

Tossups

1. A scandal for this man's government occurred after the homosexuality of John Vassall was used to get secrets from the Admiralty by the KGB. He got a nickname from a comic which was subtitled "How to Try to Continue to Stay Top Without Actually Having Been There" and which was created by Vicky. This man gave a speech against economic complacency in Bedford that led to the quote "most of our people have never had it so good." Another speech by this prime minister denounced apartheid and described the "wind of change" blowing through Africa. This man resigned shortly after a minister's affair with Christine Keeler was revealed in the Profumo Affair. For 10 points, name this Conservative prime minister of Britain from 1957 to 1963 who was nicknamed "Supermac."

ANSWER: Maurice Harold Macmillan

2. This book's preface cites Geza Roheim's translation of the Australian word *altjira* as "dream," and it frequently cites the work of post-Freudian dream interpreter Wilhelm Stekel. Its epilogue notes that each of us "carries the cross of the redeemer" "in the silences of his personal despair." This book's chapter "The Belly of the Whale" gives several dramatic examples of the "threshold." The "ultimate boon" and the "cosmogonic cycle" are discussed by this book, which uses a diagram of a bisected circle to represent the "separation – initiation – return" formula for journeys that start with a "call to adventure" received by the title figure. For 10 points, name this book which reduces Cu Chulainn, Raven, Perseus, and many other quest narratives to a "monomyth" structure, by Joseph Campbell.

ANSWER: *The Hero With a Thousand Faces*

3. In a play by this author, Skrobotov is shot and killed following the closing of his factory. His trip to Capri resulted in a series of poetic vignettes called *Tales of Italy*. In one of his plays, Protasov works diligently to perfect mankind, oblivious to his best friend's attempts to woo his wife. This author of *Enemies* and *Children of the Sun* wrote a play in which Natasha's sister burns her legs by throwing boiling oil on them, and her lover Pepel kills Kostiloff. In that play, his most famous, the idealistic Luka tries to uplift such characters as the thief Vaska and a drunken former actor. That play is about a lodging house inhabited by the dregs of society. For 10 points, name this author of *The Lower Depths*.

ANSWER: Maxim Gorky [or Alexei Maximovich Peshkov]

4. E.A. Walker coined a term for an action led by this ruler, which Julian Cobbing claims is part of a racist narrative for this man's life. After being stabbed in an assassination attempt during a dance, this ruler was treated by diary writer Henry Francis Fynn. A rival tribe was forced to move north of the Pongola River after being defeated by this man's forces in such fights as the Battle of Gqokli Hill. This rival of Zwibe has been credited with introducing widespread use of a short stabbing spear called the iklwa, which was an improvement on the assegai. After being mentored by Dingiswayo, this ruler may have killed thousands in the Mfecane, and he was murdered by his brother Dingane. For 10 points, name this nineteenth century king known for his militarism after he started the Zulu Empire.

ANSWER: Shaka kaSenzangakhona [or Chaka]

5. A growing problem for this river is an increased number of drownings each year during the Sham el Nessim holiday. It is home to a namesake type of monitor lizard that has been listed as an invasive species in the Everglades. One of its tributaries is the Atbara River, which dries up rapidly during the drier period of January to June. An ancient quarry and a staircase-like device used to measure this river's height are found on its island of Elephantine. One major tributary of this river causes the Tis Issat Falls just after originating at Lake Tana. After a massive and well publicized search by Speke, Livingstone, and Stanley, another of its major tributaries was found to flow from Lake Victoria. For 10 points, name this African river with namesake Blue and White tributaries, the longest in the world.

ANSWER: Nile [do not accept "White Nile" or "Blue Nile"]

6. Loewner's inequality relates the area and systole of Riemannian metrics on one of these spaces. Arnold's cat map is a chaotic mapping from one of these spaces to itself. This name is given to connected, compact, abelian Lie subgroups, and any compact Lie group has a maximal one. Dupin cyclides are geometric inversions of these objects,

and two Villarceau circles can be created by cutting one of these objects diagonally. N-dimensional versions of these objects, which have genus one, are homeomorphic to the Cartesian product of N circles. Other than the Klein bottle, these are the only closed, compact surfaces with an Euler characteristic of zero. They can be created by revolving a circle around an axis coplanar to the circle's diameter. For 10 points, name these mathematical objects that often look like doughnuts.

ANSWER: torus

7. One of this composer's symphonies begins with a string tremolo followed by a theme which he claimed was whistled to him in a dream. The adagio second movement of that symphony opens in C-sharp minor and builds to a C major climax. The finale of one of his symphonies includes a trio representing a dance song played to hunters during their lunch break. Deryck Cooke wrote an influential paper about the difficulties caused by the multiple versions of his symphonies, which is this composer's namesake problem. According to legend, he wrote the cymbal clash at the climax of the adagio of his seventh symphony upon learning of Wagner's death. For 10 points, name this Austrian composer whose fourth symphony is nicknamed "Romantic."

ANSWER: Anton Bruckner

8. In one story, this man peeled stripes of bark off several branches and stuck the resulting striped sticks in a drinking trough. This man chooses not to go back to Mount Seir with the head of the Edomites. He talks with Hamor before his family circumcises and kills the men of the city of Shechem. An injury incurred by this man at Luz explains a prohibition on eating the sciatic nerve of animals. This man's concubines include Bilhah and Zilpah, and he served the shepherd Laban for fourteen years. While traveling, he named a rock "house of God," or Beth-El, years after trading a pot of lentils and strapping goatskins to his arms to earn his father's blessing. For 10 points, name this husband of Leah and Rachel, an Old Testament patriarch who wrestled an angel.

ANSWER: Jacob [or Yaakov; or Israel; or Yisra'el]

9. A chaperone unique to these cells removes CLIP from the invariant chain protein. An ABC-class transporter unique to these cells is TAP, which transports peptides to the ER's peptide-loading complex. The avidity model explains the differential development of these cells. By suppressing NF-AT transcription factors, cyclosporine prevents the growth of these cells. These cells are regulated by both positive and negative selection, and they undergo somatic recombination but not somatic hypermutation. These cells present the major histocompatibility complex. One class of these cells has the CD8 glycoprotein on its surface and secretes perforin and granzymes. For 10 points, name these lymphocytes which come in "helper" and "cytotoxic" forms and mature in the thymus.

ANSWER: T cells [or T lymphocytes; or cytotoxic T cells/lymphocytes; or helper T cells/lymphocytes; prompt on lymphocytes before it is read; prompt on leukocytes or white blood cells before "lymphocytes" is read]

10. This author wrote a play in which Sir Howard Hallam and his sister-in-law Lady Cicely Waynflete visit Morocco. He asked whether Jesus was a coward or a martyr in a long essay called "On the Prospects of Christianity" which reflects on the Gospels. He wrote a play in which women are frequently compared to boa constrictors who force men to marry them; in that play, Jack Tanner is portrayed by the same actor who portrays Don Juan in third act, "Don Juan in Hell." This author of *Captain Brassbound's Conversion* often published his plays with prefaces longer than the plays themselves. One of his plays, set during the Serbo-Bulgarian War, is about the love of Raina Petkoff and Sergius Saranoff. For 10 points, name this playwright of *Man and Superman* and *Arms and the Man*.

ANSWER: George Bernard Shaw

11. This artist used beeswax to depict the phases of the moon in one portable sculpture, and gathered ground-up recycled safety glass into mounds for *Groundswell* at the Wexner Center for the Arts. This designer of the reading garden at the Cleveland Public Library created a black stone fountain inspired by a Martin Luther King quote in Montgomery, Alabama and an eleven-acre field of undulating grass hills at the University of Michigan. This creator of *Wave Field* and the Civil Rights Memorial designed another work that was supplemented by Frederick Hart's *Three Soldiers* sculpture and consists of black granite walls inscribed with over 58,000 names. For 10 points, identify this designer of the Vietnam Veterans Memorial.

ANSWER: Maya Lin

12. A pamphlet about these men written by Art Shields was titled *Are They Doomed?* William Proctor and James Burns were both brought in as ballistics experts in a court case against these men. Robert Grant, Samuel Stratton,

and Abbott Lawrence Lowell formed a committee that agreed with Alvan Fuller's decision about these men. Webster Thayer ruled against these men, who were defended by Fred Moore, William Thompson, and Felix Frankfurter. Celestino Medeiros claimed that he and members of the Morelli gang, not these men, committed the murder of Alessandro Berardelli and Frederick Parmenter at a shoe factory in South Braintree, Massachusetts. For 10 points, name these two men who were executed in 1927 after a trial influenced by both men being Italian anarchists.

ANSWER: Nicola Sacco and Bartolomeo Vanzetti [accept in either order]

13. This work praises Ruggiero Boscovich's refutation of materialistic atomism, but claims we must also reject "atomism of the soul." Its seventh section mentions Japanese drama as an example of the "spiritualization of cruelty" underlying high culture, and it says early on that the "most dangerous error hitherto" includes Plato's dogmatic invention of pure spirit. This book notes the need for an aristocracy in its ninth section, "What is Noble?" and lauds "free spirits" who abandon the prejudices of philosophers and the "will to truth." This book warns that "if you gaze long into the abyss, the abyss gazes also into you," and it opens by asking "Suppose Truth is a woman – what then?" For 10 points, name this aphoristic critique of two basic moral categories, by Friedrich Nietzsche.

ANSWER: Beyond Good and Evil: *Prelude to a Philosophy of the Future* [or Jenseits von Gut und Böse: *Vorspiel einer Philosophie der Zukunft*]

14. This author wrote a novel in which the actress Charlie helps Martin Kurtz track down a Palestinian terrorist named Khalil. In another novel by this author, Liz is brought to testify at a tribunal on the pretext that she is being invited to a special meeting of the Communist Party. In that novel, Alec Leamas unwittingly helps take down Fiedler, thinking he is actually helping to take down Mundt, and allows himself to be shot instead of jumping over the Berlin Wall. Peter Guillam appears in that novel, as well as this in author's so-called *Karla Trilogy*. Another of this author's recurring characters, who works for an organization called "the Circus," is George Smiley. For 10 points, name this author of espionage novels like *Tinker, Tailor, Soldier, Spy* and *The Spy Who Came in from the Cold*.

ANSWER: John le Carré [or David John Moore Cornwell]

15. This region was home to the author of the 48-book *Dionysiaca*, the last epic written in Ancient Greek. A mythical king of this place sacrificed foreign travelers to avert famine until Heracles broke from chains and killed him. In this home of Nonnus and the mythical Busiris, the gods turned into animals while fleeing from Typhon. Hypermnestra refused to kill a suitor from this place, which was once ruled by Epaphus, the son of Io. This place, named for a king who had forty-nine of his fifty sons murdered by the Danaids, included temples to the syncretic god Serapis. On his return from Troy, Menelaus wrestled the shape-shifting Proteus in this region before sailing north again. For 10 points, name this region containing Pharos, where ethnic Greeks syncretized Typhon with Set and learned about Isis.

ANSWER: Egypt [or Aegyptus; prompt on answers such as "Pharos" or the "Nile Delta"; do not prompt on "Africa" or "Libya" or "Ethiopia" at any point]

16. Recent research at the BABAR experiment at SLAC has shown that the decay ratio of the B meson to a D meson, neutrino, and this particle is larger than expected from the Standard Model. The discovery of this particle temporarily upset the symmetry of the Glashow-Iliopoulos-Maiani mechanism, according to which the existence of this particle implied the existence of the bottom and top quarks. This particle is the most massive non-hadronic product of the decay of the Z0 boson, and it is the only particle of its type that can itself decay into hadronic products. Like leptons in the first two generations, this third-generation lepton, discovered by Martin Perl, has a negative charge, and a mass of 1.7 GeV. For 10 points, identify this particle, the last heavy lepton to be discovered after the electron and the muon

ANSWER: tau lepton [or tauon]

17. This artist married his student Susan Macdowell, whom he painted sitting next to his setter dog Duke. He depicted his father watching Bertrand Gardel and George Holmes participate in the title activity in *The Chess Players*. In another of his paintings, a victorious wrestler holds his hand to the crowd as he exits the ring. He painted the title pair wearing blue bandanas in one of his many paintings of the Biglin brothers. This painter of *Salutat* painted a nude woman holding a slab of wood while modeling for William Rush. Many of his paintings depict rowers on the Schuylkill River. He painted himself in a crowded medical gallery watching a femur operation

performed by a famous Philadelphia surgeon. For 10 points, name this artist of *Max Schmitt in a Single Scull* and *The Gross Clinic*.

ANSWER: Thomas Eakins

18. A continuum model for this process created by Andreas Klamt is called COSMO, or the conductor-like screening model. An equation modelling this phenomenon sets its energy proportional to one over the permittivity minus one, divided by ionic radius. That's the Born equation. This process leads to a decrease in entropy, increasing the free energy for cavity formation, in the hydrophobic effect. Intimate ion pairs can form during this process. Calculation of the enthalpy change from this process usually includes two endothermic steps and an exothermic step. Substances with large dielectric constants create a "shell" around ions in this process. For 10 points, name this process by which solute dissociates when placed in a solvent.

ANSWER: solvation [or solution; or dissolving; or dissolution; or other word forms; prompt on hydration]

19. While visiting his fiancée's apartment, the protagonist of this novel feels his tongue turn into a "fat thumb," and compares that fiancée to the Buddha. While carousing with an old man, two characters in this novel pretend to be Krafft-Ebbing and Havelock Ellis. The protagonist of this novel dreams about trying and failing to sacrifice a lamb to God with two of his college friends, and killing it with a stone after it escapes. In the title character's bedroom, an ivory Christ has been pried off its crucifix and nailed to the wall. Its protagonist goes to an old farmhouse in Connecticut with his fiancée Betty and sleeps with Fay Doyle, whose crippled husband Peter shoots him. For 10 points, name this novel in which the editor Shrike torments the title advice columnist, a work by Nathanael West.

ANSWER: Miss Lonelyhearts

20. This ruler's reign is the last covered in a history written by a soldier who served under him named Velleius Paterculus. After growing out his hair, the slave Clemens impersonated his former master before being executed by this ruler. This man was forced to divorce his wife Vipsania Agrippina. This man's reign may have started with the execution of his rival Agrippa Postumus, and his second wife's exile may have been orchestrated by his mother, Livia Drusilla. The senate received this ruler's secret commissioning of Macro to lead the Praetorian Guard, which led to the execution of Sejanus. This ruler spent his last decade on the island of Capri before his death led to the rule of Caligula. For 10 points, name this second Roman emperor, the successor of Augustus.

ANSWER: Tiberius Julius Caesar Augustus [or Tiberius Claudius Nero]

TB 1. The twenty-ninth article of the third section of this treaty abolished both the royal placet and exequatur. A 1985 modification to this treaty led to one of its signatory countries starting a tax system called the "eight per thousand." This treaty resulted in one side receiving financial compensation for loss of territory that it had rejected nearly 60 years earlier in the Law of Guarantees. This agreement comprised a three-article Financial Convention, a treaty of conciliation that made one side a neutral territory, and a concordat. This treaty, which was signed by Pietro Gasparri, resolved the "Roman Question." For 10 points, name this 1929 treaty also signed by Benito Mussolini in which Italy recognized the creation of a sovereign state called Vatican City.

ANSWER: Lateran Treaty [or Lateran Accords; or Lateran Pact]

TB 2. The Macuira National Park lies to the northwest of this body near the Bahia Cocinetas, which lies directly on an international border. Both sit on the Guajira Peninsula, off of which are the Los Monjes Archipelago. Across from that peninsula lies the Paraguana Peninsula, which is connected to the mainland by the isthmus of Medanos. The Paraguana Peninsula lies just south of the island of Aruba and west of Curacao. To the south of this gulf is a 5 mile sandbar containing the islands of Toas and Zapara. This gulf is connected to a larger body of water by the Tabrazo Strait, near which is the General Rafael Urdaneta Bridge. For 10 points, name this gulf that sits just north of Lake Maracaibo in its namesake country.

ANSWER: Gulf of Venezuela

Bonuses:

1. In honor of the recently deceased Italian translator William Weaver, name some authors he translated, for 10 points each.

[10] Weaver translated *Baudolino*, *Foucault's Pendulum*, *The Name of the Rose*, and many other works by this author.

ANSWER: Umberto **Eco**

[10] Weaver translated *The Monkey's Wrench*, this author's novel about the rigger Liberto Faussone. He also translated this author's novel about Mendel Dajcher's participation in the resistance movement, *If Not Now, When?*

ANSWER: Primo Michele **Levi**

[10] Weaver translated *A Man*, a novel based on this journalist's relationship with Alexandros Panagoulis. She is better known for her interviews, many of which are collected in *Interviews with History*, and for her criticism of Islam.

ANSWER: Oriana **Fallaci**

2. *Physalia physalis*, or the Portuguese man o' war, is a colony of organisms taking this form. For 10 points each:

[10] Name this sessile body form which is cylindrical in shape and requires the organism to be attached to a substrate. Organisms in the class *Anthozoa* usually take this body form and reproduce asexually.

ANSWER: **polyp**

[10] Organisms in this phylum take on polyp and medusa body types. This animal phylum consists of jellyfish, sea anemones, and corals.

ANSWER: **Cnidaria**

[10] Cnidarians are very similar to ctenophores, except ctenophores aren't sessile; instead they use these cilia-covered strips running along their bodies in order to swim. There are usually eight of them.

ANSWER: **comb rows** [prompt on partial answer]

3. This alliance started with an ahdname in 1536, and a full trade capitulation was granted from one side to the other in 1569. For 10 points each:

[10] Name this alliance between a Christian country and Muslim empire, both of which worked together to capture Nice in 1543 because of their mutual dislike of the Hapsburgs.

ANSWER: **French-Ottoman** alliance [accept in any order and other equivalent answers such as **Franco-Turkish** alliance or alliance between **France** and the **Ottoman** empire]

[10] An impetus behind the alliance was the power gained by this Habsburg ruler, who took the Spanish throne in 1516 and became Holy Roman Emperor three years later.

ANSWER: **Charles V** of the Holy Roman Empire [or **Charles I of Spain**; prompt on "Charles"]

[10] In 1553, French and Ottoman forces collaborated to capture this island. Much later, France paid Genoa in the 1768 Treaty of Versailles to buy this island, which had an independence movement led by Pascal Paoli.

ANSWER: **Corsica** [or **Corse**]

4. This man's henchmen include the mercenary Zartan, the demolitions expert Firefly, and his bodyguard Storm Shadow. For 10 points each:

[10] Name this character who was played by Joseph Gordon-Levitt in a 2009 movie.

ANSWER: **Cobra Commander**

[10] Cobra Commander is the main antagonist of this elite military unit introduced in a line of Hasbro action figures and a TV show subtitled "Real American Hero."

ANSWER: **G.I. Joes**

[10] The Marvel comics reveal that Cobra Commander got his start with this job. Others to work this job include Danny Devito in *Matilda* and William H. Macy in *Fargo*.

ANSWER: used **car salesman**

5. This war started after American troops were sent into the Nueces Strip. For 10 points each:

[10] Name this war that ended in an American victory with the signing of the Treaty of Guadalupe Hidalgo in 1848.

ANSWER: **Mexican-American War**

[10] During the battle of Cerro Gordo, Company G of the 4th Illinois Volunteer Infantry captured this item, along with a partially-eaten chicken and \$18,000 in gold, after surprising the general who owned it and forcing him to flee.

ANSWER: wooden **leg of Santa Anna** [accept equivalent answers such as Antonio Lopez de **Santa Anna's** fake left **leg**; prompt on partial answers]

[10] James Polk sent this man to Mexico in 1845, where he unsuccessfully tried to buy territory without fighting a war. This man was later one of two men captured while representing the Confederacy aboard the HMS *Trent*.

ANSWER: John **Slidell**

6. This woman is depicted sitting on a stool in the nude in the painting *Lovers*. For 10 points each:

[10] Name this woman, who was also the subject of the painting *On Her Knees*.

ANSWER: **Helga Testorf** [accept either name]

[10] Helga Testorf was the neighbor of this artist, who painted a polio-stricken girl in a field in Maine in *Christina's World*.

ANSWER: Andrew Newell **Wyeth**

[10] This father of Andrew Wyeth was an illustrator whose work for *Scribner's* includes illustrations for *Treasure Island*.

ANSWER: **N. C.** Wyeth [or **Newell** Convers Wyeth]

7. In Chinese mythology, four “kings” of these creatures live in the oceans and control the seas. For 10 points each:

[10] Name these giant, flying beasts, the most fictional animal on the Chinese zodiac.

ANSWER: **dragons** [or **long**]

[10] In what's surely a total coincidence, this Japanese *kami* of the sea is also a dragon who controls the tides with magical jewels in his coral palace. He was the father of Otohime.

ANSWER: **Ryujin** [or O-**Watatsumi** kami]

[10] This massive, peacock-like bird, the mythical animal representing the south in Chinese lore, often symbolizes the empress when paired with a dragon representing the emperor.

ANSWER: **fenghuang** [prompt on “phoenix” or “Chinese phoenix”; prompt on “August Rooster”]

8. Answer some questions about the microcanonical ensemble, for 10 points each.

[10] In the microcanonical ensemble, the occupation probability of microstates follows this distribution on the energies for which it is supported.

ANSWER: **uniform** distribution

[10] An alternate derivation of the microcanonical ensemble defines it as the ensemble for which this property is maximal, given the information known about its components. Temperature is defined as the derivative of internal energy with respect to it.

ANSWER: **entropy** [or **information entropy**]

[10] In the microcanonical ensemble, the thermodynamic entropy is defined as Boltzmann's constant times this function of the number of microstates.

ANSWER: natural **logarithm** [or **ln**; or **log** base anything]

9. This character receives a pink bonnet, which she reminisces over while lamenting her lover's abandonment in the aria “Donde Lieta Usci.” For 10 points each:

[10] Name this subject of the aria “Che Gelida Manina,” which is sung by her lover Rodolfo upon noticing her cold hands. This seamstress dies of consumption at the end of the opera in which she appears.

ANSWER: **Mimi**

[10] Rodolfo and Mimi are characters in this opera about the artistic poor by Giacomo Puccini.

ANSWER: *La* **Boheme**

[10] Musetta performs “Quando M'en Vo” while at Cafe Momus with this man, her sugar daddy. The characters eventually run out of the cafe, leaving this man to pay their bill.

ANSWER: **Alcindoro**

10. One chapter in this novel details how the inhabitants of the title location send criminals to medical facilities for treatment while the sick are put in jail. For 10 points each:

[10] Name this satire in which Higgs is taken in by Senoj Nosnibor.

ANSWER: **Erewhon**; or, *Over the Range*

[10] *Erewhon* is by this author of *The Way of All Flesh*, who thought that the *Odyssey* was written by a woman.

ANSWER: Samuel **Butler**

[10] Despite Senoj Nosnibor's desire for Higgs to marry his elder daughter Zulora, he instead falls for this younger daughter and runs away with her.

ANSWER: Arowhena Nosnibor

11. Harvey Mansfield believed that this man's focus on individual *virtù* was a key development in the history of "manliness." For 10 points each:

[10] Name this Florentine Renaissance thinker who split all regimes into republics and principalities, covering the former in *Discourses on Livy* and the latter in *The Prince*.

ANSWER: Niccolo Machiavelli

[10] Machiavelli's *The Prince* likens this aspect of life to a river which the prince must dam, or a woman he must beat. Lady Philosophy allegorizes this other thing as a woman in Boethius's *The Consolation of Philosophy*.

ANSWER: Fortune [or Fortuna; do not accept synonyms]

[10] This Chicago professor's *Thoughts on Machiavelli* focused on anticlericalism. This political theorist got a cult following in the 50s as he studied al-Farabi and Spinoza and supported "esoteric writing" as the philosopher's defense against persecution.

ANSWER: Leo Strauss

12. Though these tables were historically compiled by hand, modern astronomers use software like NASA's HORIZONS service instead. For 10 points each:

[10] Name these tables that give the locations of celestial bodies at various points in time to high accuracy and precision.

ANSWER: ephemerides [or ephemeris; accept things like ephemeris charts or ephemeris tables]

[10] This astronomical coordinate, measured as an hour angle, is analogous to longitude on earth. This coordinate plus declination constitute the equatorial coordinate system in which ephemerides are typically reported.

ANSWER: right ascension [or RA; prompt on "ascension"]

[10] In ephemerides, times are typically given in terms of time since an epoch like J2000.0 ("J two thousand point oh"), in units of years named for this pre-Gregorian calendar, in which the average year length was 365.25 days.

ANSWER: Julian calendar [accept Julian year]

13. Members from this group were selected to serve as the sultan's personal bodyguards. For 10 points each:

[10] Name these Ottoman soldiers often created by taking Christian children, converting them to Islam, and training them. This group was abolished in 1826 by Mahmud II in the Auspicious Incident.

ANSWER: Janissaries [or Janissary Corps; or Yeniceri]

[10] The Janissaries were created by this Ottoman sultan. Despite the presence of Janissaries, this ruler was killed during the Ottoman victory at the Battle of Kosovo, which led to the succession of his son Bayezid the Thunderbolt.

ANSWER: Murad I [prompt on "Murad"]

[10] This practice of "collecting" Christian children was how the ranks were filled early on, although it became much less important by the end of the seventeenth century.

ANSWER: devsirme [or devshirme]

14. Hugo Munsterberg used this phenomenon as part of his theory of cinema, along with persistence of vision. For 10 points each:

[10] Name this type of optical illusion in which pulsing images create a sensation of movement. It was first defined by Max Wertheimer.

ANSWER: phi phenomenon

[10] Max Wertheimer was one of the founders of this school of psychology that emphasized that the whole is greater than the sum of its parts.

ANSWER: Gestalt

[10] This other tenet of Gestalt states that items in close proximity tend to be perceived together.

ANSWER: past experience principle [or the law of past experience]

15. Answer the following about Japanese theater, for 10 points each.

[10] Kabuki plays were originally performed by female casts, but beginning in 1629, all-male casts were used. This is the term for male actors who play female roles in kabuki.

ANSWER: onnagata [or oyama]

[10] In this other genre of Japanese theater, pioneered by Kan'ami and his son Zeami, the actors often wear masks. Plays in this genre are separated by farcical interludes called *kyogen*.

ANSWER: **Noh** [or **Nogaku**]

[10] This pioneer of bunraku theater is known for his “love-suicide” plays and the historical drama *The Battles of Coxinga*.

ANSWER: **Chikamatsu** Monzaemon [or **Sugimori** Nobumori]

16. In Pure Land Buddhism, one form of this practice involves repeating the name of Amitabha Buddha thousands of times per day. For 10 points each:

[10] Give the general term for mental exercises which help the performer towards nirvana. It's often accompanied by breath control, mindfulness, focus, or the recitation of a mantra.

ANSWER: **meditation** [or **meditating**; accept verb forms]

[10] In Japanese Zen Buddhism, this pre-nirvana state of sudden enlightenment is the goal of *zazen* meditation. It is sometimes distinguished from *kensho* by its longer duration.

ANSWER: **satori**

[10] This form of Theravada meditation, sometimes called “insight meditation” or “analytic meditation,” has a name meaning “seeing clearly.” In contrast to *samatha*, which focuses on an outside object, it involves observing one's own mind in the present moment.

ANSWER: **Vipassana**-bhavana meditation

17. The first-movement prelude to this piece, marked *Vif*, is dedicated to Jacques Charlot. For 10 points each:

[10] Name this six-movement piano suite dedicated to the memory of various military personnel who died in World War I.

ANSWER: *Le Tombeau de Couperin* [or *The Tomb of Couperin*]

[10] *Le Tombeau de Couperin* is by this composer of *Pavane for a Dead Princess* and *Boléro*.

ANSWER: Joseph-Maurice **Ravel**

[10] *Le Tombeau de Couperin* is named after François Couperin, a Baroque composer who also wrote a treatise on how to play this instrument.

ANSWER: **harpsichord** [accept *clavecin*]

18. One of these men who was assassinated was likely Grigory Otrepyev, and another one of these men established his base in Tushino. For 10 points each:

[10] Name these men, the last of whom was possibly named Sidorka and the first of whom came to power in 1605.

ANSWER: **False Dmitry**s

[10] The first False Dmitry was removed from power in favor of this man, who was opposed by the second Dmitry. This ruler's attempt to get Swedish support led to a Polish invasion by Sigismund III and the deposition of this man.

ANSWER: **Vasily Shuysky** [or **Vasily IV**; prompt on “Vasily”]

[10] The False Dmitrys and Vasily Shuysky were players in this period of political turmoil in Russia. This period fell between the end of the Rurik Dynasty and the start of the Romanov Dynasty.

ANSWER: **Time of Troubles** [or **Smutnoye Vremya**]

19. This organization produces a namesake “portfolio” that includes articles like “The Masked Marriage” and “The History of a Squash.” For 10 points each:

[10] Name this club formed by the March sisters in *Little Women* that meets when it is too rainy to do their gardening.

ANSWER: the **Pickwick** Club [or **P.C.**]

[10] In their May 20 meeting, the Pickwick Club admits Laurie to their ranks. Laurie later marries this March sister, who he hooks up with in Europe after Jo rejects him.

ANSWER: **Amy** March

[10] In the opening chapters of *Little Women*, the sisters put on a play about Don Pedro and Zara named after the curse of one of these people. In *Macbeth*, the Weird Sisters are a trio of these people.

ANSWER: **witches**

20. Answer some questions about the chemistry of benzene, for 10 points each:

[10] Each carbon atom in benzene has this hybridization. This hybridization corresponds to a trigonal planar

molecular geometry and leaves one unhybridized p orbital for pi bonding.

ANSWER: sp² [s-p-2]

[10] A synthetic route to many benzene derivatives is the formation of a diazonium salt from a derivative of this compound, the simplest aromatic amine. This compound can be synthesized by reducing nitrobenzene.

ANSWER: aniline [or phenylamine; or aminobenzene]

[10] Diazonium salts can be generated by treating anilines with this acid. This weak acid is usually prepared by adding its sodium salt to hydrochloric acid, which forms a blue color *in situ*.

ANSWER: nitrous acid [or HNO₂; or HONO; do not accept or prompt on "nitric acid"]