

STIMPY 2015: we barely wrote the tournament, so there was no time to write a subtitle

Editors Packet 2

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Tossups

1. **This ruler opposed a group led by John Somers and Charles Montagu, the Whig Junto. A massive wartime budget was approved by this ruler's Lord High Treasurer, Sidney Godolphin, who was succeeded by the October Club patron and Tory Robert Harley. This ruler's dislike of the Whigs led to Abigail Masham replacing Sarah (\*) Churchill as this ruler's favorite. John Vanbrugh built Blenheim Palace for the Duke of Marlborough during this ruler's reign. The North American theater of the War of the Spanish Succession was named for this monarch, who passed the Acts of Union to create the United Kingdom. For 10 points, name this successor of William and Mary and daughter of James II.**

ANSWER: Queen Anne I

2. **One work in this genre opens with an E-flat in octaves, and then has the pianist play rapid ascending chromatic fourths in the right hand. In the middle section of that work in this genre, the left hand repeatedly plays E, D-sharp, C-sharp, B in octaves. The characteristic rhythm of this 3/4 dance is one eighth note, two sixteenth notes, then four eighth notes. One work in this genre was originally paired with an "Andante (\*) spianato." An A-flat major work in this genre has a middle section that supposedly depicts a cavalry charge. They're not Impromptus, but Chopin's last one of these works is a "Fantaisie" one. Chopin's works in this genre have nicknames like "Military" and "Heroic." For 10 points, what dance has a name literally meaning "Polish?"**

ANSWER: polonaises [accept polaccas; accept answers like "grande polonaise brillante"]

3. **Seven objects in this story are compared to "slender angels" that the protagonist hopes will save him. At one point in this story, the protagonist takes a hundred paces around a room before tripping on the torn hem of his robe and knocking himself out. At the end of this story, the protagonist recalls hearing "a loud blast of many trumpets," signaling that General Lasalle had entered the city. The protagonist of this story gets away after managing to rub a piece of meat on the (\*) surcingle around his hand, which was then consumed by a horde of rats. The protagonist of this story had been condemned by the Inquisition and tied to a rack near the title swinging object. For 10 points, name this short story by Edgar Allen Poe, named for the two torture devices that the protagonist eventually escapes.**

ANSWER: "The Pit and the Pendulum"

4. **A religion in this country includes halls for feminism and masculinity in their Temples of Humankind, which were built underground. That religion in this country is named for Horus's city of worship, Damanhur. The tilting of a vile occurs during a major religious festival in this modern-day country, during which the namesake saint's dried blood is believed to turn into liquid. A religious figure from this country is sometimes referred to as "The Father of Church-Song" for his namesake hymns. That man advocated for voluntary virginity and was the (\*) mentor to Saint Augustine. An epistle addressed to a city in this nation contains the quote "the wages of sin is death" and follows Acts of the Apostles as the first epistle in the Bible. For 10 points, name this home of Saint Ambrose, and in whose capital city Peter became the first pope.**

ANSWER: Italy

5. **In this city, the gambler Antonio Rinaldeschi was executed for throwing horse dung at a picture of the Virgin Mary. The Six-Bean Rule was used to decide votes in a governing body of this city, where sodomy was policed by the Office of the Night. A crowd in this city rioted after Domenico da Pescia debated the eucharist for three hours instead of undergoing a trial by fire as promised. In this city, the author of (\*) *Infelix Ego* was**

opposed by the Mad Dogs and supported by the Weepers. This city's ruler Piero the Unfortunate, who belonged to a family that had once faced the Pazzi Conspiracy, fled this city, allowing the rise of a man who attempted to suppress vice with the Bonfire of the Vanities. For 10 points, name this city ruled by the friar Girolamo Savonarola and by the Medici family.

ANSWER: Florence [or Firenze]

6. A function satisfying this equation is multiplied by the wavefunction in a modification of the Schrödinger equation named for Newton. The time-independent Klein–Gordon equation reduces to a version of this equation whose solutions are given by sums of Yukawa potentials. An extension of this equation is used to model solutions in which the charge density follows a Boltzmann distribution, and adds exponential terms to one side. A special case of this equation can be numerically solved by iteratively updating the value of a function on each point of a grid by (\*) averaging over its value at neighboring points in the relaxation method. That special case of this equation is satisfied by harmonic functions and is known as Laplace's equation. For 10 points, name this second-order partial differential equation that states the Laplacian of the potential equals negative free-charge density over epsilon.

ANSWER: Poisson equation [accept Poisson–Boltzmann equation or screened Poisson equation; prompt on “Laplace equation”]

7. Tasso's twenty-five works in this form include *The Father of the Family* and the late *Minturno*. Leopardi wrote works in this form with characters like Torquato Tasso and his “familiar spirit,” the Earth, the Moon, Nature, and an Icelander, in his *Operette Morali*. Another work in this form begins with a note “To the Discerning Reader” attacking dogmatic Aristotelians, and noting that they shouldn't be called Peripatetics since they don't walk around. The fourth section of that work in this form details how the (\*) tides result from the motion of the earth. That work in this form features the neutral Sagredo, the fool Simplicio, and the Copernican Salviati. For 10 points, name this form of a Galileo work about the *Two Chief World Systems*.

ANSWER: dialogues [or dialogo; or dialogi; accept specific works like *Dialogue Between Torquato Tasso and His Familiar Spirit* or *Dialogue Between the Earth and the Moon* or *Dialogue Between Nature and an Icelander* or *Dialogue Concerning the Two Chief World Systems*]

8. Michael Frohlich's research on *Corynospermales* supports the view that the structure of these organisms comes mainly from their male reproductive organs, the “mostly male” hypothesis. Recent research on their origins has discredited the hypothesis that Gnetales are closest to these organisms, but both groups undergo a process in which a tube penetrates the micropyle and two sperm cells enter the female gametophyte called double fertilization. A structure belonging to these plants forms when the walls of their ovaries thicken to become (\*) pericarp. The number of seed leaves their embryos have is the basis of their classification into monocots and dicots. Their reproductive organs include carpels containing the stigma, style, and ovary, and the stamen, which has a filament and an anther. For 10 points, name this group of plants which have fruit and flowers, unlike gymnosperms.

ANSWER: angiosperms

9. This man collaborated with colleague Karl Lashley on an ethological study of homing on Bird Key. In one essay, this man posited an approach whose practitioners acknowledge “no dividing line between man and brute” and disavowed the method of introspection. This man collaborated with Harvey Carr on an experiment in which a rat conditioned to find food at a set distance ran (\*) into the wall of a maze when it was moved closer. In another of this man's experiments, a metal bar was repeatedly struck with a hammer whenever a nine-month-old boy touched a rat, eventually conditioning him to fear furry objects. For 10 points, name this American experimental psychologist who conducted the Little Albert experiment and founded the school of behaviorism.

ANSWER: John Watson

10. One character with this profession ascends to a high B in the “Suicidio!” aria after she is menaced by Barnaba, an evil Inquisition spy who kills her mother, La Cieca. Another woman with this profession once posed as the gypsy girl Eugenia Montez and sleeps with Prus to get a letter that details the secret to eternal life. A character with this profession spits out, “Et avanti trembla tutta (\*) Roma!” before setting candles around a corpse in the Farnese Palace. That character says that she “gave jewels for the Madonna’s mantle” in “Vissi d’arte” and kills the chief of police, Baron Scarpia, before hurling herself off the Castel Sant’Angelo. For 10 points, identify this profession of Floria Tosca, incidentally also the profession of the soprano portraying her. ANSWER: singer [or soprano; or opera singer; or ballad singer; or street singer; or diva; or vocalist; accept equivalents]

11. In asymptotic giant branch stars, the third dredge-up removes the remnants of a “shell” this element forms around the core. This element is consumed in a reaction that generates power proportional to the square of density and roughly the fortieth power of temperature at around 100 million kelvins. A mechanism for producing this element sometimes produces fluorine as an intermediate and was proposed by (\*) Bethe and Weizsäcker. In some low-mass stars, this element’s runaway fusion causes its namesake “flash.” This element is created via the CNO cycle and the proton–proton chain, and it “burns” in the triple-alpha process. For 10 points, name this element that is created in stars by the fusion of hydrogen. ANSWER: helium [or He; or helium nucleus; or alpha particle]

12. A character created by this author frequently whistles “The Last Rose of Summer” to himself and is assisted by a boy with bulging eyes nicknamed “Gooseberry.” An actress in a novel by this author eventually marries Captain Kirke after wooing Frank Clare and discovering that her will was invalidated when her father died in a train crash. Another character in a novel by him catches typhus while lying on a roof in the rain to overhear the plot of (\*) Percival, who intends to pay his debt using money gained from a marriage to her half-sister Laura Fairlie. This author of *No Name* wrote a novel in which Sergeant Cuff attempts to find the title object, which is stolen from Rachel Verinder by Godfrey Ablewhite. For 10 points, name this author of *The Woman in White* and *The Moonstone*. ANSWER: William Wilkie Collins

13. A character in this work compares a certain concept to Atē in that it trods “in the softest of all the things that are.” In this work, a character claims that humans originally took the shape of eight-limbed circles, but were cut in two for revolting against the gods. This work opens with an unnamed character encountering Apollodorus on the road to Phaleron and inquiring about the content of several (\*) speeches. In this work, Socrates recalls learning of the existence of the form of Beauty during a conversation with Diotima of Mantinea. Alcibiades enters late in this work and praises Socrates for saving his life in battle, before insisting that Agathon lie between them when they retire to bed. For 10 points, name this Platonic dialogue set at a drinking party that discusses the nature of love. ANSWER: Symposium

14. This city is known for a kielbasa and french fry sandwich called a Polish Boy. Though not New York, the Olmsted Brothers firm designed a namesake Metroparks System surrounding this city. In 2008, the HealthLine was added to this city’s metro system, the RTA. The Van Sweringen brothers developed this city’s suburb of Shaker Heights. Cesar Pelli designed the largest building in this city, the 57-story (\*) Key Tower. This city’s theater district, Playhouse Square, lies on its Euclid Avenue. This city’s North Coast Harbor is the site of a museum with an odd cylindrical tower and a large glass pyramid adjacent to the shore of Lake Erie. The oft-burning Cuyahoga River runs through this city. For 10 points, name this Ohio city home to the Rock and Roll Hall of Fame. ANSWER: Cleveland, Ohio

15. These people believed in a substance called *pe* that made all organic substances move. These people were sometimes referred to as “Cloud People” for their belief that they would join their ancestors in the clouds after death. These people controlled the cities of Tierras Largas and the key city in the Rosario Phase of this civilization, (\*) San Jose Mogote. These people’s chief city contained stone carvings of either magicians or war prisoners in The Gallery of the Dancers. This civilization began to control much of central Mexico after the decline of the Olmecs, and their capital city translates as “White Hill.” For 10 points, name this Mesoamerican civilization prominent in Oaxaca in the first century CE whose capital was at Monte Alban.

ANSWER: Zapotecs

16. This substance’s melting temperature is affected by ion concentration and “stacking factors” between its substituents, and its melting causes a notably large increase in absorbance. Two of its main forms differ in whether the pucker of certain substituents is C3-endo or C2-endo. HMG proteins and MLL can bind onto a cruciform structure in this material. One form of this molecule has little difference in the size of its major and minor grooves and is (\*) left-handed; that is this molecule’s Z form. Photograph 51 shows the B form of this molecule taken with 100 hours of X-ray exposure. It differs from a similar molecule in that one of its sugars has one less oxygen. For 10 points, name this molecule whose double helical structure was identified by Watson and Crick.

ANSWER: DNA [or deoxyribonucleic acid]

17. A painting depicting this city features a foreshortened viola da gamba and a lute in the foreground and is set in a musical instrument seller’s stall. A powder explosion in this city destroyed most of the artwork of a painter best known for a small oil painting of a chained goldfinch. *The Little Street* is set in this city, and another artist depicted a nurse and a child entering a *Courtyard* in this city. Some of this city’s characteristic tiles appear decorated with cupids in a painting from this city that also features a symbolic (\*) foot-warmer. Carel Fabritius and Pieter de Hooch lived in this city. Another artist used a camera obscura to paint its bell-less New Church from across the Schie River. For 10 points, name this city where Jan Vermeer worked and which he painted a *View of*.

ANSWER: Delft

18. Some old librarians beat this character because he once destroyed a rare book on snowflakes. While in the hospital, this character is shown pictures of a bird’s nest and a peacock and is visited by a man he calls the Minister of the Inferior. After tripping over a milk saucer, this character is attacked by some cats and an elderly woman, whom he accidentally murders. In the first chapter, he asks (\*) “what’s it going to be then, eh?” and dons a Benjamin Disraeli mask after leaving the Korova Milkbar. This character refers to himself as “your humble narrator,” and speaks a slang called Nadsat with his droogs Pete and Dim. For 10 points, name this ultraviolent Beethoven enthusiast, the protagonist of Anthony Burgess’s *A Clockwork Orange*.

ANSWER: Alex [prompt on “Your Humble Narrator” or “6655321”]

19. Prior to a festival dedicated to this god, priests remained nude for eighty days while placing fir branches on the tops of mountains, and the namesake objects of that festival were known as “objects for seeing” for their divination value. This god’s quick speed was represented by his attendant Paynal. This god was considered young because, instead of stone, he was frequently depicted using amaranth dough, and he carried a fire serpent who is used as a lightning bolt. The dedicatee of the (\*) Panquetzaliztli Festival, this god enveloped his four hundred brothers in clouds and created the Moon when he cut off the head of his sister, Coyolxauhqui. Along with Tlaloc, this god was the dedicatee of the Temple Mayor in Tenochtitlan. This deity supposedly burst from his mother’s womb fully armed after that mother, Coatlicue, was impregnated by a ball of feathers. For 10 points, name this Aztec god of the sun and war who was known as the hummingbird god.

ANSWER: Huitzilopochtli

20. Initiatives in favor of this policy included Project Concern in Hartford and the METCO program. During protests over an implementation of this policy, Joseph Rakes was photographed attacking Ted Landsmark with an American flag. This policy was partly supported by the Perrow Commission, which helped end opposition to it under the doctrine of Massive Resistance. The *Swann* decision and (\*) *Milliken v. Bradley* ruled on a tactic for implementing this policy. During the case that began this process, Kenneth and Mamie Clark presented the results of their doll experiments. In opposition to this policy, Orval Faubus had the National Guard block the Little Rock Nine. For 10 points, name this process often implemented with busing, which was supposed to be carried with "all deliberate speed" after the ruling in *Brown v. Board of Education*.

ANSWER: desegregation of public schools [or integration of public schools; or busing until mentioned; accept word forms like "desegregating" or "integrating" or obvious equivalents]

## Bonuses

1. The Einstein field equations are central to this theory. For 10 points each:

[10] Name this theory of gravitation that predicts phenomena like gravitational lensing.

ANSWER: general relativity [or GR; prompt on “relativity”]

[10] This quantity found in the Einstein equations represents the vacuum energy density of space. Its value is thought to be positive because of the observed accelerating expansion of the universe.

ANSWER: cosmological constant [accept lambda]

[10] The Einstein equations can be written more compactly by defining the Einstein tensor as  $R_{\mu\nu}$  minus one-half  $g_{\mu\nu}$  times  $R$ , where  $R$  is obtained from the Ricci curvature tensor by performing this operation.

ANSWER: taking the trace [accept tensor contraction]

2. The introduction to this work describes the artist as “Swiss and unobtrusive” and that this work “captures the feeling... when the sun is hot in the streets and the music comes out of the jukebox.” For 10 points each:

[10] Name this collection of 85 photographs that depicts various people of the title group doing everyday things like smoking and working.

ANSWER: The Americans

[10] Upon coming to the United States, Robert Frank, the creator of *The Americans*, was mentored by Walker Evans, who is known for photographs taken during this period while working for the Farm Security Administration. Dorothea Lange’s photographs *Migrant Mother* and *White Angel Breadline* were also taken during this period.

ANSWER: The Great Depression [or The Great Slump]

[10] Frank’s film *Cocksucker Blues*, which can only be shown when he is present, depicts this band on tour. This band’s performance at the Altamont Free Concert was depicted in a documentary about this band directed by the Maysles brothers and Charlotte Zwerin.

ANSWER: The Rolling Stones

3. Answer some questions about the British translator Michael Hamburger. For 10 points each:

[10] Hamburger translated an “unofficial” selection of this Austrian poet’s works. He wrote “Extinguish Thou My Eyes,” “The Spanish Dancer,” and a poem beginning “A tree arose. O pure transcendence!”

ANSWER: Rainer Maria Rilke

[10] Hamburger was the major translator of both Nelly Sachs and Paul Celan, who both suffered under the Nazis due to being this kind of person.

ANSWER: Jewish [accept any obvious equivalents]

[10] Hamburger translated this poet’s works throughout his life. This German Romantic wrote enigmatic poems like “Hyperion’s Victory-Song,” “The Ister,” “Bread and Wine,” and “Half of Life.”

ANSWER: Friedrich Hölderlin

4. An insane election song sung by supporters of this man went, “He killed my ma, he killed my pa, I’ll vote for him.” For 10 points each:

[10] Name this leader who was opposed for much of his presidency by the ULIMO and overthrew Samuel Doe in 1990.

ANSWER: Charles McArthur Ghankay Taylor

[10] Charles Taylor and Samuel Doe were presidents of this African nation. It is the only one formed by former American slaves.

ANSWER: Liberia [or Republic of Liberia]

[10] Liberia was led for much of the 20th century by members of this political party, the party of William Tubman. This party’s name and ideals were inspired by a 19th century American political party.

ANSWER: True Whig Party

Commented [1]: repeat?

5. Heracles had to use special, Hephaestus-brand clappers called krotala to defeat the Stymphalian type of these creatures. For 10 points each:

[10] Name this type of animal, one of which pecks out Prometheus's liver every day.

ANSWER: birds [or Stymphalian birds; or Circassian eagles; or vultures]

[10] Heracles was given his labors by this king of Tiryns who hid in a bronze jar when Heracles brought him the Erymanthian Boar.

ANSWER: Eurystheus

[10] The Bistones ruled by King Diomedes got very angry when Heracles stole their cattle, so Heracles had to flee, leaving the cattle to this man. Unfortunately, this guy was murdered by the horses, so Heracles named a city after him.

ANSWER: Abderos [or Abderus]

6. The Landfrieden contract grew out of this movement, which was written about by Ademar de Chabannes. For 10 points each:

[10] Name this movement prominent in the eleventh century that was supported by Urban II and attempted to reduce the amount of wars in Europe.

ANSWER: Peace of God movement [or Truce of God; or Peace and Truce of God; or Pax Dei; or Treuga Dei]

[10] The Law of Adamnán, which was created in this country at the Synod of Birr, had similar goals to the later Peace of God movement. This country's Brehon Laws were apparently revised by St. Patrick.

ANSWER: Ireland

[10] A Landfrieden law was proclaimed by this king at Mainz. This Hohenstaufen emperor peacefully won Jerusalem during the Sixth Crusade and was known as "Stupor Mundi."

ANSWER: Frederick II [prompt on "Frederick"; do not accept "Frederick Barbarossa"]

7. Upon wresting control over a certain nation, this party named former Valve Corporation economist Yanis Varoufakis as Minister of Finance. For 10 points each:

[10] Name this populist party, whose leader Alexis Tsipras became prime minister of a certain European nation on January 26, 2015.

ANSWER: SYRIZA [or Coalition of the Radical Left]

[10] Alexis Tsipras was elected in this country. The term "Grexit" was coined to describe this country's potential exit from the eurozone.

ANSWER: Greece

[10] Following the election, Tsipras reached out to this right-wing party in an attempt to form a coalition. It was successful, as he shortly named this party's leader Panos Kammenos Minister of National Defense.

ANSWER: Independent Greeks [or ANEL]

8. After the burning of Reverend Smith's church, this character arrests several villagers and demands a fine of two hundred bags of cowries. For 10 points each:

[10] Name this character in a 1958 novel. He is the author of the book *The Pacification of the Primitive Tribes of the Lower Niger*.

ANSWER: the District Commissioner

[10] The District Commissioner appears in this Chinua Achebe novel in which Okonkwo commits suicide after accidentally killing Ezeudu's son at a funeral when his gun explodes.

ANSWER: Things Fall Apart

[10] Okonkwo also participates in the murder of this adopted son of his, who was ordered to be killed by the village Oracle. Nwoye revolts against his father and converts to Christianity upon this character's death.

ANSWER: Ikemefuna

9. A half-dressed young woman sees one of these objects through her yellow curtains in one painting. For 10 points each:

[10] Name these objects that appear “on 57th Street” and “on Waldorf” in paintings by Childe Hassam, who also prominently featured them in *Avenue in the Rain*.

ANSWER: American **flags**

[10] Hassam was an American member of this art movement, as was Mary Cassatt. This movement’s French practitioners included Claude Monet.

ANSWER: **impressionism** [or other word forms]

[10] American flags also appear in the work of Jasper Johns, a lover of this other artist. This artist included a taxidermied goat stuck in a tire in *Monogram*, one of his combines.

ANSWER: Robert **Rauschenberg**

10. This branch of philosophy is discussed in an article that introduces the concept of “relative brutality” in a discussion of a grocer supplying the article’s author with potatoes. For 10 points each:

[10] Name this branch of philosophy, whose “Modern” form titles a 1958 article that coined the term “consequentialism” and argued against the philosophy of Henry Sidgwick.

ANSWER: **moral** philosophy [or **ethics**]

[10] “Modern Moral Philosophy” is an essay by this female philosopher and student of Wittgenstein, who also authored the book *Intention*.

ANSWER: G. E. M. **Anscombe**

[10] In the essay, Anscombe contends that it is “not profitable” to do moral philosophy without developing a complete philosophy of this other discipline, which concerns the scientific study of the human mind. B. F. Skinner is a prominent practitioner of this discipline.

ANSWER: **psychology**

11. Initiates in this faith go through the “crushing of leaves” as part of the Kanzo ceremony. For 10 points each:

[10] Name this faith, popular in Haiti and some parts of Louisiana, whose adherents worship figures called loa.

ANSWER: **voodoo**

[10] This figure, also known as the “good god,” is normally referred to as the supreme god of voodoo. In voodoo tradition, this god gives everyone their fates.

ANSWER: **Bondye** [or **Bondeve**]

[10] Loas are represented with these ornate symbols often drawn in powder on the floor. The one for Baron Samedi has a coffin between two crosses.

ANSWER: **veves** [or **vévés**]

12. This person sees drops of blood on a crucifix which she compares to scales of a herring and to water dripping from a house’s eaves. For 10 points each:

[10] Name this English anchoress who described the religious visions she had during a near-death experience in *Revelations of Divine Love*.

ANSWER: **Julian** of **Norwich** [prompt on “Julian”]

[10] In Julian’s vision, this figure appears as an ugly young man with red skin, red hair and formless hands. This figure is depicted as a three-faced monster trapped in ice in Dante’s account of his realm, the *Inferno*.

ANSWER: **Satan** [or the **devil**; or **Lucifer**; or obvious equivalents]

[10] The devil also appears in this Middle English poem, in which he jousts with Jesus on Calvary. This dream-vision poem begins with Will falling asleep on Malvern Hill and was written by William Langland.

ANSWER: **Piers Plowman** [or **William’s Vision of Piers Plowman**; or **Visio Willelmi de Piers Plowman**]

13. This revolt was crushed under National Guard forces led by Eugène Cavaignac, with over 10,000 casualties. For 10 points each:



[10] Name this uprising in the summer of 1848 sparked by plans to close Louis Blanc's National Workshops.

ANSWER: the **June Days** [or les **journées de Juin**; accept answers with "Uprising" or "Revolt"]

[10] The French Revolution of 1848 started in, and is sometimes named for this month. Another revolution named for this month led to the installation of Georgy Lvov as Prime Minister.

ANSWER: **February** [or **Février**; accept **Ventôse**]

[10] The 1848 French Revolution overthrew this "Citizen-King," who himself took power after the July Revolution of 1830 overthrew Charles X.

ANSWER: **Louis Philippe I**

14. In 2001, algae caused a terrifying red form of this phenomenon, the amount of which is measured by a hyetograph. For 10 points each:

[10] Name this liquid precipitation which provides the source for the study of hydrology.

ANSWER: **rainfall**

[10] This is an area of land for which all of the surrounding rainfall drains into the same body of water.

ANSWER: **watershed** [accept **catchment** or any sort of **basin**]

[10] This term refers to the downward movement of water into soil. The Green-Ampt equation relates the extent of this process to the hydraulic conductivity, and its rate is a decaying exponential according to Horton's equation.

ANSWER: **infiltration**

15. This technique uses restriction enzymes like *EcoRI* ("eco-R-one") to digest DNA, which is then separated by gel electrophoresis and transferred to nitrocellulose or nylon paper. For 10 points each:

[10] Name this technique which uses a radioactive complementary DNA probe to detect the specific DNA sequence in the sample.

ANSWER: **Southern blot** [prompt on "blot"]

[10] A Southern blot is used in this type of analysis that looks for differences in lengths of DNA strands to find mutations at restriction sites. Though less used today, it was once important for paternity testing and disease testing.

ANSWER: **restriction fragment length polymorphism** [or **RFLP**, pronounced "rif-lip"]

[10] The sticky membrane in a Southern blot can be washed with the DNA of this animal's sperm so the probe will only stick to its complementary DNA, not the sticky paper. These animals live most of their lives in saltwater oceans but then swim up freshwater streams to spawn.

ANSWER: **salmon**

16. One work in this musical style was later used as the basis for the *Suite italienne*. For 10 points each:

[10] Name this early 20th century musical style of works like the *Dumbarton Oaks* concerto, the ballet *Pulcinella*, and the *Symphony of Psalms*.

ANSWER: **neoclassicism** [accept word forms like **neoclassical**]

[10] This Russian composer wrote all of those works in his neoclassical phase. In his earlier "Russian" period, he wrote the ballets *The Firebird* and *The Rite of Spring*.

ANSWER: Igor **Stravinsky**

[10] Stravinsky also wrote a neoclassical D major work in this genre, comprising a "Toccata," two "Arias," and a "Capriccio." Berg's last completed work was one in this genre dedicated "To the Memory of an Angel."

ANSWER: **violin concerto**

17. Chinese immigrants to this city were targeted in the sandlot riots and were attacked in Denis Kearney's racist speeches. For 10 points each:

[10] Name this California city where the 1906 earthquake destroyed a lot of records, allowing Chinese immigrants to enter the country as "paper sons."

ANSWER: **San Francisco**

[10] In 1900, San Francisco's Chinatown was the site of an epidemic of this disease, the existence of which was stubbornly denied by Governor Henry Gage until he was voted out of office.

ANSWER: bubonic **plague** [or the **Black Death**]

[10] Many Chinese immigrants first came to San Francisco after the signing of this treaty, at which the namesake diplomat conferred "most favored nation" status on China.

ANSWER: **Burlingame** Treaty

18. These people celebrate a coming of age ceremony where they receive markings called *gaar*, which are scars created on the forehead with a razor. For 10 points each:

[10] Name this ethnic group from the Nile Valley, who believe in a supreme deity called Kwoth Nhial.

ANSWER: **Nuer**

[10] This English anthropologist authored several studies about the Nuer, but is best known for writing *Witchcraft, Oracles, and Magic Among the Azande*.

ANSWER: E. E. **Evans-Pritchard**

[10] The Nuer celebrated a "ghost" type of this ceremony, which normally involved the gift of a cow from the groom's family to that of the bride.

ANSWER: **marriage** [or **wedding**]

19. At one point in this essay, its author recalls a story about a sixteen-year-old who jumped to her death from the deck of a ship because of "unhappy adolescent love," but concludes it was actually because of "despair." For 10 points each:

[10] Name this essay about its author's 1995 journey onboard the MV Zenith, a cruise ship he later renames the Nadir.

ANSWER: "A **Supposedly Fun Thing I'll Never Do Again**"

[10] That aforementioned essay was written by this author of *Infinite Jest*, who himself committed suicide in 2008.

ANSWER: David Foster **Wallace**

[10] Wallace at one point describes this object in his cabin as "fascinating and potentially malevolent." A modern essay on traditional Japanese aesthetics describes this object as "a place of spiritual repose."

ANSWER: his cabin **toilet**

20. When this phenomenon causes the electron density in a pi bond to differ from what a single Lewis structure would predict, it's called the mesomeric effect, and this phenomenon explains why all the bonds in benzene have the same length. For 10 points each:

[10] Name this effect in which electrons delocalize and molecules exist in a combination of different Lewis structures.

ANSWER: **resonance**

[10] Resonance structures will be less stable with the separation of these quantities. This quantity for an atom is the normal number of valence electrons minus the number of unpaired electrons minus half the number of shared electrons.

ANSWER: **formal charge** [prompt on "charge"]

[10] In ozone, this number is the formal charge of the central oxygen.

ANSWER: **one** [or **plus one**; do not accept "negative one" or "minus one"]