

Tossups

1. The speaker of a poem by this author says that he has seen “fish-traps / Where a whole Leviathan rots in the rushes!”. The speaker of that poem by him asks: “–Is it in these bottomless nights that you sleep and exile yourself, / Million golden birds, o future Vigor?”. The line “Once, if my memory serves me well, my life was a banquet where every heart revealed itself” opens a (*) prose poem by him, which includes two “deliriums” titled “Foolish Virgin” and “Alchemy of the Word”. The opening of his most famous poem describes “yelping redskins” taking the haulers of the title conveyance. This poet was shot by his lover Paul Verlaine. For 10 points, name this French Symbolist poet who wrote *A Season in Hell* and “The Drunken Boat”.

ANSWER: Arthur Rimbaud (RAHM-boe) [or Jean Nicholas Arthur Rimbaud]

2. This philosopher proposed distinguishing the existential and logical components of a statement as the second, or “semi-formal”, step of his four-step process of deduction. A work by him argues for strategies of social improvement that seek to combat urgent evils rather than trying to create a Utopian good; he called this “piecemeal engineering”. This philosopher claimed that Platonic ideas were sympathetic with (*) totalitarianism in a book that attacks Marx and Hegel in its second volume, “The High Tide of Prophecy”. Like Imre Lakatos, this philosopher distinguished science from non-science with the criterion of falsifiability. For 10 points, name this author of *The Open Society and its Enemies* and *The Logic of Scientific Discovery*.

ANSWER: Karl Popper [or Karl Raimund Popper]

3. The second movement of this composer’s only string quartet opens in 6/8 time, with the first violin and cello playing a *pizzicato* G major chord four times. This composer wrote two dances for strings and a cross-strung harp, one dance “sacred” and the other “profane.” This composer’s three-movement set of *Nocturnes* was inspired by James Whistler paintings. A tone poem by this composer begins with a solo (*) flute that descends from C-sharp to G. The movement “From dawn to noon on the sea” opens a three-movement work by him that depicts the ocean. His twenty-four *Préludes* include “The Girl with the Flaxen Hair”. For 10 points, name this French composer of *Prelude to the Afternoon of a Faun*, whose *Suite Bergamasque* includes “Clair de lune”.

ANSWER: Claude Debussy [or Achille-Claude Debussy]

4. The Hagen-Rubens relation connects this phenomenon in the infrared region to conductivity in metals. For sound intensity, the directivity factor is a correction that accounts for surfaces exhibiting this phenomenon. Two adjacent surfaces separated by a small gap that allow tunneling of evanescent waves can exhibit a form of this phenomenon in a “frustrated” (*) variant. This phenomenon does not occur for one polarization state at Brewster’s angle. The inverse-sine of the ratio of two refractive indices gives the critical angle for the “total internal” type of this phenomenon. For 10 points, name this phenomenon in which a ray of light bounces off a surface at an angle equal to the angle of incidence.

ANSWER: reflection [or emissivity until “correction” is read; or total internal reflection or TIR after “tunneling” is read]

5. David Joris was present at a meeting of members of this group in Bocholt that attempted to reconcile differences between factions led by Jan van Batenburg and Obbe Philips. A meeting of this group at Schleithem under Michael Sattler claimed a certain action was “the highest and chief abomination of the pope”; opposition to that action contributed to their persecution, which was a chief focus of the book *Martyrs Mirror*. Branches of this movement were started in (*) Moravia by Jakob Hutter and in the Low Countries by Menno Simons, the founder of the Mennonites. For 10 points, name this religious movement of radical reformers, who were named for their belief that only adults should receive a sacrament normally performed on infants.

ANSWER: Anabaptists [or Anabaptism]

6. One story by this author opens with a man testifying in court about a neighbor who refused to mend his pigpen, allowing a hog to keep escaping. In that story by him, a character is charged ten bushels of corn for purposely ruining a manure-stained rug after being ordered to clean it. In another story by him, a druggist writes a label saying “for rats” after a customer refuses to explain her plans for (*) arsenic. Major de Spain stops an arson attempt by Abner Snopes at the end of a story by him. Another of his stories ends with single strand of grey hair in the nostrils of the corpse of Homer Barron, indicating the title woman had been sleeping with the dead body. For 10 points, name this Southern author of “Barn Burning” and “A Rose for Emily”.

ANSWER: William Faulkner [or William Cuthbert Faulkner]

7. Low-molecular-weight compounds with amino and carboxyl groups called carrier ampholytes are used in the capillary zone type of this process. Urea and formamide are mixed in as denaturants in a variant of the temperature gradient type of this process. IPG strips can be used for isoelectric focusing in its 2-D type. A “smile” appears in this technique when excess voltage is used. A piece of equipment used for it has a (*) comb pattern to help separate loading wells, and sodium dodecyl sulfate coats targets in SDS-PAGE, a variant of it. An intercalator used in this process is ethidium bromide, which visualizes DNA bands under UV light. A ladder of markers with set kilodalton values appears on one side of its result. For 10 points, name this technique that separates proteins by molecular weight or charge.

ANSWER: gel electrophoresis [prompt on partial answers]

8. The strangest artist in this movement developed a weird “inhalation” theory of art and created an austere landscape with three unicorns at the bottom. Inspired by Manet’s *Bar at the Folies-Bergère*, an artist from this movement painted his wife in a mirror behind the proprietor of a café in *Chez Mouquin*. The Macbeth Galleries housed the biggest exhibition of artists in this movement, many of whom had met while studying under Thomas Anshutz. (*) Arthur Davies later joined this movement, whose original members included John Sloan and William Glackens. Its ringleader painted a carriage on a snowy street, though equally famous today is an artist from this movement known for his boxing scenes. For 10 points, name this gritty realist American art movement led by Robert Henri and George Bellows.

ANSWER: Ashcan school [or The Eight]

9. A radical government in this country collapsed in a bribery scandal over Daniel Strauss’s fixed roulette game, “straperlo.” In this country, the JAP was the youth wing of the CEDA, a right-wing party that secretly controlled the left-wing Lerroux government. This country’s left wing endured the “black two years” and went to war with itself during the May Days. Its PSOE and (*) POUM parties joined a left-wing Popular Front that won its 1936 elections. Shortly after that election, the socialist Manuel Azaña government faced a July coup led by Emilio Mola, which led into a three-year war during which the Condor Legion bombed Guernica. For 10 points, name this European nation taken over by fascists after a 1936-1939 civil war.

ANSWER: Kingdom of Spain

10. Jensen’s alpha can be expressed as the excess return of a fund minus this value times the excess market return. In arbitrage pricing theory, this value is factor specific and thus requires multiple representations. In the capital assets pricing model, this value has only one representation and is graphed on the x-axis on the security market line. For risk-free securities, such as treasury bonds, this value is equal to 0, and for a market (*) portfolio, it is equal to one. For an individual asset, this value is equal to the covariance of the rate of return on the asset and the benchmark rate, divided by the variance of the benchmark rate. For 10 points, identify this value that measures a portfolio’s risk due to movements in the market.

ANSWER: beta [or financial elasticity; or correlated relative volatility]

11. **The Series Seed documents were created mainly to help people working in this place, where a “full stack” type of business has been promoted by Andreessen Horowitz. In August 2014, a federal judge dismissed a \$324 million lawsuit alleging that employers from this place colluded to not poach each other’s staff. James Risen and Nick Weinfeld used Max Kelly’s change in employment as an example of the revolving door between this place and the (*) NSA. Developments at PARC are credited with sparking a business boom in this place, which has spawned companies led by Peter Thiel, Larry Ellison, and Mark Zuckerberg. For 10 points, give this nickname for a South Bay area home to numerous technology corporations.**
ANSWER: Silicon Valley [prompt on less specific answers, such as “California” or “the Santa Clara Valley”]
12. **When Jesus heals ten lepers in the Gospel of Luke, one of these people is the only one to return and praise God. In the Gospel of John, another of these people says she has no husband, then receives the reply that she has had five husbands and is currently living in sin. Known as “Kuthim,” these people built a temple on the site where they believe Abraham tried to sacrifice Isaac, Mount (*) Gerizim. In John, Jesus encounters the “woman at the well,” who belongs to this group. A parable about one of these people is set on the road from Jerusalem to Jericho, where a priest and a Levite ignore an injured man whom one of these people assists. For 10 points, name this Semitic religious group depicted in a famous parable about being a good neighbor.**
ANSWER: Samaritans [or Good Samaritans; or Kuthim until it is read]
13. **An ancient family from this ethnic group known as the Ashina led a successful revolt against the Rouran. The oldest record of their language is preserved in the Orkhon inscriptions. A series of massacres by members of this ethnic group drove the Alevi community underground. The caliph al-Musta’sim introduced warriors of this (*) ethnicity into the Abbasid army. Because it encompassed former Roman territory, an offshoot of one of their empires was called the Sultanate of Rum. The longest-lasting empire of this ethnicity was founded by Osman and used abducted Christian boys known as janissaries to capture Constantinople in 1453. For 10 points, name this ethnicity of the Seljuk and Ottoman sultans.**
ANSWER: Turks [or Turkic people; or Oghuz Turks; or Gokturks; or Seljuk Turks until “Seljuk” is read; or Ottoman Turks until “Ottoman” is read]
14. **The modular group is isomorphic to a projective special linear group over this ring. In algebraic geometry, every scheme has a unique morphism to the spectrum of this ring. Since the unit circle’s covering space is the real numbers, its fundamental group is isomorphic to this ring, considered as a group. Every abelian group is a module over this ring. In the category of rings, this ring is the initial object. The maximal ideals of this ring are the principal ideals generated by the prime (*) numbers. This countably infinite ring embeds into \mathbb{Q} , and its only units are 1 and -1. Solutions of Diophantine equations take values from this ring, and the non-negative elements of this ring are known as the natural numbers. For 10 points, identify this ring symbolized \mathbb{Z} .**
ANSWER: the integer ring [or \mathbb{Z} until it is read]
15. **In this work, a character attempts to seduce another by claiming that she would have so many pearls she could afford to dissolve and drink them. When one character in this play makes up a story about spy baboons that live near China, another character claims that those are who the Mamelukes are. In Act Four of this play, multiple characters bear false witness against a woman at her (*) rape trial. The protagonist of this work disguises himself as a mountebank named Scoto. Sir Politic Would-Be appears in this work, in which the animal-inspired characters Voltore, Corbaccio, and Corvino scheme to be named the heir of the title character, whose servant is Mosca. For 10 points, name this comedy by about a Venetian nobleman who pretends to be dying, by Ben Jonson.**
ANSWER: Volpone

16. A cluster compound with this property and named for Chevrel is an excellent type II superconductor. Alfred Werner won the Nobel in Chemistry for studying these compounds. Compounds with this characteristic can isomerize via the Ray-Dutt or Bailar twists and can exist as facial and meridional isomers. Because of their large splitting energy, they have the possibility of existing in either high-spin or low-spin states. The orbitals of molecules with this characteristic can be divided into (*) t-sub-2-g and e-sub-g sets. The Jahn–Teller (YAHN–Teller) distortion is most commonly encountered in complexes with this geometry. Characterized by sp³d² hybridization, it is exhibited by sulfur hexafluoride. For 10 points, name this molecular geometry in which six ligands are arranged symmetrically around a central atom.
ANSWER: octahedral molecules [or octahedral geometry; prompt on “coordination compounds” until “high-spin or low-spin” is read]
17. This author wrote a work in which a panhandler is appointed Secretary of State and a baboon is appointed to the Supreme Court. That piece, “Roosevelt After Inauguration”, is in a collection with “I Am Dying, Meester?”, which is an early demonstration of a technique this author developed with Brion Gysin. The Mugwumps and Reptiles fight in a work by this author of the (*) *Yage Letters*. This author, who rearranged texts in his cut-up technique, wrote a novel whose protagonist works for Islam Incorporated during his visit to a land ruled by Dr. Benway. Later in that novel, the Interzone, which is loosely inspired by Tangiers, is visited by that protagonist, William Lee. For 10 points, name this author of *Naked Lunch*, a member of the Beat generation.
ANSWER: William S. Burroughs [or William Seward Burroughs II; or William Lee until it is read]
18. A church was designed in this style to accommodate the influx of tourists who came to see the miraculous tears produced by a wooden figurine of the Scourged Savior. An artist who worked in this style depicted a mischievous youth destroying the weapon of a lion-slaying hero in his sculpture *Cupid Cutting His Bow from the Club of Hercules*. A mononymic sculptor in this style mainly worked in terra-cotta and produced many orgiastic sculptures of nymphs and satyrs. Its heyday coincided with peak of the (*) Chinoiserie fad, where artists tried to imitate Chinese interior design and sculpture. Bouchardon and Clodion sculpted in this style, which takes its name from a portmanteau of the words “stone” and “shell” in French. For 10 points, name this ornamented art style used by the painter Watteau.
ANSWER: Rococo [or Late Baroque; do NOT accept “Baroque”]
19. From 1930 to 1990, this state’s governor had the power to veto parts of words or digits in numbers that appeared in a bill. A senator from this state chaired the committee that investigated detective agencies like the Pinkertons for their spying on unions. That man’s father was attacked when he allegedly said he had “no grievance against Germany” in regards to World War I. Reformers promulgated its namesake (*) “idea” that faculty in its university system should work closely with legislators in drafting reforms. “Fighting Bob” was a senator from this state, as was a man who claimed to possess a list of 205 members of the Communist Party in the State Department. For 10 points, name this Midwestern state home to two Robert LaFollettes and Joseph McCarthy.
ANSWER: Wisconsin
20. This man was given the shield of Sir Torre after a woman gave him a token of a red sleeve embroidered with pearls to wear at a jousting tournament. After being wounded by a spear, this man was taken to the home of Baudwin and healed by the Fair Maiden of Astolat. This man rescued a daughter of King Pellès from a boiling water tub she had spent five years in. He discovered his true name in a cemetery after the Copper Knight fled from battle at Dolorous (*) Gard. This man was tricked into sleeping with Elaine of Corbenic. He went on the quest for the Holy Grail with his nephews Sir Bors and Sir Percival. His son successfully sat in the Perilous Seat and drank from the Grail. For 10 points, name this Knight of the Round Table, the father of Galahad and lover of Guinevere.
ANSWER: Sir Lancelot du Lac [or Launcelot of the Lake; prompt on “White Knight” or “Knight of the Cart”]

Bonuses

1. A sultanate in this region had a ruler who built a monumental dome called the Gol Gumbaz, and a large portion of it was unified by the Chalukyas. For 10 points each:
[10] Name this geographic region, which included sultanates at Bijapur and Berar. It's bounded by the Eastern and Western Ghats, and the Vindhya mountains separate this region from the plains of the Ganges.
ANSWER: the **Deccan** Plateau [prompt on "(South) India"]
[10] This kingdom, which was led by people like Hyder Ali and Tipu Sultan, was also based in the Deccan Plateau. It fought several wars against the British in the late 1700s.
ANSWER: Kingdom of **Mysore**
[10] The Qutb Shahi dynasty ruled a sultanate in this large city in the center of the Deccan Plateau. This city was also ruled by the Nizams of the Asaf Jahi dynasty.
ANSWER: **Hyderabad**
2. Some believe that these spirits, exemplified by the *kököle*, live in the Lake of the Dead. For 10 points each:
[10] Name these spirits whose other examples include Koshare clowns and which are commemorated with a ceremonial dance.
ANSWER: **kachinas** [or **katsina**; or **katsinim**]
[10] The *kachina* dance is part of the religion practiced by these peoples. Ruth Benedict studied the mythology of a subgroup of these peoples, the Zuni; their other subgroups include the Hopi.
ANSWER: **Puebloan** peoples
[10] A detachable one of these body parts is possessed by the *kachina* Kokopelli. Another mythological character notable for this body part was cursed by Hera while in Aphrodite's womb.
ANSWER: **penis** [or obvious equivalents]
3. In one of these artworks, the round forehead of Princess Elizabeth of Saxony matches the concentric circles of a clock to her left. For 10 points each:
[10] Name these artworks, one of which features three radios blaring static, another of which involves paint extending to a pillow and quilt, and a third of which consists of a stuffed goat passing through an automobile tire.
ANSWER: **combines**
[10] This Pop artist, who appeared to pass off blank canvases as art in his *White Paintings*, strung together junk he found on the streets to create his combines, which include *Leaves*, *Broadcast*, *Bed*, and *Monogram*.
ANSWER: Robert **Rauschenberg**
[10] Rauschenberg was friends with this other Pop artist, who created comic panels with Ben-Day dots in his paintings *Drowning Girl* and *Whaam!*
ANSWER: Roy **Lichtenstein**
4. The loss of the power to control these events is possibly caused by an inability to find contaminated samples of a certain salt. For 10 points each:
[10] Name these occurrences that a character tries to stop after Sir Danvers Carew is murdered. Hastie Lanyon dies after witnessing the reversal of one of these events.
ANSWER: Doctor Henry **Jekyll's transformations** into Mr. Edward Hyde [or **metamorphosis** into Mr. **Hyde**; or any combination of *either Jekyll or Hyde* and an obvious equivalent of **transformation** or **metamorphosis**, as long as they don't suggest that Hyde is turning back into Jekyll]
[10] *The Strange Case of Dr. Jekyll and Mr. Hyde* is by this Scottish author, who created the character of Long John Silver in his *Treasure Island*.
ANSWER: Robert Louis **Stevenson**
[10] Ben Gunn develops an obsession for this substance while marooned on Treasure Island. G.K. Chesterton wrote an essay on "The Neglect of [this substance] in European Literature", bemoaning how few great works mention it.
ANSWER: **cheese**

5. This operator is equal to minus \hbar^2 over two m times the Laplacian plus the potential energy operator. For 10 points each:
[10] Name this operator that gives the energy eigenvalue of the wave function it is applied to in the time-independent Schrodinger equation.
ANSWER: **Hamiltonian** operator [or **H**]
[10] Since the Hamiltonian and the square of this operator commute, a good complete set of commuting observables for a quantum system is the Hamiltonian, the square of this operator, and its z component.
ANSWER: **angular momentum** operator [or **L**; or **J**]
[10] The minus \hbar^2 times Laplacian term in the Hamiltonian comes from the dot product of the momentum operator with itself, the momentum operator being equal to minus this constant times \hbar times the gradient. The minus sign in the Hamiltonian thus arises because the square of this quantity is minus 1.
ANSWER: **i** [or **imaginary unit**]
6. Enceladus is the primary source of material for Saturn's E example of these things. For 10 points each:
[10] Name these collections of rock, ice, dust, and other debris orbiting planets like Saturn and Jupiter in a flat disk shape.
ANSWER: planetary **rings**
[10] The orbital plane of planetary rings is normally this plane because their associated planets rotate fast enough bulge in this plane. Because the geoid is very close to an oblate spheroid, the Earth also bulges in this plane and is flattened at the poles.
ANSWER: **equatorial** plane [or obvious equivalents]
[10] This largest planetary ring in the Solar System is the only known ring to be tilted from the equatorial plane. This practically invisible Saturnian ring was only discovered in 2009 and may have a retrograde orbit if its source is indeed a namesake Saturnian moon with a retrograde orbit.
ANSWER: **Phoebe** ring
7. This house formed the royal house of Piedmont-Sardinia and then Italy after its member, Victor Emmanuel II, was crowned king. For 10 points each:
[10] Name this house, whose member Eugene served as a general for the Austro-Hungarian Empire.
ANSWER: House of **Savoy** [or Casa **Savoia**]
[10] At this 1697 battle, Eugene of Savoy led a surprise attack on an Ottoman force attempting to cross the Tisza river. The result was a rout in which the Austrians inflicted over 30,000 casualties on the Ottomans.
ANSWER: Battle of **Zenta** [or Battle of **Senta**]
[10] The Ottomans signed this 1699 treaty with the Habsburg empire two years after being routed at Zenta. This treaty signed over large parts of Hungary and Serbia to Austria, and Dalmatia to Venice.
ANSWER: Treaty of **Karlowitz**
8. Answer the following about Wilhelm Wundt, whose pre-Freudian innovations lead some to call him the "father of modern psychology," for 10 points each.
[10] Wundt pioneered the use of this method to study the mind in his lab at Leipzig. In modern terms, this method uses a control group and manipulates an independent variable to see the effects on a dependent variable.
ANSWER: **experimental** method [or controlled **experiments**; or **experimental** study; or obvious equivalents mentioning **experiment**]
[10] Wundt advocated this key method of structuralist psychology, in which a person reflects on their own thoughts to isolate the component parts of their conscious experience.
ANSWER: **introspection**
[10] This British student of Wilhelm Wundt translated Wundt's work into English, warning about the effects of "stimulus error" on introspection and coining the term "empathy" in the process.
ANSWER: Edward B. **Titchener** [or Edward Bradford **Titchener**]

9. An opera by this composer opens with Ferrando narrating how a gypsy was falsely burned at the stake, on accusations of causing the illness of the Count di Luna. For 10 points each:
[10] Name this Italian composer of *Il Trovatore* and an opera about the consumptive Violetta, *La Traviata*.
ANSWER: Giuseppe **Verdi** [or Giuseppe Fortunino Francesco **Verdi**]
[10] The second act of *Il Trovatore* opens with a chorus of gypsies singing this number, in which they praise wine and gypsy women.
ANSWER: **Anvil Chorus** [or *Vedi! Le fosche notturne*; prompt on “*Coro di zingari*”]
[10] This Romanian soprano made her premiere recording as Violetta in *La Traviata* in 1994. Her 2002 recording of *Il Trovatore* was made with her on-again-off-again husband, Spanish tenor Roberto Alagna.
ANSWER: Angela **Gheorghiu** [or Angela **Burlacu**]
10. The title object of this story was created by the one-eyed Petrovich. For 10 points each:
[10] Name this story in which the clerk Akaky Akakievich saves up money for the title object, which is stolen by muggers on his way home from a party.
ANSWER: *The* **Overcoat** [or *The Cloak*; or *Shinel*]
[10] *The Overcoat* is by this Ukrainian writer, who wrote of Chichikhov buying up the rights to deceased serfs in his unfinished novel *Dead Souls*.
ANSWER: Nikolai **Gogol**
[10] In 1996, this renowned husband-and-wife translating team produced a version of Gogol’s *Dead Souls*. Their 2002 version of Tolstoy’s *Anna Karenina* won the PEN Translation Prize.
ANSWER: Richard **Pevear** & Larissa **Volokhonsky**
11. Performing a Zimm analysis of a static light scattering experiment will give you a measure of this property and the second virial coefficient. For 10 points each:
[10] Name this property of an atom or a molecule which is relative to its measure for carbon-12, which means that it is approximately 1 for hydrogen and 12 for carbon.
ANSWER: molecular **mass** [or **weight**; or molar **mass**]
[10] Compounds with different molecular masses can occasionally be separated by this technique, in which a sample passes through a column tightly packed with a matrix of porous polymer beads.
ANSWER: **size-exclusion chromatography** [or **gel-filtration chromatography**; or **gel permeation chromatography**; prompt on “chromatography”]
[10] The mass of a solvent lies in the denominator of this measure of concentration, symbolized b , which is multiplied by the van’t Hoff factor and a constant in the formulas for boiling point elevation and freezing point depression.
ANSWER: **molality** [do NOT accept “molarity”]
12. The conflict in this play stems from an expected visit from a character’s pen-pal, a white woman named Ethel. For 10 points each:
[10] Name this play about the differing skin colors of the half-brothers Morris and Zachariah.
ANSWER: **Blood Knot**
[10] *Blood Knot* is a play by Athol Fugard, an author from this country, which was also home to Nadine Gordimer.
ANSWER: Republic of **South Africa**
[10] Fugard created his plays *The Island* and *Sizwe Bansi is Dead* in collaboration with this Brechtian-style acting company, which he founded.
ANSWER: **Serpent** Players

13. This practice was the topic of the Supreme Court case *Lee v. Weisman*. For 10 points each:
[10] Name this practice that was ruled to be a violation of the Constitution in the case *Engel v. Vitale*, where the court rejected the defendant's arguments that this practice was not coercive.
ANSWER: **school prayer** [or **prayer in public school** settings; prompt on "prayer" or "religious practices in schools"]
[10] Atheist Michael Newdow argued that this commonly recited statement in schools was a prayer because it used the phrase "under God." The Supreme Court has ruled that students do not need to stand up or salute the flag while this statement is being read.
ANSWER: The **Pledge of Allegiance**
[10] In a 2000 case named for this independent school district, the Court ruled that student-led and initiated prayers at high school football games violated the Establishment Clause. Despite this school district's name, it's actually in Texas.
ANSWER: **Santa Fe** [or **Santa Fe Independent School District v. Doe**]
14. This book establishes mind-independent existence as being consistent with God's creation of the world by tying all existence to God's conceptions and decrees. For 10 points each:
[10] Name this book, in which a character argues that all qualities perceived by sense must be ideal, rather than belonging to material objects.
ANSWER: **Three Dialogues between Hylas and Philonous**
[10] This Irish bishop and philosopher presented his "master argument" in both *Three Dialogues between Hylas and Philonous* and *A Treatise Concerning the Principles of Human Knowledge*.
ANSWER: George **Berkeley** [or Bishop **Berkeley**]
[10] David Hume extended Berkeley's phenomenalism into this theory, which contends that an object is really a collection of properties. Hume also used this theory to argue that the self is merely a collection of perceptions.
ANSWER: **bundle** theory
15. This theme originated in a song by The Winstons, which became the most sampled track in music history after "jungle" producers started using it in British club music. For 10 points each:
[10] Name this four-bar drum solo commonly used in the beats for rap songs. It opens N.W.A.'s song "Straight Outta Compton" and appears in the theme to *Futurama*.
ANSWER: the **Amen** break
[10] This N.W.A. member added the Amen break to "Straight Outta Compton" as the album's producer. He became the wealthiest rapper alive when Apple bought Beats Electronics.
ANSWER: Dr. **Dre** [or Andre Romelle **Young**]
[10] Dr. Dre produced the iconic G-Funk beat for "The Next Episode," which appears on this follow-up album to *The Chronic*.
ANSWER: **2001** [or *The Chronic 2001*]
16. This man was an early articulator of the importance of the "option for the poor" in modern Catholic social doctrine. For 10 points each:
[10] Name this Dominican priest, who began a major Third-Way Christian movement for social justice with his book, *A Theology of Liberation*.
ANSWER: Gustavo **Gutiérrez** [or Gustavo **Gutiérrez** Merino]
[10] Gutiérrez is from this country, where Catholicism displaced indigenous religions that worshipped the sun god Inti. The first American woman to be canonized, Saint Rose of Lima, was from what is now this country.
ANSWER: Republic of **Peru**
[10] Saint Rose is also considered one of the co-patron saints of this country. This country is predominantly Muslim in much of its south, which has prompted sectarian conflict with the *moros*.
ANSWER: Republic of the **Philippines**

17. The zoo and garden varieties of this technique compare the similarities in sequence between similar animal and plant species, respectively. For 10 points each:
[10] Name this technique in which a probe hybridizes to DNA that has been transferred to a nitrocellulose membrane. It isn't actually named for a cardinal direction, rather being named for a British biologist.
ANSWER: **Southern blot**
[10] In the first step of a Southern blot, these enzymes, which recognize specific sequences, cut DNA into smaller fragments. EcoR1 and HindIII are oft-used examples.
ANSWER: **restriction** enzymes [or **restriction** endonucleases]
[10] At the end of a Southern blot, the hybridization pattern is visualized using this technique, in which molecules or fragments labeled with short-lived isotopes are taken up and then displayed on X-ray film.
ANSWER: **autoradiography**
18. The speaker of this poem describes himself as having "No more to say, and nothing to weep for but the Beings in the Dream, trapped in its disappearance". For 10 points each:
[10] Name this poem beginning "Strange now to think of you, gone without corsets & eyes, while I walk on the sunny pavement of Greenwich Village". It was dedicated to the poet's mother, Naomi.
ANSWER: "**Kaddish**"
[10] "Kaddish" is by this Beat poet who described seeing the best minds of his generation destroyed in the poem *Howl*.
ANSWER: Allen **Ginsberg** [or Irwin Allen **Ginsberg**]
[10] The first public reading of *Howl* was at this October, 1955 event, during which Ginsberg and writers like Gary Snyder and Michael McClure introduced the larger public to Beat poetry.
ANSWER: **Six Gallery** reading [or **Gallery Six** reading; or **Six Angels** in the same performance]
19. The Greek *ethne* named for this region was frequently contrasted with the Dorians by historians, who sometimes presented the Peloponnesian war as the clash between the two groups. For 10 points each:
[10] Name this region of western Anatolia, which names the Greek *ethne* that settled Attica. Athens assisted this region's cities in a revolt against the Persians.
ANSWER: **Ionian** [or **Ionian Revolt**]
[10] This Ionian Greek city led the Ionian Revolt. It founded the colonies of Sinope, Olbia, and Pantikapaion on the Black Sea.
ANSWER: **Miletus** [or **Miletos**; or **Millawanda**; or **Milet**]
[10] This leader of Miletus attempted to aid exiled citizens of Naxos in their attempt to retake their island from the Persians. When he failed and earned the Persians's ire, he launched the Ionian Revolt.
ANSWER: **Aristagoras**
20. This composer spent the last two decades of his career as choirmaster of the Cappella Giulia. For 10 points each:
[10] Name this Renaissance composer, whose *Pope Marcellus Mass* apocryphally convinced the Council of Trent not to ban polyphony.
ANSWER: Giovanni Pierluigi da **Palestrina**
[10] The *Pope Marcellus Mass* is this type of mass, which borrows multiple voices from a pre-existing, usually secular, musical source. It contrasts with *cantus firmus* or paraphrase masses, in which only one voice is borrowed.
ANSWER: **parody** mass [or **imitation** mass]
[10] The first movement of an ordinary mass is traditionally a setting of this prayer in Greek, which asks for the Lord's mercy. It is usually followed by a *Gloria*.
ANSWER: **Kyrie** *eleison*