

OOT 2020: [The Search for a Middle Clue]

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THE ANSWER TO THE LAST TOSS-UP SHOULD HAVE BEEN: *Phaedo*

Packet 9

Toss-ups:

1. One work by an artist from this city is a pointillist self-portrait in their study with Van Gogh's *Portrait of the Artist's Mother* hanging in the top left-hand corner. In this city, another artist designed posters like one of a woman in profile holding an hourglass and another of a dancer with huge floating yellow sleeves. An artist from this city depicted a nude female vampire in an illustration for *Ver Sacrum*, the official publication of a group based in this city. One of that group's exhibitions included a work that featured a giant gorilla next to three women surrounded by its artist's signature blocks of colour and gold leaf, the *Beethoven Frieze*. For 10 points, name this city in which Gustav Klimt led the Secession.

ANSWER: **Vienna** [accept **Wien**] <CJ>

2. Absorptions at 463 and 735 nanometres give the naphthalenide [naff-THAL-eeen-eid] of an element in this group of the periodic table a deep green colour. Three atoms of an element in this group can react with one oxygen atom to form a dark-green suboxide, while four atoms produce a red-violet suboxide. The alpha decay of actinium enabled Marguerite Perey to discover an element in this group in 1939. One element in this group burns with a lilac-coloured flame when reacting with water, while another produces a characteristic yellow light with wavelength near 589 nanometres in gas-discharge lamps. For 10 points, name this group of the periodic table containing elements such as francium, rubidium, and potassium.

ANSWER: **alkali metals** [or group **1** or group **1A**; accept **lithium** group; do NOT accept or prompt on 'alkali earth metals'] <AH>

3. Israel Selvanayagam has called this individual and Ashoka 'counterfigures' because they experience similar crises but reach different moral conclusions. This figure is told that war 'is a door to heaven, opened fortuitously' by their companion, who reveals to this figure that they are reborn each age to establish the law again. When this figure sees the true form of their companion, they say that they see all their enemies, such as Bhishma and the sons of Dhritarashtra, being crushed in that character's mouth. This hero therefore resolves to fight at Kurukshetra against the Kaurava. For 10 points, name this hero whose chariot driver reveals themselves as Krishna in the *Bhagavad Gita*.

ANSWER: **Arjuna** <OSC>

4. A play often attributed to this author ends with its title character being exiled to Pandataria, where she will be killed. In another play by this author, a character goes to a hellish dark grove to murder three children; the prologue of that play by this author is given by the ghost of Tantalus. The play *Octavia* is often misattributed to this author, but in fact describes this author's death. Atreus ignores his guard's advice and chooses vengeance against his brother in a play by this author, who, unlike Euripides, depicts a title character blaming herself for the deaths of her and Jason's children. For 10 points, name this Roman tragic playwright of

Thyestes and *Medea*, a Stoic philosopher who advised Nero.

ANSWER: Lucius Annaeus **Seneca** the Younger [do NOT accept or prompt on 'Seneca the Rhetorician' or 'Seneca the Elder'] <AH>

5. This city's boys and girls were educated at 'Houses of Youth' and 'Houses of Song', respectively. The 'Bancroft dialogues' challenge the prevailing theory of the etymology of this city's name. This city was divided into four zones called *campes* and eighty districts accessible by removable wooden bridges. In one source, this city was described as 'as large as Seville or Cordova', and more information about this city is found in the Codex Mendoza. The Sacred Precinct of a temple in this city had a dwelling for Eagle Warriors as well as a huge skull rack, and was built on the site where an eagle had been sighted on a cactus holding a snake. For 10 points, name this city built on an artificial island in Lake Texcoco, the capital of the Aztec empire.

ANSWER: **Tenochtitlan** [anti-prompt on Mexico City] <CJ>

6. Classical results in asymptotic homogenization, as derived by Bensoussan *et al* among others, assume that the fast scale behaviour has this property. Liénard's theorem gives the conditions under which the solution to a second-order ordinary differential equation exhibits this property. Floquet's theorem gives the solution of equations of the form ' \dot{x} equals x times A of t ' where A has this property with respect to t . The Poincaré-Bendixon theorem states that for a two-dimensional phase space with a trapping region, solutions must converge to a fixed point or to a system with this property. For 10 points, name this property of limit cycles, and of functions such as cosine, of having the same output if the input is changed by a fixed amount.

ANSWER: **periodic** [accept **periodicity**; accept having a **limit cycle** before mention] <LW>

7. A paper by William Roy and Timothy Dowd asks the question 'What is sociological about [this phenomenon]?'. Max Weber argued that there was a tension between this phenomenon's 'ratio' and its 'life' in a work titled for 'the rational and social foundations' of it. In *Distinction*, Bourdieu argued that 'nothing more clearly affirms one's class...than tastes in [this phenomenon]'. A work by Theodor Adorno about this phenomenon argues that there is a five-step process to its recognition, and distinguishes between its 'serious' and 'popular' forms. For 10 points, name this phenomenon, which was written about by thinkers like Arnold Schoneberg and John Cage.

ANSWER: **music** [accept specific musical forms like pop **music**, **jazz**, classical **music** etc.; prompt on art] <GDC>

8. Martin Eidelberg emphasised the importance of a person with this last name's 'girls' to the creation of works using a copper foil method. The most comprehensive collection of the works of a designer with this last name can be found in Winter Park, Florida, and that person with this last name also designed the *Education* windows in Yale's Chittenden Hall. Along with the creator of the daffodil lamp, this is the name of a company that designed the Vince Lombardi trophy, as well as sterling silver hearts inscribed with the phrase 'Please Return To' this company's headquarters at 727 5th Avenue, New York. For 10 points, the glass designer Louis Comfort shares his last name with what American jewelry company?

ANSWER: **Tiffany** <GDC>

9. *Description acceptable*. Legislative debate over this policy featured the 'tackers' controversy in the House of Lords. A leader of this cause accidentally killed John D'Esterre and won a by-election against William Vesey Fitzgerald. The Earl of Winchelsea fought a duel to oppose this policy as a leader of the Ultra-Tories, while a one-penny-a-month fee greatly expanded the membership of a group that advocated for this policy and was

founded by Daniel O'Connell. The Duke of Wellington and Robert Peel eventually enacted this policy by an 1829 Relief Act. Opposed by the Gordon Riots and effected by the repeal of the Penal Laws and the Test Act, for 10 points, name this policy of allowing members of a certain religion rights like voting and holding public office in Britain.

ANSWER: **Catholic emancipation** [accept **Catholic relief**; accept appropriate descriptions like **Catholic civil rights** or **Catholic voting rights**] <CJ>

10. This author described crushing three 'failed' eggs that 'should have hatched in May' before remembering that God 'waiteth for thy fruits in vain.' They're not Oscar Wilde, but this author wrote 'I strain my heart, I stretch my hands, / and catch at hope' in 'De Profundis'. This author compared their heart to 'a singing bird', 'an apple tree', and 'a rainbow shell' before concluding that it is 'gladder than all these.' This author of 'Symbols' and 'A Birthday' wrote 'Our God, heaven cannot hold Him / Nor earth sustain', and also wrote about a girl who sells her hair for fruit to a group who repeat 'Come buy, come buy'. For 10 points, name this poet of 'In the bleak midwinter' and 'Goblin Market'.

ANSWER: **Christina Rossetti** [prompt on **Rossetti**] <AP>

11. This author speculated about extraterrestrial life in their work *Cosmotheoros*. This person's work *De Vi Centrifuga* made them the first to derive the standard formula for the centripetal force, and this figure invented the first multi-lens telescope eyepiece. A 1673 book by this scientist set out their analysis of the pendulum, which underpinned their invention of the pendulum clock. A spacecraft named for this person is the only one ever to land in the outer Solar System, and sent several photos from the surface of a moon that this person discovered. For 10 points, a space probe carried by Cassini to Titan is named after which Dutch scientist?

ANSWER: Christiaan **Huygens** [HOI-genz] <AH>

12. A 2003 article by Eric Posner and Adrian Vermuele argue that the rightness of enacting policies of this type is as much about institutional design as it is about abstract justice. An essay arguing for one form of a policy of this type tells a story about Clyde Ross selling his horse for \$17 and examines the history of North Lawndale. Henry Louis Gates caused controversy by suggesting advocates of this policy would do well to remember the role African merchants played in the slave trade. An article in the *Atlantic* highlighting the extent to which 'white flight' is socially engineered is called the 'Case for [this policy]' and is by Ta-Nehisi Coates. For 10 points, name this policy of compensating the descendents of a historically oppressed people.

ANSWER: **reparations** <GDC>

13. One novel set in this state features Esch shoplifting a pregnancy test, an echo to another novel set in this state in which a character goes to a pharmacy several times to try to get an abortion. It's not Louisiana, but this state is the setting of a novel in which the dog China gives birth to a litter of pups while one family prepares for Hurricane Katrina. That novel is *Salvage the Bones* by Jesmyn Ward. In another novel set in this state, a character runs into the Gillespie family's barn, which their brother Darl tried to burn down. That novel set in this state follows the Bundren family as they carry their mother's body to this state's fictional Yoknapatawpha [YOK-nah-puh-TAW-pha] County. For 10 points, name this setting of *As I Lay Dying*, the home state of William Faulkner.

ANSWER: **Mississippi** <SR>

14. Increased oxidation of this molecule by C.Y.P.27.A.1 has been associated with the progression of Alzheimer's disease. When the apo.lipo.protein [A-po-LIE-po-protein] B gene is mutated, this molecule may

form deposits above the eyelids. It's not a ketone body, but H.M.G.-Co.A is a precursor for the biosynthesis of this molecule, which is regulated by S.R.E.B.P-2. By inhibiting P.C.S.K.9, Evolocumab improves hepatic clearance of this molecule, and is used in patients that don't respond to statins. Foam cells are filled with LDL, which is considered the 'bad' form of, for 10 points, which lipid often associated with cardiovascular disease?

ANSWER: **cholesterol** <ML>

15. A 2003 court case saw this person convicted on 43 counts of fraud along with their broker, Addy Moolman. This person claimed that another politician was only 'wheeled out to collect money' in a 2010 interview with Nadira Naipaul, and this politician caused many resignations from a party committee in 1995 after they failed to hand over a large donation from Benazir Bhutto. This person was convicted of kidnapping 14-year-old activist Stompie Seipei, who was subsequently murdered by this person's security detail. This person's bodyguards, called the 'United Football Club', committed atrocities like 'necklacing' throughout the 1980s in Soweto. For 10 points, name this second wife of South Africa's first post-apartheid President.

ANSWER: **Winnie Mandela** [or Winnie **Madikizela**-Mandela or Nkosikazi Nobandle Nomzamo **Madikizela**; prompt on **Mandela**] <AH>

16. André Gide [zheed] claimed that this novel was the best French novel ever written. A passage in this novel describes the protagonist using a dagger to cut down a branch of a chestnut tree that his mother had planted twenty-three years earlier. A character asks 'But you realize that what you are suggesting is utterly immoral?' in response to the suggestion that she cheat on her husband, the Duke of Sanseverina, with Count Mosca. The protagonist of this novel, which was inspired by an account of the life of Alessandro Farnese, gives sermons in the hope that his love, Clelia Conti, will attend one. That protagonist of this novel retires and dies in the title monastery after the death of his child. For 10 points, name this novel about Fabrizio del Dongo, written by Stendhal.

ANSWER: *The **Charterhouse of Parma*** <GDC>

17. Experiments involving these particles to measure the radius of the proton led to results that differ from the accepted result by 5.6 standard deviations. An exotic molecule of this particle with two fluoride ions has a higher zero point energy than any naturally-occurring triatomic molecule. This particle is the preferred decay mode of the pion, as another mode is helicity suppressed. Because of its much smaller Bohr radius, this particle can catalyze fusion between heavy hydrogen atoms. The number of these particles reaching the ground is an important illustration of special relativity, since they have a mean lifetime of only 2.2 microseconds. For 10 points, name these leptons with mass 207 times that of the electron.

ANSWER: **muons** [accept **mu mesons**; accept **mu** leptons] <LW>

18. In August 2019, this country's Parliament introduced a bill to decriminalize abortion until 20 weeks, reversing a 1977 law. Residents of this country popularized a hashtag promoting turning magazines with this country's leader on the cover face-down. The opposition National Party supported this country's passage of a Zero Carbon bill in 2019; during debate, Todd Muller attempted to interrupt Green MP Chloe Swarbrick. Earlier that year, this country's Prime Minister and Emmanuel Macron announced a plan to target violent online content in response to the Facebook Live stream of an attack on the Al Noor mosque and Linwood Islamic Centre. For 10 points, Jacinda Ardern leads what country where a March 2019 shooting took place in Christchurch?

ANSWER: **New Zealand** <CJ>

19. *Two answers required.* The interest of one of these composers in the works of the other was as a 'harmonic laboratory', according to a work titled for one of these composers *and the Patterns of Invention*. The only four-harpichord concerto by one of these composers was a transcription of one of the other's works, one of 22 keyboard transcriptions made by them from the other's violin concertos. Those works were written after Johann Ernst of Saxe-Weimar brought the latter's first set of published concertos, *L'estro armonico*, from Venice. One of these composers wrote a concerto featuring *flauti d'echo*, while the other imitated a dog barking in a programmatic concerto. For 10 points, name these two composers, one of the *Four Seasons*, the other of the *Brandenburg Concertos*.

ANSWER: Antonio **Vivaldi** and Johann **Sebastian Bach** [prompt on partial answers] <AP>

20. One ruler of this name twice deposed Pope Benedict IX, eventually appointing the reforming Leo IX. A lavish pericope of the Gospels was produced at Reichenau for a ruler of this name, the only legitimately canonised Holy Roman Emperor. Another ruler of this name was kidnapped as a child by Archbishop Anno of Cologne and crushed the 1074 Saxon Revolt. One ruler of this name concluded the Concordat of Worms and deposed their own father, also of this name, who had been excommunicated five times during the Investiture Controversy. With that one waiting barefoot for three days for Gregory VII at Canossa, for 10 points, give this name of many Kings of Germany, beginning with one nicknamed 'the Fowler'.

ANSWER: **Henry** or **Heinrich** [accept any of **Henry I** to **V**] <AP>

Bonuses:

1. The policemen Simmonds and Ross repeatedly punch each other in an attempt to cover up the accidental killing of the abusive Kenny in this author's play *The Removalist*. For 10 points each:

[10] Name this prolific Australian dramatist, who also satirized university life in works like *The Department* and *Dead White Males*.

ANSWER: David **Williamson**

[10] The *Sydney Morning Herald* hailed Nakkiah Lui, a member of this group, as 'Australia's next David Williamson' in 2018. In Williamson's play *Emerald City*, Kate's editor warns her against publishing a work by a member of this group because 'Blacks don't sell books'.

ANSWER: **Aboriginal** Australians [accept **Aborigines**; prompt on **Indigenous** Australians or **First Nations** Australians]

[10] Williamson is also known as a screenwriter and was the first choice to adapt this Joan Lindsay novel about a group of schoolgirls who go missing during an outing on Valentine's Day 1900 into a now-iconic film, though he was unable to take on the project.

ANSWER: **Picnic At Hanging Rock** <CJ>

2. The Lieb-Wu equations are derived from the Bethe [BAY-tuh] ansatz for the one-dimensional version of this model. For 10 points each:

[10] Name this model of interacting fermions on a lattice, the sum of a tight binding Hamiltonian and an interaction term. In this model, the hopping term is only non-zero for nearest neighbour sites, in which case it is negative, and the positive interaction term is non-zero when there are two particles on the same site.

ANSWER: **Hubbard** model

[10] The Hubbard model provides a model for the transition between conductors and these materials. The Hubbard model leads to the Mott form of these materials, which cannot conduct current, since this would require sites to become doubly occupied.

ANSWER: **insulators**

[10] The Hubbard model also gives rise to the itinerant form of this behaviour, which arises through the Pauli exclusion principle, as fermions with the same spin cannot occupy the same site, thus lowering their energy.

ANSWER: **ferromagnetism** [accept word forms; do NOT accept or prompt on 'antiferromagnetism'] <LW>

3. During this period, a campaign was launched calling for the Destruction of the Four Olds. For 10 points each:

[10] Name this period, which saw the mass distribution of the Little Red Book, and in which the Red Guards were encouraged to attack symbols of old customs, culture, habits, and ideas.

ANSWER: Great Proletarian **Cultural Revolution**

[10] Because the composer of the PRC's original anthem was purged during the Cultural Revolution, this song became its *de facto* anthem. This song, the opening number of a play and film created by Zhou Enlai, includes the lyrics 'The Communist Party is like the sun, Wherever it shines, it is bright'.

ANSWER: '**The East is Red**' [accept **Dōngfāng Hóng**]

[10] This designated successor of Mao, who had compiled the Little Red Book and was an important player in the policies of the Cultural Revolution, was killed in a mysterious plane crash in 1971. This person, the head of the PLA, was allegedly fleeing after trying to launch a coup d'état.

ANSWER: **Lin** Biao <OSC>

4. Michael Storms suggested adapting this scale to three dimensions, while Fritz Klein introduced a grid-like approach to the variable it measures to take into account changes over time. For 10 points each:

[10] Name this scale, which its creator defended by arguing that the world is 'not divided into sheep and goats'. The research that led to the development of this scale is sometimes criticised for lacking rigour, because, for example, it took into account lewd bathroom graffiti.

ANSWER: **Kinsey** scale

[10] A 6 on the Kinsey scale describes people who solely had desires of this type, the sexual attraction of people to the same gender as themselves.

ANSWER: **homosexuality** [accept being **gay**]

[10] *Description acceptable.* Kinsey's work provided evidence that being gay was more common than thought, which was influential in the decision to perform this action in 1973, which helped destigmatise non-heterosexual people in the eyes of the psychological profession.

ANSWER: **removing homosexuality from the DSM** [accept any answer mentioning **Diagnostic and Statistical Manual of Mental Disorders** or *DSM* or *DSM-II* and the idea of making it so that being gay or homosexual was removed or no longer listed as a disorder] <GDC>

5. A bell tuned to B-flat is repeatedly struck throughout this symphony's slow first movement, while a bass chorus sings text by Yevgeny Yevtushenko. For 10 points each:

[10] Name this choral symphony, whose fourth movement 'Fears' quotes elements from its composer's suppressed *Symphony No. 4*.

ANSWER: Dmitri **Shostakovich**'s *Symphony No. 13 in B-flat minor* or '**Babi Yar**' [accept '**Babi Yar**' alone; otherwise prompt on partial identification of the piece]

[10] This composer began their only choral symphony with a fortissimo fanfare in B-flat minor, which the choir entry resolves to D major. A harp plays the Westminster chimes at the start of their *A London Symphony*.

ANSWER: Ralph ['Rafe'] **Vaughan Williams** [prompt on **Williams**]

[10] This text is used throughout Leonard Bernstein's third symphony. A praise of the name of God, in the symphony it is juxtaposed with a narrator castigating God's apparent indifference to suffering.

ANSWER: **Kaddish** <AP>

6. Daniel O'Leary's failure to carry out an order to burn one leader's writings after their death resulted in the preservation of dozens of love letters written to this figure. For 10 points each:

[10] Name this revolutionary who was awarded the Order of the Sun for her role in the independence of Spanish America and who first aided the movement by spying on guests in the house of her husband, a wealthy English merchant.

ANSWER: Manuela **Sáenz**

[10] Sáenz is best-known for her relationship with this other independence leader. After she helped him escape an assassination attempt in Bogotá, this man began to call her 'the Liberator of the Liberator'.

ANSWER: Simón **Bolívar**

[10] After Bolívar's death, Sáenz was expelled from Colombia and forbidden from returning to her birthplace. She eventually died in poverty in this country, the location of the earlier decisive Battle of Ayacucho.

ANSWER: **Peru** <CJ>

7. A 1983 book by Michael Slater discusses these characters in a certain author's work and categorises them as Angel, Fairy, Good Sister or Kitten. For 10 points each:

[10] Name this type of character written by a certain author. A book about these characters by Miriam Margolyes [MAR-go-lees] and Sonia Fraser notes that their author often portrays them as emotionally deadened seventeen-year-olds, perhaps due to the death of Mary Hogarth aged seventeen.

ANSWER: **female** characters in the works of Charles **Dickens** [prompt on **Dickensian** characters; prompt on **women** or **female** characters with 'in which author?'; anti-prompt if they give a too-specific subset, e.g. **Dickensian fallen women**]

[10] David Holbrook argues that this character's abusive upbringing by Miss Barbary numbs her emotions. This only female narrator in Dickens' works narrates part of a novel dominated by the *Jarndyce and Jarndyce* court case.

ANSWER: **Esther Summerson** [accept either underlined part]

[10] Estella is portrayed as similarly emotionless after being brought up by Miss Havisham in this Dickens novel, whose protagonist is Pip.

ANSWER: **Great Expectations** <AH>

8. This power has been identified with the Paraclete, meaning 'helper', in the Gospel of John. For 10 points each:

[10] Name this third element of the Trinity that the First Council of Constantinople amended the Nicene Creed to call 'the Lord and the giver of life' that 'has spoken through the prophets'.

ANSWER: **Holy Spirit** [accept **Holy Ghost**]

[10] Some fifth-century Latin churches added this word to the Nicene Creed to specify that the Holy Spirit proceeds from the Son as well as from the Father, much to the consternation of the Eastern Church.

ANSWER: **filioque**

[10] The Orthodox Church considered that the Western church had violated Canon VII of this third ecumenical council by introducing 'filioque' to the Creed. This council also condemned the teaching of Nestorius.

ANSWER: Council of **Ephesus** <CJ>

9. A famous example of this style of pottery depicts a horse frightened by a lion. For 10 points each:

[10] Name this pottery style developed in England in the 1770s. Though works in this style of pottery have many different colours, the most common examples are a shade of pale blue sometimes named for their creator, Josiah Wedgwood.

ANSWER: **jasperware** [prompt on **stoneware**]

[10] This artist, sometimes referred to as the 'father of British studio pottery', spent many of their formative years in Japan, which is reflected in many of their works.

ANSWER: Bernard **Leach**

[10] This contemporary British potter's 'when in doubt, bung it on' style contrasts with Leach's more understated work. This potter often incorporates their female alter-ego 'Claire' into their creations.

ANSWER: Grayson **Perry** <GDC>

10. The gene organisation of the chloroplast genome was first deduced in 1986 using the chloroplast genome sequence of *Marchantia polymorpha*, a species from this group of plants. For 10 points each:

[10] Name this group of non-vascular plants. These plants are often thalloid, but leafy species of these plants are distinguished from mosses by possessing single-celled rhizoids.

ANSWER: **liverworts** [or **hepatics** or **Marchantiophyta**]

[10] *Marchantia polymorpha* is a liverwort model organism used in this discipline, which also uses model

organisms such as *Arabidopsis thaliana* for angiosperms and *Physcomitrella patens* for moss, and studies topics such as organogenesis.

ANSWER: plant **evolutionary developmental** biology [or **evo-devo**]

[10] Non-vascular plants lack this tissue, which forms tracheids in gymnosperms and vessel elements in angiosperms. Whilst phloem transports sugar, this dead tissue transports water.

ANSWER: **xylem** <LC>

11. Answer the following about the career of Murad I, for 10 points each:

[10] During his reign, Murad dramatically expanded the holdings of this sultanate in the Balkans and extracted tribute from the Byzantine emperor, though this dynasty was not yet able to conquer Constantinople.

ANSWER: **Ottoman**

[10] This 1389 battle, a defeat for an allied Christian army led by the Serbian Prince Lazar, was Murad's most decisive victory, though he was killed either during or just after it.

ANSWER: Battle of **Kosovo**

[10] Earlier, Murad moved the Ottoman capital to this city in what is now European Turkey. The emperor Valens was killed fighting the Goths at a much earlier battle that took place outside this city.

ANSWER: **Edirne** [accept **Adrianople**] <CJ>

12. These molecules are always in the point group 'C infinity v' or 'D infinity h', and most of Earth's atmosphere consists of molecules of this type. For 10 points each:

[10] Name these molecules, which, having precisely two atoms, may be described as heteronuclear or homonuclear.

ANSWER: **diatomic** molecules

[10] A homonuclear diatomic molecule has a centre of inversion, with respect to which an orbital or electronic state may be symmetric or antisymmetric, as denoted by these two labels.

ANSWER: **gerade** and **ungerade**

[10] The ground state of dioxygen is a diradical, with two pi-star antibonding orbitals singly occupied, making it paramagnetic and giving it this unusual ground state molecular term symbol.

ANSWER: triplet **sigma g minus** [or three **sigma g minus**; prompt on **sigma g**; do NOT accept or prompt on 'sigma g plus'] <AG>

13. This person pulled out of the 2020 BDO Championship after the tournament announced a significant reduction in prize money. For 10 points each:

[10] Name this darts player. In 2019, they defeated Ted Evtets and Mensur Suljović [SOOL-yo-vich] en route to a career-best third-round appearance at the PDC World Championships.

ANSWER: Fallon **Sherrock**

[10] Sherrock's World Darts Championship success came at this venue, which hosts the tournament in the suburbs near North London. Since 2012, it has also hosted the Masters snooker tournament.

ANSWER: **Alexandra Palace** [accept **Ally Pally**]

[10] Sherrock reached the final of the Women's World Darts Championship in 2015, where she lost to this player. This player has won the Women's World Championship four times, most recently in 2018.

ANSWER: Lisa **Ashton** <AH>

14. Article 301 of this country's penal code has been used to persecute several of its authors. For 10 points each:

[10] Name this country. A novel set in this country involves a radical named Blue being betrayed to its government and begins with the protagonist in a café witnessing the Director of the Institute of Education being shot.

ANSWER: Republic of **Turkey**

[10] This author was charged under Article 301 with insulting Turkishness and the Turkish armed forces with their novel *Snow*. This author also wrote *My Name is Red*.

ANSWER: Orhan **Pamuk**

[10] This other author was charged under Article 301 for discussing the Armenian genocide in *The Bastard of Istanbul*. This author used both Istanbul and Oxford as the setting for their novel *Three Daughters of Eve*.

ANSWER: Elif **Shafak** <AH>

15. Susan Wolf split these people into two types: ‘rational’ and ‘loving’, the latter of whom’s ‘own well-being simply consists in the well-being of others.’ For 10 points each:

[10] Name these people, who Wolf argues in a 1982 paper would be unattractive because they lack the ‘ability to enjoy the enjoyable in life’.

ANSWER: **moral saints** [prompt on partial answer]

[10] Wolf uses the concept of ‘moral saints’ to criticise a moral philosophy she names for this concept. According to Aristotle, this concept requires ‘rational activity’, and as such it is sometimes translated as ‘flourishing’.

ANSWER: **eudaimonia**

[10] Wolf links the concept of the ‘loving’ moral saint to this ethical philosophy that was originated by Jeremy Bentham.

ANSWER: **utilitarianism** <GDC>

16. The paper that proposed this theory argued that twentieth-century technology left Russia increasingly open to invasion from the east or west, and it was later challenged by Dimitris Kitsikis’ notion of the Intermediate Region. For 10 points each:

[10] Name this theory of geography put forward by Halford Mackinder, predicting that whichever power ruled Eastern Europe would command a namesake region stretching from the Volga to the Yangtze.

ANSWER: **Heartland** theory

[10] In Mackinder’s theory, the ruler of the Heartland would consequently gain power over this other entity, comprised of Africa and Eurasia. Heartland Theory holds that, since this entity hosts well over half the world’s resources, control of it would mean global power for the holder.

ANSWER: **World-Island**

[10] Excluded from the World-Island are the outlying islands, consisting of the Americas and Australia, and the offshore islands, including the Japanese and this other group of islands, formerly attached to the continent by Doggerland.

ANSWER: **British** Isles [accept **Britain**] <CJ>

17. Differing levels of obsequiousness depending on a vassal’s location have been discerned in texts discovered near two temples of a solar deity that partially name this site. For 10 points each:

[10] Name this ancient city, whose ruler was hailed from Sidon as ‘the king, my lord, my god, the breath of life’, but by the more distant ruler of Qatna as simply ‘the king of Egypt’.

ANSWER: Tell-e-**Amarna** [accept **Akhetaten**]

[10] Several letters in the Amarna correspondence concern the intrigues of rulers of this modern-day country,

from which the Egyptians sourced cedar wood. One letter describes the betrayal of Zimredda of Sidon, who defected from Egypt and was denounced by Abimilku of Tyre.

ANSWER: **Lebanon**

[10] Those intrigues were in part driven by the rivalry between Egypt and this kingdom after its defeat of Mitanni. One letter from Suppiluliuma, a ruler of this kingdom, to a pharaoh asks ‘my brother’ to send him four precious statues and ‘a chunk of lapis lazuli’.

ANSWER: **Hattusa** [accept **Hittite** Empire] <OSC>

18. A man lying in bed is eating a giant tortoise in a painting named for the Lord Mayor experiencing these events. For 10 points each:

[10] Name these events, one of which names a painting depicting a nude Charles James Fox next to a dice and dice box.

ANSWER: **nightmares** [prompt on **dreams**]

[10] That painting of Charles James Fox depicts him lying down in a pose evocative of Henry Fuseli’s *The Nightmare*, which in turn depicts one of these creatures lying on the chest of a woman. Fuseli showed one of these creatures leaving two sleeping women in one work.

ANSWER: **incubus**

[10] James Gillray depicted the future William IV lying down in the same pose as the woman in *The Nightmare* in his work *Duke William’s Ghost*, an example of one of his many works in this style, in which a person’s features are deliberately exaggerated.

ANSWER: **caricature** [prompt on **cartoon**] <GDC>

19. One of the protagonists of this novel is fatally wounded in a duel against the music teacher Chevalier Danceny. For 10 points each:

[10] Name this novel. One of the protagonists of this novel abandons Cécile [seh-SEEL] due to a promise from the other protagonist of a night together that is eventually reneged on.

ANSWER: **Dangerous Liaisons** [or **Les Liaisons dangereuses**]

[10] While Vicomte de Valmont is killed in a duel, the Marquise de Merteuil [mehr-TOO-ee] suffers this fate after moving to the Netherlands, which results in her losing her beauty.

ANSWER: contracting **smallpox** [prompt on **scarring**, **illness** or **disease**]

[10] Despite the rather shocking content of *Dangerous Liaisons*, many upper-class women in eighteenth-century France owned a copy, including this wife of Louis XVI, who is depicted in Dumas’ *The Knight of the Red House*.

ANSWER: **Marie Antoinette** <GDC>

20. This boundary was originally conceived as the altitude above which an object would need to travel faster than orbital velocity to generate sufficient aerodynamic lift to support itself, but it is conventionally set at 100km. For 10 points each:

[10] Name this boundary between Earth’s atmosphere and outer space, named after the Hungarian scientist who first calculated it.

ANSWER: **Kármán** line

[10] The Kármán line lies near the lower end of this layer of the atmosphere, which like the stratosphere displays an inverted temperature gradient, and is named for being the hottest layer of the atmosphere.

ANSWER: **thermosphere**

[10] At a similar altitude to the Kármán line is this point in Earth's atmosphere, above which the composition of the atmosphere varies according to the molecular mass of each chemical species, rather than being well-mixed by eddy diffusion.

ANSWER: turbopause [accept homopause] <AG>