

MKVLTRA: Tamashi Gunkan

Written and edited by Matt Booth, James Carrigy, George Corfield, Jonathan Elliot, Alex Hardwick, Daoud Jackson, Ronny Jackson, Emma Laslett, Brandon Blackwell, and Ellie Warner

Packet 10: Tossup On What It Feels Like When Doves Cry

Tossups

1. **This ruler's coronation was recorded as performed with "such solemnity as they do use in this country, which is not very costly". French poet Pierre de Boscose de Chastelard was reportedly in love with this monarch, and later imprisoned for stalking them, although this may have been part of a Huguenot plot. Evidence against this monarch in a murder trial included two marriage contracts and various love sonnets, included with eight unsigned (*) 'casket letters', although their veracity was never proven. This ruler was later convicted as part of the Babington Plot, and executed at Fotheringhay Castle. For 10 points, name this 16th Century monarch, the daughter of James V and first woman to rule Scotland in her own right.**

ANSWER: **Mary, Queen of Scots** [accept **Mary Stuart** or **Mary I of Scotland**, accept **Mary I** after 'Scotland' has been said, but prompt until this, prompt on 'Mary' alone]

<EL>

2. **London branches of this restaurant incorporated cocktail bars in 2015 to "win back the Nando's generation". In the US, this restaurant founded the often-criticized Book It! Program, which gives gift certificates to students based on monthly reading goals. In 2008 this restaurant was mentioned in a viral hit by Das Racist in which it was combined with fellow Yum! Brand subsidiary (*) Taco Bell. A 1995 ad campaign featuring Donald Trump is why this restaurant is considered to have popularized stuffed crust in the US, while Mikhail Gorbachev appeared in a commercial for this restaurant that aired internationally in 1997. For 10 points, name this fast-food chain, named for its trademark red, trapezoidal roof.**

ANSWER: **Pizza Hut**

<BB>

3. **Factions of this organisation clashed in the Jaybird-Woodpecker War, eventually won by the Jaybirds with the help of governor Sul Ross. The ruling in *Smith vs. Allwright* ruled that members of this organisation were not allowed to conduct segregated elections, ultimately aiding the rise of women like Barbara Jordan in this organisation. The portrayal of Coke R. Stevenson, a member of this organisation, as a victim in (*) Robert Caro's *Means of Ascent* was criticized; that book is a biography of another member of this organisation. The Texas Eleven, members of this organisation, fled to neighbouring states to stop a rival of this organisation from gaining partisan advantage. Lloyd Betsen was the last member of this party to serve a full senate term in Texas. For 10 points, name this American political party represented by Lyndon B. Johnson.**

ANSWER: (Texas) **Democratic** Party

<DJ>

4. **As a linguistic and vocabulary building exercise, Umberto Eco required students to retell this story in 10 words all starting with the same initial letter. Jalil prevents Mariam**

from watching a film of this story despite owning the cinema in *A Thousand Splendid Suns*. Aleksey Tolstoy's *The Golden Key, or the Adventures of Buratino* is a retelling of this story. This story's central character pays to watch a show put on by (*) Mangiafuoco, distracting the participants before being kidnapped by a fox and a cat and later turning into a donkey alongside Candlewick. For 10 points, a translation of one of Eco's student's pieces about what story is "Poor papa Peppe, /primarily penurially pinched, /picks paltry pine piece /perfectly prepared, projects *puppet* prefabrication?"

ANSWER: Pinocchio

<DJ>

5. In 'Signature Event Context', Jacques Derrida argues that the distinction made between these two concepts is itself an example of one of these concepts. One work describes one of these concepts as the "work of a collective intelligence" when describing the "bifurcation" between these concepts that leads to that work's title describing it as (*) 'General'. That work that defines these concepts likens them to the fact that the rules of chess cannot be inferred by watching games of chess, but any game can be understood after learning the rules. For 10 points, name these two concepts, the underlying rules of a language and individual utterances in that language, as formulated by Ferdinand de Saussure.

ANSWER: langue and parole [prompt on either part alone, or on 'language' and/or 'speech']

<EL>

6. This city is home to the world's oldest velodrome and Magnus Volk's "daddy long-legs", the world's oldest operating electric railway. In this city, William Porden created Steine House as a residence for Maria Fitzherbert, and it contains the UK's oldest *purpose-built* cinema, topped by 20ft legs in black-and-white stockings. Frederick Crace decorated the interior of a house in this city whose stables became the theatre where ABBA won (*) Eurovision with Waterloo; that house's architect was John Nash. In 2016 British Airways opened the i360 tower in this city, with the aim of funding the restoration of the UK's first Grade I listed pier, which faces this city's famous Lanes shopping district. For 10 points, name this seaside city home to the West Pier and the Royal Pavilion.

ANSWER: Brighton

<EW>

7. One compendium of writings on this concept is subtitled *Manual of the Ultimate Doctrine*, and describes this concept as "eternal, quiescent and unalterable, as the true essence of every living being and source of all virtuous qualities." A text by Kamalasila equates this concept with both luminosity and *Śūnyatā*. One text named for this concept states that "the ignorant see the filth of the mold but the wise know that [this concept's eponymous being] is within", while in *The Gateless Gate*, Zhaozhou answers (*) "Mu" to the question of whether a dog possesses this quality. For 10 points, name this ineffable quality explored in Mahayana philosophy, broadly describing a thing's potential to achieve its namesake enlightened state.

ANSWER: Buddha-nature [accept tathagatagarbha or buddhadhatu, do not accept or prompt on Buddhahood or equivalent]

<EL>

8. **Two practitioners of this discipline have released books on this discipline such as *How to Play in Traffic*. One member of this profession played a member of this profession in the film *Terror Train*, and later bought Caribbean islands claimed to contain the Fountain of Youth. Books by another practitioner of this discipline include *Pure Effect* and *Happy: Why More or Less Everything is Absolutely Fine*, while his TV shows include (*) *Apocalypse* and *Messiah*. One practitioner of this discipline was mauled in public, but then saved from a stroke, by Mantacore, one of the tigers he used in this profession. For 10 points, name this form of performance practiced by people such as David Copperfield, Derren Brown, and Siegfried & Roy.**

ANSWER: stage magic [accept clear-knowledge equivalents, such as anything about them being magicians or illusionists, prompt on 'Penn & Teller', 'David Copperfield', 'Derren Brown', or 'Siegfried & Roy' before said]

<EL>

9. **A writer created by this author believes that innocence is lost when you realise you can't eat a shadow, and tells this to his grandson visiting him in San Diego. Another play by this author opens as a photographer reminisces about "grandmother boss" Henry Ford visiting his old factory, and ends as he tells the title patron of Sky's bar to smile for a photo for a work permit in the (*) name of a corpse. This author also wrote about pen-pal Ethel Lange straining Morris and Zachariah's relationship, and in their most famous play, the son of an alcoholic laments that "you can't fly kites on rainy days" after lashing out at ballroom dancing partners Sam and Willie, his family's black servants. For 10 points, name this playwright who set *Master Harold... and the Boys* in his native South Africa.**

ANSWER: Harold Athol Lanigan Fugard

<EW>

10. **In 1985, this play was gender-swapped by its author, newly featuring Trivial Pursuit and the Costazuela brothers. In one scene in this play, a character refuses to throw a cup "because I'd still be angry and I'd have a broken cup", while further squabbles break out in this play after linguini is called spaghetti and a ladle is called a spoon. One of this play's title characters is four weeks late paying (*) alimony to Blanche, and is sleepily called "Frances" by Frances' ex-husband. A poker game with Vinnie, Roy and Speed opens this play, which ends with a news-writer moving in with Cecily and Gwendolyn Pigeon to get away from his sportswriter roommate. For 10 points, name this play about lazy Oscar Madison and neurotic Felix Ungar, written by Neil Simon.**

ANSWER: *The* Odd Couple

<EW>

11. **A 2017 article by M. Saad Bhamla described an ultralow-cost alternative to the commercial version of this technique. PVP covered silica particles are used in a form of this technique trade-marked as Percoll. As in the Meselson-Stahl experiment, caesium chloride is often used in the (*) isopycnic form of this technique. The Lamm equation describes the effects of forms of this process; Ole Lamm himself studied under the developer of that intensive form of this technique, Theodor Svedberg. Uranium hexafluoride undergoes this process to separate its 235 and 238 isotopes. This technique produces a supernatant and a**

pellet. For 10 points, mixtures can be separated by spinning them at high angular velocity in which common lab technique.

ANSWER: centrifugation

<DJ>

12. **After willingly surrendering their powers, this character was trained in martial arts and weapon mastery by the Chinese master I Ching. During the Blackest Night, this character was deputised as part of the Violet Lantern Corps by Ganthet. One of this character's weapons was forged by the god (*) Hephaestus from the golden girdle of Gaea, and due to Aphrodite's Law, if this character's indestructible bracelets were chained together by a man, this character would lose their super strength. This character's signature weapon compels anyone caught by it to tell the absolute truth. For 10 points, name this superhero, the alter ego of Princess Diana of Themyscira, played by Gal Gadot (ga-DOT) in a 2017 film.**

ANSWER: Wonder Woman [accept "Diana Prince"; accept "Princess Diana of Themyscira" if given before "alter ego"; prompt on "Princess Diana" if by some mad impulse they mean the other one]

<RJ>

13. **Henry Salt contested the claims made by James Bruce in a history of his journeys to find one of these places. In that history, Bruce relates making a toast to George III at Gish Abay. Missionary Pedro Paez is credited with being the first European to visit one of these places after converting Susenyos I. S. P. Scott compared the similarity of an account of these places on the *Tabula Rogeriana* to those found by men like (*) Samuel Baker. John Hanning Speke's claim to have discovered one of these places was vindicated by Henry Morton Stanley's journey to Ripon Falls. For 10 points, name these places, often identified as Lake Tana and Lake Victoria, the origins of the world's longest river.**

ANSWER: sources of the Nile (accept descriptive answers)

<DJ>

14. **In one work by these people, they appear at the end of the story to apologise for the lack of a final boss. One series created by these people features the episodes 'Smart Money's on the Skinny Bitch' and 'I Am Also a We', and its title characters include The Old Man of Hoy, Jonas Maliki, and (*) Capheus Onyango. One film by these people features transhuman characters like Caine Wise and Balem Abrasax, and its climax takes place in a youth serum refinery in the eponymous planet's Great Red Spot. The protagonist of one film by these people initially works at Metacortex, but later joins the crew of the *Nebuchadnezzar*. FTP, name these sisters, the creators of *Sense8*, *Jupiter Ascending*, and *The Matrix*.**

ANSWER: The Wachowskis [accept Lana and Lilly Wachowski; begrudgingly accept Larry and Andy Wachowski, but inform teams that those haven't been their names for years and provide the correct names]

<EL>

15. **Graham Waterhouse's 'Chieftain's Salute' was originally composed for this instrument and string quartet, although later versions replaced this instrument with a wind quintet. The bassline of the final movement of Beethoven's Piano Sonata no. 15 is thought to be based on the sound of this instrument, and this instrument is imitated throughout the**

finale of Haydn's Symphony no. 82, although it is more commonly likened to a dancing bear. This instrument provides the finale of a 1985 piece by (*) Peter Maxwell-Davies, in which this instrument represents the sun rising over Caithness. For 10 points, name this unconventional instrument paired with symphony orchestra in *An Orkney Wedding, With Sunrise*, a traditional Scottish wind instrument.

ANSWER: **Bagpipes** [accept **Great Highland Bagpipe** or **Dudelsack**, prompt on 'pipes']

<EL>

16. Aaron Fowler painted a 'black' one of these objects, Andrew Schoultz bombed one with gold, and Mark Alexander painted one as if it had been submerged in a bog. A 1988 poster for the New York City Ballet by Keith Haring features his signature figures dancing on one of these things. The words "look for the moment when pride becomes contempt" appear on one of these things designed by Barbara Kruger. Claes Oldenburg created one of these objects to be (*) "fold[ed] in the pocket" as well as a tempera-painted canvas and plaster one of these things. Jean-Michel Basquiat painted one of these things covered in 'X's by a typewriter. Jonathan Horowitz pictured three of these things in rainbow colours in a work that references three canvases painted in encaustic by Jasper Johns. For 10 points, name this object, carried anachronistically across the Delaware River in a painting by Emmanuel Leutze and covered in stars and stripes.

ANSWER: **flag** of the **USA** (accept obvious equivalents. Prompt on just **flag**)

<MB>

17. Gold-iron and copper-manganese alloys of low ferromagnetic content experience a phase transition into these objects when cooled. The simplest model of these things, similar to the Ising model, is the Edwards-Anderson model. After being magnetised by an external magnetic field, the magnetisation of these objects remains constant at the remanent level and does not decay. Parisi gave an exact solution to the (*)

Sherrington-Kirkpatrick model of these things, whose individual bonds are a roughly equal mixture of ferromagnetic and antiferromagnetic. For 10 points, name this class of materials whose component atoms' magnetic spins are irregularly aligned, named by analogy with the irregular bond structure of amorphous solids such as glass.

ANSWER: **spin glasses** [prompt on **magnets** before "magnetised" is read]

<MB>

18. Proto- versions of these things are formed after the LAGB phase, and plerions are a type of these things whose winds are powered by their central pulsar. One of these things was used to measure the thickness of Titan's atmosphere via its X-ray shadow. Bok globules such as IC 2944 are examples of the "dark" type of these things, which are so dense that they obscure the light from objects behind them. The (*) Red Square, the Engraved Hourglass, and Barnard's Loop are all examples of these things. One of these things is the first entry in a 1771 catalogue of 110 non-comets compiled by Pierre Méchain and Charles Messier; that object is a remnant of a 1054 supernova. For 10 points, name these interstellar clouds of dust and gas, examples of which include the Horsehead or the Crab.

ANSWER: **nebulae** (accept specific types like **planetary nebula** or **emission nebula**)

<MB>

19. William Stahl argues that this thinker's "puerile conceptions" should be read as literature rather than science, despite the fact that this thinker is the earliest person known to give a description of Brownian motion. This thinker is believed to have originated Christian Thomsen's division of the Stone, Bronze and Iron Ages. This thinker wrote an important work which he addressed to (*) Memmius. The fourth book of this thinker's only known work deals with love and lust, while its third book famously aims to refute the fear of death by proving that the soul and body must perish together. For 10 points, name this Roman Epicurean philosopher who wrote the didactic epic poem *On the Nature of Things*.
ANSWER: Titus Lucretius Carus

<AH>

20. This figure is named after an unrelated figure known as 'the Brown', and is fostered by an unidentified fisherman and later by the Pope, although their actual father was the King of Orkney. This figure's son by the fairy Blanchmal (BLONSH-mal) defeated Malgier the Grey, and is known as the 'Fair Unknown'. This figure is initially identified as "the (*) Knight of the Surcoat", but has their true identity revealed by their uncle after fighting him and pushing him in a river. This figure received a magic belt in exchange for three kisses from Lady Bertilak, making it impossible for her transformed husband to cut this figure's head off. For 10 points, name this Knight of the Round Table, the son of Lot and Morgause, who defeated the Green Knight.

ANSWER: Sir Gawain [accept Gauwaine, Gwalchmei ap Gwyar, Gauvaine, or Waluanus]

<EL>

Bonuses

1. One of the recurring narrators in this book is Tony Hunter, who tries to "go straight" with Nevada Jones but ends up happy with the bootlegger Congo Jake. For 10 points each:
[10] Name this book, whose narrators including Jimmy Herf, Ellen Thatcher, Stan Emery, George Baldwin, Gus McNeil and Joe Harland overlap stories as their city develops into the 20th century.

ANSWER: Manhattan Transfer

[10] John Dos Passos' *Manhattan Transfer* is often seen as a stylistic precursor to this series by him which includes *The 42nd Parallel, 1919* and *The Big Money*.

ANSWER: U.S.A. Trilogy

[10] The *U.S.A.* Trilogy specifically gained acclaim for combining biography, "newsreel" passages and "camera-eye" sections using this free narrative mode used in the final chapter of *Ulysses*.

ANSWER: stream of consciousness

<EW>

2. A poem by this author begins by begging "Colourful-throned, deathless Aphrodite" not to crush their spirit with anguish and distress. For 10 points each:

[10] Name this poet, who said that "it is midnight, time goes by, and I sleep alone" in one of their many surviving fragmentary poems.

ANSWER: **Sappho**

[10] Sappho wrote poetry in the Aeolic [ey-OH-lick] dialect within this genre. This genre of poetry is named after an Ancient Greek stringed instrument associated with Apollo, and comes in choral and individual forms.

ANSWER: **lyric** poetry

[10] This other Greek poet came from Tanagra and wrote lyric poetry in the Boeotian [boy-OH-shee-an] dialect. Apart from Boeotian folk tales, their "Terpsichore" poem demonstrates an interest in genealogy.

ANSWER: **Corinna**

<AH>

3. In May, Jess Phillips was filmed having a fierce argument with Shakeel Afsar outside this place, in which she called for an exclusion zone around it. For 10 points each:

[10] Name this school in Sparkhill, which has been a flashpoint for 2019 protests against the inclusion of LGBT issues in the curriculum.

ANSWER: **Anderton Park** Primary School

[10] The clashes at Anderton Park were part of a wave of anti-LGBT protests in Birmingham, originally sparked by backlash against the 'No Outsiders' programme created by this man.

ANSWER: Andrew **Moffat**

[10] 'No Outsiders' aims to educate children on the rights enshrined in this 2010 act, which consolidated previous anti-discrimination law into one covering nine 'protected characteristics'.

ANSWER: **Equality** Act 2010

<EW>

4. For 10 points each, answer the following about contemporary British artists featuring pigs in their works:

[10] Two policemen kiss passionately in a graffiti work by this elusive artist, who created the dystopian Disney-themed group show "Dismaland" in Weston-super-Mare in 2015.

ANSWER: **Banksy**

[10] In 1997, this artist won the Turner Prize for "60 Minutes Silence", a video of a police cohort standing still for an hour. This artist designed the Millicent Fawcett statue in Parliament Square.

ANSWER: Gillian **Wearing**

[10] This duo from the East End who have been creating for over 50 years often use police headlines in their violent photo collage collections, such as "Naked Shit Pictures" and "Jack Freak Pictures".

ANSWER: **Gilbert and George**

<EW>

5. Did you know that if a ring R is Noetherian (nuh-THEER-i-an), then the polynomial ring $R[X]$ will also be Noetherian? For 10 points each:

[10] The previous statement is the Basis Theorem of this German mathematician, who created a paradox involving a hotel with infinitely many rooms and wrote a list of 23 unsolved problems.

ANSWER: David **Hilbert**

[10] A ring is Noetherian if it satisfies the ascending chain condition on the left and right of these subsets of a ring, which are closed under addition and may be integral, fractional, or prime.

ANSWER: **ideals**

[10] These eponymous domains in which every non-zero prime ideal is maximal are also always Noetherian, since every ideal is generated by at most two elements.

ANSWER: **Dedekind** domains

<EW>

6. Reginald Fessenden played this piece on the first ever AM radio broadcast, meaning this was the first piece of music to be broadcast by radio. For 10 points each:

[10] Name this aria. It is popularly referred to as its composer's "Largo" despite the original tempo marking of "Larghetto". In it, the singer admires the shade of a plane tree.

ANSWER: **Ombra Mai Fu** [do not accept or reveal "Handel's Largo"]

[10] *Ombra Mai Fu* opens the opera *Serse* by this composer. Other operas by this composer include *Rinaldo*, *Semele* and *Giulio Cesare*, although his best work for voice remains *Messiah*.

ANSWER: George Frideric **Handel**

[10] Handel principally composed operas in this Italian style, whose noble and dramatic tradition contrasted with *Opera Buffa*, which often took inspiration from *Commedia dell'arte*.

ANSWER: Opera **seria**

<GC>

7. A 2016 study suggested that this process was accelerated by reductions in sulfate aerosols in Europe since 1980. For 10 points each:

[10] Name this process, which in 2019 is likely to break the record it set in 2012. It may cause global warming to accelerate unstoppably.

ANSWER: ice **melting** at the **poles** [description acceptable; prompt on ice or glaciers **melting**]

[10] After steadily increasing until 2014, polar ice has started melting really really quickly in this continent at the south pole.

ANSWER: **Antarctica**

[10] This largest ice sheet in the world is suffering particularly from polar melting. A considerable amount of ice is being lost from the Totten Glacier and the Cook Ice Shelf within this ice sheet.

ANSWER: **East Antarctic** Ice Sheet [do not accept just 'Antarctic']

<AH>

8. In January, this star brought Birmingham city centre to a standstill when over 8,000 fans turned up for a meet-and-greet at the Morphe cosmetics store. For 10 points each:

[10] Name this YouTube makeup artist and CoverGirl ambassador, who made the headlines in May for being very publicly 'cancelled' by frequent collaborator Tati Westbrook.

ANSWER: James **Charles** (Dickinson)

[10] Although James had annoyed Tati for a while, the final straw was him promoting rival hair vitamins at this hip festival, held in a namesake valley in the Colorado Desert in Indio, California.

ANSWER: **Coachella** Valley Music and Arts Festival

[10] After his untimely cancelling, Charles had to call off this planned 24-city tour, titled for his nickname for his fans. Tickets had cost those fans \$500 apiece.

ANSWER: The **Sisters** Tour

<EW>

9. In an abstract ballet by this choreographer, 12 dancers move through solos, duets and ensembles beneath an LED screen showing white stick figures walking across the stage. For 10 points each:

[10] Name this artist, whose work as Resident Choreographer at the Royal Ballet includes that ballet, *Infra*, as well as *Chroma*, *Nimbus*, *Carbon Life*, *Raven Girl* and *Yugen*.

ANSWER: Wayne **McGregor**

[10] McGregor is the first choreographer-in-residence at the Royal Ballet to come from a background in this dance style, whose techniques include Release, Cunningham and Graham.

ANSWER: **contemporary** dance [do not accept 'modern dance', the two styles are *very* different]

[10] McGregor's first full-length work for the RB in 2015 was based on the life of this author, combining elements from their letters, essays, diaries and novels *Orlando* and *The Waves*.

ANSWER: Virginia **Woolf**

<EW>

10. One of the main interpreters of this philosopher was the late Michael Dummett, who revived interest in their work by writing about their *Philosophy of Language*. For 10 points each:

[10] Name this philosopher, who introduced a symbol for the universal quantifier in a book on Concept Script, and used the Morning Star and Evening Star to contrast sense and reference.

ANSWER: Gottlob **Frege**

[10] Frege wrote about the "foundations" of this field in a work distinguishing between $1+1=2$ and $a+b = b+a$. The "fundamental theorem" of this field is that every number greater than 1 is either prime or expressible using primes.

ANSWER: **arithmetic**

[10] In *The Foundations of Arithmetic*, Frege derived the Peano axioms using this idea, which says that the number of Fs and Gs will be equal if there is a bijection between the Fs and Gs.

ANSWER: **Hume's principle**

<EW>

11. Sections of this work include "Ritual Uncleaness", "Secular Defilement", "The System at War with Itself" and "The System Shattered and Renewed". For 10 points each:

[10] Name this work of social anthropology by Mary Douglas, which analyses what it means to be dirty in different cultural and religious contexts.

ANSWER: ***Purity and Danger: An Analysis of Concepts of Pollution and Taboo***

[10] *Purity and Danger* was inspired by Durkheim's *The Elementary Forms of the Religious Life*, which analyses this animist concept which Freud linked with taboo.

ANSWER: **totemism**

[10] However, Douglas has since revised her proposal that these religious dietary rules are about symbolic boundaries. Animals must have cleft hooves and chew the cud to be suitable under these rules.

ANSWER: **kashrut** [accept **kosher**; do not accept 'halal']

<EW>

12. If the Mayan calendar tells us when the world is scheduled to end, it's crucial we know exactly how it works. For 10 points each:

[10] The high period of the Classical Maya appeared in the 8th and 9th baktun, each of which lasts 394 years. The 14th baktun began in this year of the 21st Century, causing unnecessary excitement.

ANSWER: **2012**

[10] Much of the information on the Mayan calendar and Mayan script was taken from this Codex, which was badly damaged in Germany in WW2.

ANSWER: **Dresden** Codex

[10] The Mayan Calendar works in this base-system, barring the 18 Haab' and 5 days of Wayeb' which were notably unlucky.

ANSWER: **base-20** [accept **Vigesimal**]

<DJ>

13. In this book, Rudi Bittesch teaches Jane Wright to contact famous authors with a dramatic sob story, in the hope that they'll send back a handwritten letter. For 10 points each:

[10] Name this novella whose title group includes Jane, the glamorous Selina Redwood, and the elocution teacher Joanna Childe, who dies when a bomb sets the May of Teck Club alight.

ANSWER: *The **Girls of Slender Means***

[10] This author wrote *The Girls of Slender Means*, in addition to other female-led novellas like *The Driver's Seat* and *The Prime of Miss Jean Brodie*.

ANSWER: Muriel **Spark**

[10] The May of Teck Club is located in this area of London, which also features in the title of a Spark novel about the editor Nancy Hawkins being stalked by Hector Bartlett.

ANSWER: **Kensington**

<EW>

14. This ruler's capital was eventually overrun by Tokhtamysh, whom he served as a tax collector. For 10 points each:

[10] Name this Prince of Moscow, who was blessed by Sergius of Radonezh before his greatest victory alongside the warrior monks Alexander Peresvet and Rodio Oslyabya.

ANSWER: **Dmitiri** Donskoi

[10] Dmitri Donskoi was best known for his victory over this group of Mongols at the 1380 battle of Kilkovo. This khanate was founded by Batu Khan, and named for the colour of the tent their leader Ozbeg Khan used.

ANSWER: **Golden Horde** [accept **Ulug Ulus**, **Altan Ord**, **Kipchak Khanate** or **Blue Horde**]

[10] Dmitri Donskoi's son Vasily married the only daughter of Vytautas, the Grand Duke of this region and father to Władysław II Jagiełło.

ANSWER: **Lithuania**

<DJ>

15. 'Jack' Howard, Earl of Suffolk, became one of the more notable experts at dealing with unexploded bombs in British cities during the Second World War. For 10 points each:

[10] Early in the war Howard had smuggled industrial diamonds and this country's supply of heavy water out of Bordeaux. Operation Freshman used gliders to attack a heavy water production facility at Telemark in this country.

ANSWER: **Norway**

[10] Howard was killed, alongside his secretary and chauffeur, in a bomb cemetery in Erith, on the outskirts of this city, whose St. Paul's Cathedral was saved from undetonated bombs by Bob Davies.

ANSWER: **London**

[10] While working as part of the Ministry of Supply, this then-Minister of Supply praised the maverick effort of Howard. This man, defeated by Attlee in the 1935 leadership election, was later praised for leading the Festival of Britain.

ANSWER: Herbert **Morrison**

<DJ>

16. *Note to moderator: for all three parts, prompt on either name alone.*

Cold as ice? Hot under the collar? Why not both? For 10 points each, answer the following about ice skating pairs who heated up the rink:

[10] The sensuality of the gold medal winning Boléro routine performed by this pair of British skaters at the 1984 Winter Olympics in Sarajevo led many to speculate about a possible off-rink relationship.

ANSWER: Jayne **Torvill** and Christopher **Dean**

[10] This Canadian pair who became Olympic ice dance champions in Pyeongchang have also been subject to rumours that they must be dating, due to their strong chemistry on the ice.

ANSWER: Tessa **Virtue** and Scott **Moir**

[10] The rumours about this current top British pair who finished 10th in Pyeongchang are, however, true – they've been a couple for years, and got engaged in December 2018.

ANSWER: Penny **Coomes** and Nick **Buckland**

<EW>

17. This quality is given to humans, animals, and all other things in nature by the supreme deity Olodumare, and it is by using this quality that people can exercise the will. For 10 points each:

[10] Name this quality in Yoruba religion, seen as both the essential life force and the ability to exert authority.

ANSWER: **Ashe** [AH-shay] [accept **ase**, **axe**, or **àse**]

[10] Ashe is transmitted from Olodumare to the natural world via the actions of these '400 plus one' incarnate spirits, such as Ogun, Eshu, and Shango.

ANSWER: **Orisha** [accept **oricha**, **orixa**, or **Ọrìṣà**, prompt on 'irunmole']

[10] This body part is seen as the seat of ashe, and as a result is depicted several times its size in Yoruba art, such as ancestral masks that depict an exaggerated version of this body part.

ANSWER: **head** [accept **face** or **ori**, prompt on 'imori']

<EL>

18. This hypothesis was first proposed by Anthony Barnosky. For 10 points each:

[10] Name this hypothesis that posits that abiotic factors such as climate change are the primary driving force behind evolution.

ANSWER: **Court Jester** hypothesis

[10] The court jester hypothesis is contrasted with this hypothesis, where evolution is driven by an arms race of developments and counter-developments between competing species.

ANSWER: **Red Queen** hypothesis

[10] The Court Jester hypothesis provides a mechanism for this scientist's theory of punctuated equilibrium. This scientist wrote books such as *Ontogeny and Phylogeny* and *The Mismeasure of Man*.

ANSWER: Stephen Jay **Gould**

<GC>

19. The "fast marching method" is a numerical method developed by James Sethian for approximating solutions to boundary value problems for this equation. For 10 points each:

[10] This nonlinear PDE, encountered in the study of wave propagation, states that the Euclidean norm of the gradient of the shortest time needed for a wave to travel from the boundary of a region to a point x is equal to one over the wave speed at x .

ANSWER: **eikonal** equation

[10] The eikonal equation can be derived from this principle, named for a French polymath, which states that the path taken by a light ray is that which can be traversed in least time.

ANSWER: **Fermat's** principle [prompt on principle of least time]

[10] For small wavelengths, Fermat's principle can itself be derived from this other principle, according to which every point on a wavefront can be considered the source of secondary spherical wavelets.

ANSWER: **Huygens**-Fresnel principle

<JE>

20. Even in its twentieth year on the air, the iconic cartoon *Spongebob Squarepants* remains culturally relevant. For 10 points each:

[10] A subreddit with over 2 million subscribers devoted to sharing Spongebob memes is named "this place" Twitter, after the main setting of the series.

ANSWER: **Bikini Bottom** (accept r/**BikiniBottomTwitter**)

[10] Part of the much-maligned 2019 Super Bowl Halftime Show included a Spongebob cameo at the beginning of this rapper's "Sicko Mode".

ANSWER: Travis **Scott** (accept Jacques Berman **Webster II**)

[10] Ignoring deceased creator Stephen Hillenburg's wish that *Spongebob* never receive a spinoff, in spring 2019 Nickelodeon announced this prequel, to the outrage of many fans.

ANSWER: **Kamp Koral**

<BB>

Tiebreaker

In the 1980s, teams dubbed the Baja Scorpions and the Whalers were among those working at this place. Bruce Burgess wrote about his work with the translator "J-Rod" at this location, which was part of the documentary "Dreamland", while other former employees at this place called it "the box" and worked on the HAVE DOUGHNUT, HAVE FERRY and HAVE DRILL initiatives. Although this place is subject to the (*) Groom Exception, it is nevertheless known to have hosted Project AQUATONE and Project OXCART, developing aircraft like the F-117 Nighthawk for Lockheed. Kyles, furries, Taylor Swift stans as human shields and Naruto runners are key to plans to storm, for 10 points, this US Air Force facility in Nevada where they got them aliens.

ANSWER: **Area 51** [accept **Homey Airport** or **Groom Lake**]

<EW>