Tossups

1. **One member of this group was killed in the concentration camp known as 'Neverland', and had a pair of semi-sentient slugs instead of a digestive system. Another member of this group possesses an external nervous system named E.V.A., while another uses tools such as 'stepping discs' and the Soulsword, and was queen of Limbo. As well as Japheth, Illyana Rasputin, and (*)** Fantomex, members of this group include one who has variously been known as 'Captain Canada', 'Patch', and 'Death', and who went feral after having the metal ripped from his skeleton, and one who uses ruby-quartz glasses to stop his optic blasts. For 10 points, name this group of mutant superheroes, founded by and named for Professor Charles Xavier.
ANSWER: The **X-Men** [accept **Generation X** until "nervous", prompt on 'mutants', 'X-Force', 'Alpha Flight', or 'Weapon X']

<EL>

2. **A team led by Erica Schultz has used a variant of this reaction to produce equivalents of resorcinol with the enzyme CylK. 1-tetralone can be produced by a variant of this reaction which uses succinic anhydride and is called the Haworth reaction. The first step of the cumene process makes use of one of these reactions which attaches a (*)** propylene to a benzene ring. Aluminium chloride is used to catalyse this reaction and the closely related Gattermann-Koch reaction. Catalysed by a Lewis acid, for 10 points, name this doubly-eponymous electrophilic aromatic substitution reaction which has alkylation and acylation variants.
ANSWER: **Friedel-Crafts** reaction (accept **Friedel-Crafts Acylation** or **Friedel-Crafts Alkylation**)

<DJ>

3. **Low wages among these people across the US caused strikes in 17 states in 2018. The highest-earning members of this group of people, who are classified as ROTL in the UK, have their earnings of over £20 a week taxed at a rate of 40%. Informal peer-to-peer lending among these people in the UK often occurs at 100% interest rates: that lending is known as (*)** 'double bubble'. Due to complaints of low rates of nutrition among these people, cigarettes have recently been supplanted as the primary form of currency by ramen noodles in the US. For ten points, name these people, who may work in workshops or laundries in locations like High Down or Wormwood Scrubs.
ANSWER: **Prisoner**s [accept clear equivalents]

<FCM>

4. **One of the men who killed Simon de Montfort was accidentally drowned in this river when a lady-in-waiting pushed him in as a prank. Thirty members of the Chattan Confederation fought a battle against an exactly evenly matched foe on the banks of this**

river at North Inch, in which Henry Smith substituted in for a missing fighter. Kenneth McAlpin brought a stone to an abbey on this river where (*) coronations were carried out, while James I was killed in a city on this river by the Earl of Atholl. That town was formerly known as St. John's Town. RORO inventor Thomas Bouch was publicly castigated for the death of 75 people after a train from Wormit fell into this river in a major disaster provoked by heavy winds. For 10 points, name this British river, a rail bridge over which British river collapsed in 1879, provoking bad poetry by William McGonagall.
ANSWER: River **Tay**

<div align="right"><DJ></div>

5. **A thin slab of silver was suggested to act as a "super" one of these things in a 2000 paper by John Pendry. John McLeod introduced a conical form of these devices called "axicons" that are used in wakefield accelerators to generate plasma. "Dialytes" and "doublets" are types of these devices made by joining materials such as crown (*)** glass and flint glass, whose differing Abbe [AB-uh] numbers combine to reduce the effects of chromatic aberration. An equation associated with these devices relates the radii of curvature of their surfaces and their refractive index to their focal length. For 10 points, name these devices which may come in concave and convex forms and use refraction to focus or disperse light beams.
ANSWER: optical **lens**es

<div align="right"><JE></div>

6. **In 2019, Takashi Murakami designed a neon green vinyl figurine of this artist for _Hypebeast_. On one track, this artist states "I'm the powder, you're the fuse, just add some friction" and samples clips from the "Threat Level Midnight" episode of _The Office_, while in another song on the same album, this artist asks "is the amount cleanin' you out? Am I satisfactory?" and repeats (*)** "what do you want from me? Why don't you run from me?", portraying a monster under the bed. This artist warns that they "might seduce your dad" in a song which contrasts them with the title figure who is a "tough, like it really rough, just can't get enough" guy. For 10 points, name this singer of "Bury a Friend" and "Bad Guy", the youngest female artist to score a UK #1 album with _When We All Fall Asleep, Where Do We Go?_
ANSWER: Billie **Eilish** [accept Billie Eilish Pirate Baird **O'Connell**)

<div align="right"><EW></div>

7. **Villages in this national park include Lower Elkstone and Stoney Middleton. Eight of the fourteen known varieties of Blue John stone are mined in this national park, as well as copper at its Ecton Mines. This national park has a close connection with millstone production. Hardwick Hall is just outside this national park. A (*)** dessert containing layers of jam, frangipane and flaked almonds takes its name from a town in this national park. Titan, the deepest known cave shaft in Britain, is connected to the Speedwell Cavern in this national park. As well as Bakewell, this national park contains Chatsworth House. For 10 points, name this Derbyshire national park, named for the White and Dark mountains it contains.
ANSWER: **Peak District**

<div align="right"><AH></div>

8. **A sultan of this name wore plainclothes to patrol the streets to personally enforce his 1633 ban on the public consumption of alcohol, coffee, opium and tobacco. Elizabeth I exchanged correspondence with a sultan of this name as part of a plan of Walsingham's plan for an anti-Spanish alliance. A sultan of this name was defeated at the first siege of Krujë (KROO-zhuh) by his former subject (*)** Skanderbeg. Mehmed II recalled his father, who had this name, to lead the Ottoman forces to victory at the battle of Varna. A sultan of this name defeated Prince Lazar in battle but was later said to have been assassinated by Milos Obilic following that 1389 victory at the Battle of Kosovo. For 10 points, give this name shared by 5 Ottoman sultans.
ANSWER: **Murad**

<div align="right"><DJ></div>

9. **This nation's secret service was implicated in the 1980s Bombers Affair, and its head Marco Mille was allowed to leave office despite having covertly recorded this country's prime minister. De Gaulle's "Empty Chair" Tactic prompted the adoption of a compromise named for this country and proposed by Prime Minister Pierre Werner. A politician from this country was forced to resign as President of the Commission by the EPP following corruption allegations against PES leader (*)** Edith Cresson. Martin Selmayr ran the campaign for a politician from this country to become EPP Spitzenkandidaten in 2019. In 1985 the EEC signed an agreement in this country abolishing internal order checks at Schengen. For 10 points, name this home country of Jacques Santer and Jean-Claude Juncker.
ANSWER: **Luxembourg**

<div align="right"><DJ></div>

10. **This ingredient is central to the Senegalese dish chebu jen, in which it is served with tomatoes and fish. In Madagascar, this ingredient is known as "vary" [var] and often served in a "ro" broth with a "laoka" [lo-kuh] side dish, while in Ghana, this ingredient can be braised in onion-fried oil in angwa moo, or served with sorghum leaves and black eyed peas in waakye [waa-chay]. Nigerians eat an "ofada" version of this ingredient, which may also be served (*)** stuffed inside a goat or soaked in coconut milk. Jamie Oliver once butchered a pan-West African dish in which tomato, onion and peppers are fried with this ingredient, for which Ghanaians prefer its jasmine variety. For 10 points, name this grain used in jollof.
ANSWER: **rice**

<div align="right"><EW></div>

11. **This author's first novel details the philandering of the preacher John "Buddy" Pearson. This author published the play *Color Struck* in the only issue of the literary magazine *Fire!!*, which they co-founded, and was accused of plagiarising Emma Roche in their interview with a survivor of the scuttling of the *Clotilda*, Cudjoe Lewis. That interview by this author was in the posthumous 2018 work (*)** *Barracoon*. Interest in this author was revived by a 1975 article "In Search of" them, by Alice Walker. This author set many fictional works in their home town of Eatonville, including a work in which the Gambler "Tea Cake" is killed by Janie Crawford. For 10 points, name this anthropologist and author of *Their Eyes Were Watching God*.
ANSWER: Zora Neale **Hurston**

<AH>

12. **One source describes Jesus as "more knowledgeable than every [member of this group]", and one name for these people is connected to the wren, owing to its use in augury. One ritual associated with this group created a cure for poisons and infertility by mixing the blood of two white bulls with two eponymous plants. Archaeological sites thought to be connected to this group include the crown-wearing 'Deal Warrior', as well as (*)** Lindow Man, who may have undergone a ritual 'threefold death' at the hands of these people. Many religious practices of this group involved mistletoe, traditionally cut with a golden sickle. For 10 points, name this religious group, the priest class in ancient Celtic Britain.
ANSWER: **Druid**s [accept **derwydd** or **druí**]

<EL>

13. **A cadence named for this country features a clashing flat-seventh against the seventh of a dominant chord. Alfonso Ferrabosco is credited with introducing the madrigal to this country. A style of polyphony that made prominent use of the third and the sixth was known as this country's namesake "countenance". Benjamin Britten wrote a *Nocturnal after* a composer from this country. That composer from this country wrote a song which opens with four descending notes, known as his (*)** falling tear motif, as well as composing seven variations on a pavan entitled *Lachrimae.* A motet where the forty voices are divided into eight choirs of five was written by a composer from this country — that piece is *Spem in Alium.* For 10 points, name this home country of John Dowland and Thomas Tallis.
ANSWER: **England** (prompt on United Kingdom)

<GC>

14. **One work by this thinker distinguishes between "*with*-i" and "*without*-i" forms. Frits Staal, George Cardona and Paul Kiparsky have analysed the fundamental principle of economy underlying a 14-part classification by this thinker, which employs recursion to expand on the weakness of a previous system which arranged obstruents in a 5x5 square. Later scholars condensed a work by this thinker into 1,400 instead of 4,000 "aphoristic threads"; that work by this thinker is named for its (*)** "eight chapters". The *Mahabhasya* of Patanjali discusses the work of this thinker, who was said to have been killed by a lion and who lived in the Gandhara Kingdom. For 10 points, name this thinker, who produced simple but comprehensive rules for Sanskrit in the *Astadhyayi*, and whose name sounds like a sandwich.
ANSWER: **Panini**

<DJ>

15. **In the DVD release of this film, its director provided a series of 10 clues that would apparently help its viewers when rewatching it. In this film, a director comes back home to find his wife sleeping with a man named Gene before proceeding to cover her jewelry in pink paint. Later, that director in this film encounters a cowboy who tells him to cast Camilla Rhodes in his film. In another sequence in this film, two men discuss a (*)** nightmare involving a man hiding behind the corner of a Winkie's, only for that nightmare to then play out. After Diane Selwyn opens a blue box in this film, the perspective is shifted to that of failed actress Betty Elms, with both played by Naomi Watts. For 10 points, name this 2001 surreal neo-noir directed by David Lynch, named after a road overlooking Hollywood.
ANSWER: ***Mulholland Drive***

16. **Translocations in both MYC ("mick") and BCL-2 or BCL-6 confer a "double hit" phenotype to one form of this disease which carries a poorer prognosis. Typical protocols employed to treat this disease might include ABVD or R-CHOP. A form of this disease in which nearly 100% of cells stain positive for Ki67, indicating a very high mitotic count, has a "starry sky" appearance under the microscope and is often caused by a member of the** (*) herpesvirus family. A classic "owl's eye" appearance of pathological Reed-Sternberg cells may be seen in one type of this disease. Other types of this disease include Mantle Cell, Diffuse Large B Cell and one named for Burkitt. For 10 points, name this malignancy of immune cells divided broadly into Hodgkin and Non-Hodgkin subtypes.
ANSWER: **Lymphoma**

17. **This author wrote a short story satirising racism, in which an astronaut is murdered by his abused Martian wife Lellie. A novel by this author is set in the fundamentalist Christian community of Waknuk. Short stories such as "Dumb Martian" and "Chronoclasm" are found in this author's collection *The* (*)** *Seeds of Time.* A novel by this author begins with most of the world's population watching a green meteor shower which blinds them. In that novel, Bill Masen eventually reaches the Isle of Wight, avoiding the titular carnivorous mobile plants in the process. For 10 points, name this author of *The Chrysalids* and *The Day of the Triffids*.
ANSWER: John **Wyndham** [accept John **Beynon**, Lucas **Parkes** or John Wyndham Parkes Lucas Beynon **Harris**]

18. **In one film, one of these entities smells like cookies and disappears after seeing the Sears Tower, and in another film, the same figure defends the Paradise Falls Diner from an army of these entities. In one series, one of these entities inhabits the body of Jimmy Novak, and one film reveals that Peter Falk was one of these entities and sees another fall in love with a (*)** trapeze artist. In one work, one of these entities describes itself as "The Bird of America, the Bald Eagle", and its appearance causes erections. In one book, one of these entities describes himself as "*The* Southern Pansy", and is revealed to have given his flaming sword to Adam and Eve to keep warm. For 10 points, name these religious beings such as Aziraphale, Castiel, and Michael, who are described *In America* in the title of a Tony Kushner play.
ANSWER: **angel**s [accept **archangel**s, prompt on 'Michael', 'Castiel', 'America', 'Damiel', or 'Aziraphale' before said]

19. **The narrator of this novel believes that "everyone is bored, and devotes himself to cultivating habits", remarking that in their town people love, work and die the same way. In this novel, panic ensues when the lead actor collapses and dies during Gluck's *Orpheus and Eurydice*; the show is attended by a disillusioned ex-fighter for the Spanish Republicans, who keeps a diary of his neighbour spitting at cats. In this novel, the failure of Castel's** (*) serum to help Othon's son prompts a sermon from a character whose death is

later recorded as a "doubtful case", Father Paneloux. Raymond Rambert and the smuggler Cottard look at rats in Oran in the opening of, for 10 points, which novel in which Dr Bernard Rieux fights an epidemic, written by Albert Camus?
ANSWER: *La Peste* [or *The Plague*]

<div align="right"><EW></div>

20. **In a 1936 talkie by Leo McCarey, this is the profession of Harold Lloyd's "Tiger" Sullivan, who is catapulted into a boxing career; the props used in that film forced McCarey to miss his own father's funeral through illness. This is the occupation of Norman Wisdom in his first colour film, *The Early Bird*. One member of this profession courts a woman who lives at (*)** 22 Linley Lane and is killed by a rock cake under the heart thrown by Two-Ton Ted from Teddington, a bread-man whom he later haunts from beyond the grave. Tevye has this occupation in *Fiddler on the Roof*. For 10 points, name this profession, described in Benny Hill's 1971 Christmas number one about the fastest member of this profession in the West.
ANSWER: **milkman**

<div align="right"><DJ></div>

Bonuses

1. One of this author's favourite places to hang out was the Café A Brasileira, where he could often be found sipping on absinthe or bica. For 10 points each:
[10] Name this poet, who founded the modernist *Orpheu* magazine with friends from the café. He wrote a 'factless autobiography' in the guise of the lonely clerk Bernardo Soares.
ANSWER: Fernando António Nogueira **Pessoa**
[10] *Orpheu* published Pessoa using his own name, and also this heteronym. This Tavira native studied ship engineering in Glasgow and wrote the poems 'Tobacco Shop" and "Lisbon Revisited".
ANSWER: Álvaro **de Campos**
[10] Another Pessoa alter ego, Ricardo Reis, returns to Portugal to commune with the author's ghost in a somewhat meta novel by this Nobel Laureate behind *The Stone Raft* and *Blindness.*
ANSWER: José **Saramago**

<div align="right"><EW></div>

2. In Ben Lerner's *Leaving the Atocha Station*, Adam Gordon goes to the Prado every morning to look at Rogier van der Weyden's version of this scene. For 10 points each:
[10] Name this Biblical scene shown in a triptych by Rubens, who painted Nicodemus and Joseph of Arimathea on ladders lowering down a crucified body wrapped in white cloth.
ANSWER: **Deposition** [or **Descent from the Cross**]
[10] The Capponi Chapel hosts this artist's blue-and-pink Deposition which features a crouching figure staring at the viewer. This painter was a Mannerist from the Florentine school.
ANSWER: Jacopo da **Pontormo**

[10] Pontormo tutored this other Florentine artist, who painted Andrea Doria as Neptune and created a Deposition with flying putti carrying a cross and a column above Jesus in Mary's arms.
ANSWER: Agnolo di Cosimo, **Bronzino**

<EW>

3. In many stories, this figure left his cousin to drown while fishing, and subsequently kidnapped his cousin's wife and stole her canoe. For 10 points each:
[10] Name this semi-legendary Māori chief, credited in many myths with leading the Polynesian migration fleet, the father of Māui.
ANSWER: **Kupe**
[10] Many myths portray Kupe as involved in the discovery and settlement of this modern-day country, which was dubbed Aotearoa, or 'long white cloud', by his wife Kuramarotini.
ANSWER: **New Zealand**
[10] Upon arriving at New Zealand, before the fleet could land, Kupe had to fight Te Wheke-a-Muturangi, a giant example of this sea creature.
ANSWER: **octopus** [prompt on 'wheke', because it's right, but it's in the question and they clearly just speak Māori and want to mess with you]

<EL>

4. This dance in triple meter irregularly accents the second and third beats and typically has a short-short-long-long rhythm. For 10 points each
[10] Name this dance. Chopin composed 59 pieces inspired by this Polish folk dance.
ANSWER: **Mazurka**
[10] This composer and ethnomusicologist argued that Chopin "had not known authentic Polish folk music" and instead suggested his Mazurkas were inspired by nationalistic music.
ANSWER: Bela **Bartók**
[10] Chopin took further inspiration from nationalistic dances in composing his *Grande polonaise brillante in E flat Major.* In performances, it is typically preceded by this piano work with the two pieces linked by a fanfare.
ANSWER: ***Andante Spianato*** in G Major

<GC>

5. Gustaf Dalén won the 1912 Nobel Prize in Physics for developing a sun valve to turn off gas-powered lights during the day. For 10 points each:
[10] Dalén pioneered the use of this gas in lighthouses as a replacement for LPG, because it was much brighter. This gas is used with oxygen in a common welding technique, and Dalén later blinded himself using this gas.
ANSWER: **Acetylene** (accept **ethyne** or C_2H_2)
[10] Dalén served as chief engineer for this Swedish cooker company, helping to design its cookers to help his wife, who had been forced to care for him when he was blind.
ANSWER: **AGA** (accept **Aktiebolaget Svenska Gasaccumulator**)
[10] The term 'AGA Saga' was originally coined by Terence Blacker to describe the novels of this author of *Brother and Sister*.
ANSWER: Joanna **Trollope**

<DJ>

6. In 2019, *Vanity Fair* reported that this entrepreneur claims that their dog Balto is a wolf, and lets said wolf poo on the floor at company headquarters. For 10 points each:
[10] Name this Stanford drop-out entrepreneur known for their unusually deep voice, who founded the controversial company at the centre of a 2018 bestseller by John Carreyrou.
ANSWER: Elizabeth **Holmes**
[10] Holmes' extremely scammy company Theranos marketed "Edison machines" that could run medical tests using a tiny amount of this substance, stating that the device worked by performing "a chemistry".
ANSWER: **blood**
[10] Holmes is currently on trial in California for nine counts of wire fraud, alongside this man, her ex-boyfriend and former Chief Operating Officer of Theranos.
ANSWER: Ramesh 'Sunny' **Balwani**

<div align="right"><EW></div>

7. This collection is set in the fictional Republic of Anchuria, inspired by a trip this author took while on the run for bank-embezzlement. For 10 points each:
[10] Name this "fix-up" collection written after a six-month stint in a Honduran jail. It includes the stories 'Fox-in-the-Morning', 'Cupid's Exile Number Two' and 'The Vitagraphoscope'.
ANSWER: *Cabbages and Kings*
[10] Although nowhere near as corrupt as *Cabbages and Kings*, this story by the same author also features an unusual trade, as Madame Sofronie buys some hair for $20 so Della can afford a $21 chain.
ANSWER: 'The **Gift of the Magi**'
[10] 'The Gift of the Magi' is one of this American author's many stories with twist endings, including 'The Ransom of Red Chief' and 'A Retrieved Reformation'.
ANSWER: O. **Henry** [or William Sydney **Porter**]

<div align="right"><EW></div>

8. It's been suggested that the wrestling content in previous instalments of MKULTRA could have been a bit more highbrow, so here are some bonuses on classical music in WWE. For 10 points each:
[10] Current WWE United Kingdom Champion WALTER [VALL-ter] enters the ring to the fourth movement of this Czech composer's Symphony no. 9, 'From the New World'.
ANSWER: Antonin **Dvořák**
[10] 4-time WWE champion Daniel Bryan enters to an electric guitar version of this section of Act 3 of the second of Wagner's Ring Cycle operas.
ANSWER: 'The **Ride of the Valkyries**' [accept *Ritt der Walküren* or *Walkürenritt*]
[10] This 2-time WWE Hall of Famer and 'Nature Boy' enters to Richard Strauss's 'Also sprach Zarathustra', a theme that has since been inherited by his daughter Charlotte.
ANSWER: Ric **Flair** [accept Richard **Fliehr**]

<div align="right"><EL></div>

9. Khertek Anchimaa-Toka became chair of the Presidium of the this region's Little Khural in 1940, arguably becoming the first non-hereditary female head of state. For 10 points each:
[10] Name this semi-independent contested republic which established independence under former monk turned Bolshevik Donduk Kuular.

ANSWER: Tannu **Tuva** [accept **Tuvan People's Republic**]
[10] The Tuvan People's Republic was only recognised by two countries, the USSR and this state which saw extensive Stalinist purges of Buddhists under Khorloogiin Choibalsan.
ANSWER: **Mongolia**n People's Republic
[10] Tuva's capital Kyzyl still features a monument erected after a survey by a British official designated it the geographic centre of this continent.
ANSWER: **Asia**

<div align="right"><DJ></div>

10. Answer some questions about the Voyager program, for 10 points each.
[10] In 1979, the Voyager probes showed that this moon of Jupiter is the most geologically active body in the solar system. Its volcanoes are driven by tidal forces as it is pulled between Jupiter and its other moons.
ANSWER: **Io**
[10] In 1987, Voyager 2 discovered new rings, the Great Dark Spot, and six new moons of this planet, including Despina, Galatea, and Thalassa.
ANSWER: **Neptune**
[10] In 2004, Voyager 1 crossed this point, the region of the heliopause where the solar wind becomes subsonic.
ANSWER: **termination shock**

<div align="right"><MB></div>

11. Lions, bears, hawks, tigers and boilers are all common emblems for sports teams. For 10 points each:
[10] This Championship side unveiled their Ideal Boilers boiler mascot in 2018. This team's ground at the Hawthorns is the highest in the UK.
ANSWER: **West Brom**wich Albion
[10] This college's teams are known as the Boilermakers after a trashing of Indiana rivals Wabash prompted the headline "Slaughter of Innocents: Wabash Snowed Completely Under by the Burly Boiler Makers" in the Crawfordsville Gazette.
ANSWER: **Purdue**
[10] James "the Boilermaker" Jeffries was seen as the "Great White Hope" before his fight with this African-American, the first black Heavyweight World Champion.
ANSWER: Jack **Johnson**

<div align="right"><DJ></div>

12. Puberty is a time of many changes - for 10 points each, answer the following about teenage dramas whose casts evolved over time:
[10] This E4 drama about the messy lives of sixth form students in Bristol changed the game by rotating its cast every two series, creating three "generations" with characters like Tony and Effy.
ANSWER: *Skins*
[10] This teen drama took a trick from *Skins'* book by centring each series on a different student at the Hartvig Nissen School, and gained acclaim for airing content in real-time chunks online.
ANSWER: *Skam* [accept *Shame*]

[10] By the fifth season of this E4 drama, Curtis, Kelly, Simon, Alisha and Nathan had been completely replaced by five new teens, who had also been changed by the storm in episode 1.
ANSWER: *Misfits*

<EW>

13. A characteristic of this plant family is the pseudanthium, or "false flower", which contains a cluster of flowers grouped into a single structure. For 10 points each:
[10] Name this extremely large family of flowering plants. It is informally named for a common yellow and white garden flower which humans like to connect into namesake "chains".
ANSWER: *Asteraceae* [accept **daisy** family or **sunflower** family]
[10] In the *Asteraceae* family, the petals of a ray flower form these strap-shaped tongues. This is also the name given to the part of a leaf found at the junction between its blade and its sheath.
ANSWER: **ligule**s
[10] Ray flowers with ligules are found in the *vulgaris* variety of this plant. The Oxford variety of this common plant spread across the UK from the Botanic Gardens after being brought from Mount Etna.
ANSWER: **ragwort** [or *Senecio* or *Jacobaea*; accept **grounsel**, **stinking willie**, **tansy** or **benweed**]

<AH>

14. This poet wrote that "The classics can console. But not enough." at the end of "Sea Grapes". For 10 points each:
[10] Name this poet, whose other characters include an injured fisherman drinking at Ma Kilman's No Pain Cafe.
ANSWER: Derek **Walcott**
[10] This other Bajan poet won the Griffin International Poetry Prize for their collection *Born to Slow Horses*. They included poems such as "The Cracked Mother" in a longer poetic trilogy.
ANSWER: Edward Kamau **Brathwaite**
[10] Walcott suggested that these landforms "can only exist if we have loved in them". These landforms, of which there are *many* in the Caribbean, title one part of Brathwaite's *The Arrivants* trilogy.
ANSWER: **island**s

<AH>

15. For 10 points each, answer the following about Edward la Zouche, 11th Baron Zouche:
[10] After his secretary Samuel More's wife was accused of adultery, Zouche suggested that he send the four children produced from the marriage to Virginia on this 1620 ship which sailed from Plymouth.
ANSWER: *Mayflower*
[10] Zouche employed Matthias L'Obel, one of the founders of this field, at the suggestion of another of its pioneers, Carolus Clusius. L'Obel also translated the work of Rembertus Dodonaeus in this field.
ANSWER: **botany**
[10] After pioneering the modern pattern of moving from Hackney to Hampshire, Zouche hosted a stag-hunt where George Abbot, a holder of this title, killed a man. His predecessor in this role was Richard Bancroft.

ANSWER: **Archbishop of Canterbury** [prompt on partial]

<DJ>

16. This philosopher came to prominence with a work which discusses Alcibiades' drunken Symposium speech, *The Fragility of Goodness*. For 10 points each:
[10] Name this philosopher who argued for a liberal education based on Greek texts in *Cultivating Humanity*, and for emotions as a form of judgement in *Upheavals of Thought*.
ANSWER: Martha Craven **Nussbaum**
[10] Nussbaum is a frequent collaborator with this economist who wrote *Poverty and Famines*, with whom she works on the "capability" approach to development.
ANSWER: Amartya Kumar **Sen**
[10] "Capabilities" encourage a more comprehensive approach to welfare economics, which has traditionally been driven by these functions which are maximised by rational agents and represent preferences.
ANSWER: **utility** functions

<EW>

17. Martin Luther King said that this conflict was lost in the living rooms of America. For 10 points each:
[10] Ken Burns released a 2017 10-part documentary about this conflict, which saw American military involvement until 1973. The war continued until the PAVN took Saigon in 1975.
ANSWER: **Vietnam War** [accept **Second Indochina War** or **Resistance War Against America**]
[10] One of the key commanders of the People's Army of Vietnam was this North Vietnamese Deputy Prime Minister, who despite no direct military training, helped turn the PAVN into an effective force against the US and South Vietnam.
ANSWER: **Võ** Nguyên **Giáp** [Accept either underlined part]
[10] One of Giap's most brilliant military victories was this climactic battle of the First Indochina War, which saw a French force of 20,000 surrender to 50,000 Vietminh. The Geneva Conference partitioned Vietnam two months after this battle.
ANSWER: **Dien Bien Phu**

<JC>

18. While Shuji Nakamura won many plaudits for developing blue LEDs, we now have even better white LEDs! For 10 points each:
[10] The central component of white LEDs is Yttrium Aluminium Garnet, doped with this element, the most abundant lanthanide. This element's sulphate's solubility decreases at high temperatures.
ANSWER: **cerium**
[10] Another form of white LED is made through this sort of crystallographic technique, in which crystals of blue zinc selenide are grown on a yellow zinc selenide substrate.
ANSWER: homo**epitaxy**
[10] Rapid developments in LED technology are predicted by Haitz's law, which suggests that every decade light per package increases twentyfold and the cost per this measure of luminous flux decreases tenfold.
ANSWER: **lumen**

<DJ>

19. Due to its mountainous terrain and scarcity of water, this province contains only 7% of Pakistan's total population. For 10 points each:

[10] Name this province, the largest in Pakistan by land area. This province's capital and largest city is Quetta [kwetta].

ANSWER: **Balochistan** [bal-ooh-chi-stan]

[10] Balochistan shares borders with this country to the north and northwest. This country has a substantial concentration of population density at its capital, Kabul.

ANSWER: **Afghanistan**

[10] This resource, central to the Baloch economy, can be obtained at Kadanwari and Qadirpur in Pakistan. Its largest worldwide sources are at South Pars in Iran and Qatar, and Urengoy in Russia.

ANSWER: Natural **gas** [accept fossil **gas**; do not accept 'gasoline']

<AH>

20. Hopefully you'll be happy with the questions in MKVLTRA today, but if you're not, you'll probably want to know the legal basis for accusing us of negligence. For 10 points each:

[10] The underpinning of the negligence tort is the existence of this relationship. This three-word term refers to the responsibility of an individual not to cause harm to another party.

ANSWER: **duty of care**

[10] A duty of care can be established using this test, which takes foreseeability, proximity and fairness into account. This test arose out of a 1990 House of Lords case about negligent accountancy.

ANSWER: **Caparo** test

[10] Foreseeability was established as key to the duty of care in this landmark 1932 case, in which the appellant contracted gastroenteritis after having an ice cream float at the Wellmeadow café in Paisley.

ANSWER: _**Donoghue v Stevenson**_

<EW>

Tiebreaker

Algorithms belonging to the Kraitchik family perform this task and have a running time solely dependent on size, which is why they are also known as general-purpose. The current fastest known method for performing this task for sufficiently small inputs is the quadratic sieve, an optimization of Dixon's algorithm, which is itself a modification of a method developed by Pierre de Fermat for accomplishing the same task using the difference of two perfect squares. Although it can only be used by quantum computers, (*) Shor's algorithm notably does this task in polynomial time. The security of many cryptographic protocols, including RSA, rely on the inability of computers to efficiently perform- for 10 points- what task in which composite numbers are broken down into a unique set of their divisors.

ANSWER: prime **factorization** (or integer **factorization**)

<BB>