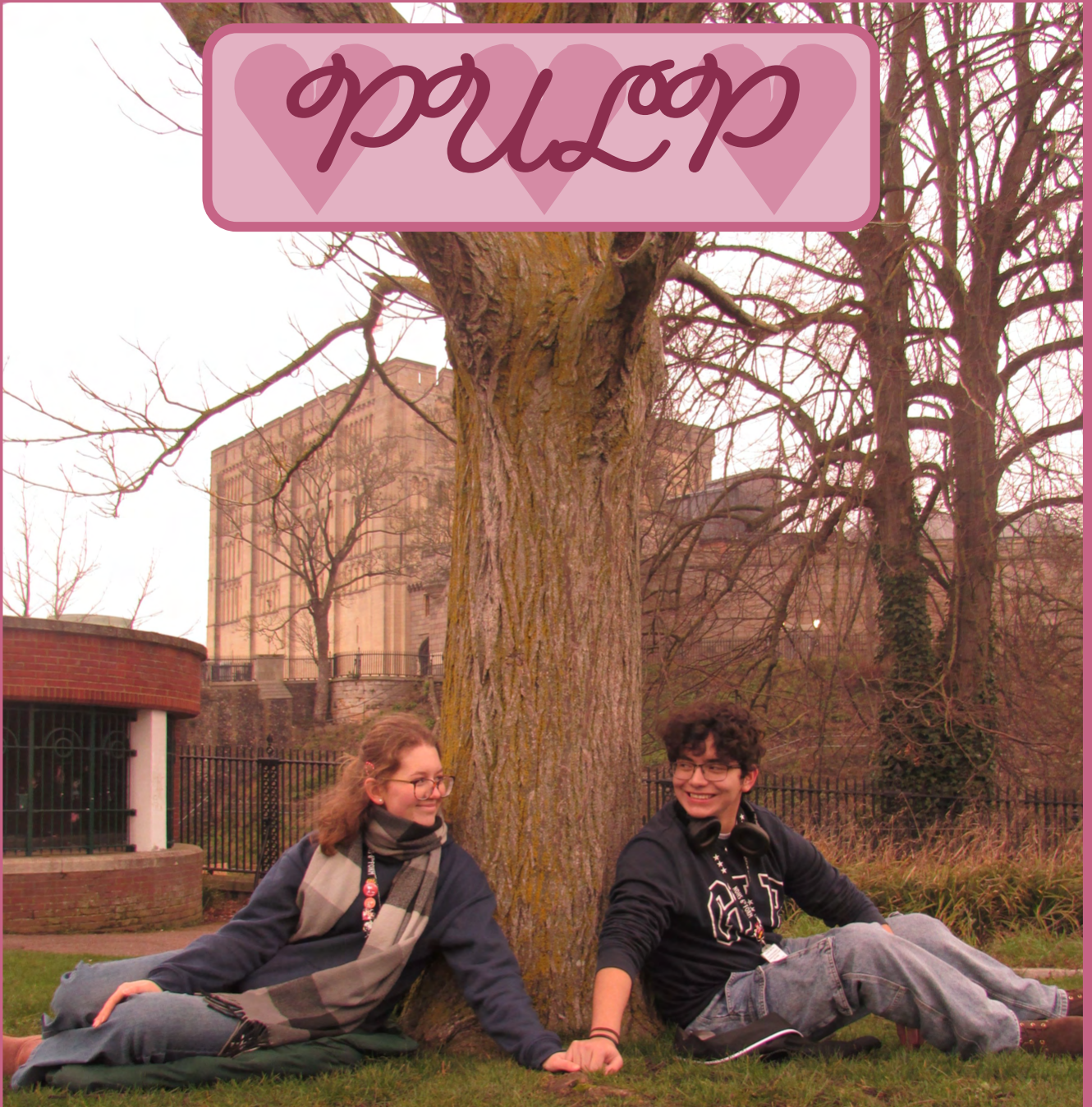
The Kiss is important because it perfectly represents Gustav Klimt's artistic vision. It combines decoration, symbolism, and emotion in a way that was groundbreaking at the time. The painting helped change how people viewed modern art, proving that beauty and meaning could exist together.

Today, *The Kiss* is one of the most reproduced artworks in the world and continues to influence artists, designers, and popular culture. Its lasting appeal lies in its universal theme and striking visual style.

By Lena Włodarczyk



Open Loop



*Thank you
for reading!*