

ACF Regionals 2015: A Livable Community

Packet by Louisiana Tech (Nick Collins, Hillary Roser, Jeb Houston, Courtney Swafford), Rochester Institute of Technology (Adam Swift, Zach Dickman), and Johns Hopkins A (Cyrus Zhou, India Reiss, Chase Fleming, Noah Stanco, Michael Shang)

Edited by Matthew Jackson, Sarah Angelo, Tommy Casalaspi, Trevor Davis, Stephen Liu, and Sriram Pendyala

Tossups

1. Because a dog saved this ethnic group's founding father, it upholds a taboo on using dog fur or eating dog meat to this day. It's not the French, but *famille rose* and *famille verte* enamel pottery emerged under this ethnic group's rule, for which Giuseppe Castiglione helped build a palace. These winners of the Battle of Sarhu included Bordered Yellow and Plain White among the divisions of their armies in the Eight Banners system. This group used Latin to write a treaty with Russia signed at Nerchinsk, rose to prominence under Nurhachi, and won at Shanhai Pass against Li Zicheng. This Tungusic ethnicity descended from the group which deposed the Northern Song dynasty, the Jurchens. For 10 points, name this queue-wearing ethnic group which ruled China during the Qing dynasty.

ANSWER: Manchus [or Manju; or Manzu; accept Jurchens until mentioned]

2. This idea constitutes a "formal determining ground" unlike the "material determining grounds" of the will. Judge Raveh examines a defendant in a glass box on his "household use" of this idea in Chapter 8 of Hannah Arendt's *Eichmann in Jerusalem*. Philippa Foot rejected this concept in favor of a "System" of weaker, "hypothetical" replacements. Adherence to this idea allows a person to escape heteronomy. One formulation of this idea envisions all men as legislators in the "kingdom of ends." Its discoverer applied it to condemn masturbation as use of one's self as a means rather than an end. For 10 points, name this principle that one should act only by maxims that can be willed as universal law, devised in the *Groundwork of the Metaphysics of Morals* by Immanuel Kant.

ANSWER: categorical imperative [or kategorischer Imperativ; prompt on "imperative;" prompt on "duty"; prompt on "autonomy"; prompt on "practical reason" or "pure practical reason" or "reason" or "moral law"]

3. When alpha to a sulfoxide group, groups containing this element migrate in a common variation of the Pummerer rearrangement. Transmetalation of groups from this element to palladium is a key step in the Hiyama cross-coupling. When groups containing this element are geminal or vicinal to hydroxyl groups, they rearrange to ethers of this element in the Brook rearrangement. Enol derivatives of those ethers of this element are reacted with aldehydes or formates in the Mukaiyama aldol reaction, and ethers of this element are generally useful protecting groups for alcohols. The tetramethyl derivative of this element is defined to have a chemical shift of 0 ppm in proton NMR, and its dioxide is the main component of glass. For 10 points, name this tetravalent element used in microchips.

ANSWER: silicon

4. Malvina Hoffman helped restore some of the works of this sculptor, who persuaded her to study anatomy in Manhattan. Many of his works are housed in a museum at his former workshop, the Hotel Biron, to which he was introduced by his secretary Rainer Maria Rilke. He also taught and sculpted his lover Camille Claudel. This sculptor made his *Saint John the Baptist Preaching* larger than life-size due to critics accusing him of casting an earlier sculpture from a living model. He used that John the Baptist sculpture, minus the arms and head, as the basis for his *The Walking Man*. This creator of *The Age of Bronze* also executed a sculpture of Dante derived from his *The Gates of Hell*. For 10 points, name this French sculptor of *The Thinker*.

ANSWER: Auguste Rodin

5. In Cherokee myth, evil little people are named for these objects, in contrast with the laurel people and dogwood people. The Norse gods placed one deep in the earth under Lyngvi and attached it to another one named Thviti. On the advice of Phineus, a dove was used to overcome two of these, and in book 14 of the *Iliad*, Ajax almost kills Hector with one. They're not rivers, but one named Gjoll was used in the binding of Fenrir. Deucalion and Pyrrha threw these objects over their shoulders to create humans. After telling his wife Merope not to bury him, and chaining Hades or Thanatos, a king of Corinth got a punishment involving one. A pair of them, the Symplegades, threatened to wreck the *Argo*. For 10 points, name these objects, one of which Sisyphus must eternally roll up a hill.
ANSWER: **rocks** [or **boulders**; or **stones**; accept other reasonable equivalents]

6. Cancer of this organ can be treated with vismodegib, which is sold as Erivedge. Most patients with Gorlin syndrome develop cancer of this organ, which can be removed in surgeries described by the acronym CCPDMA. The progress of cancer in this organ can be measured by the Clark level and Breslow's depth. This organ is the target of the surgical procedure EDC, which stands for "electrodessication and curettage." Lentigo maligna is a variety of one of this organ's cancers. This organ can develop the usually non-lethal basal cell carcinoma, and the deadliest cancer of this organ occurs in cells that produce a namesake dark pigment. For 10 points, name this primary organ affected by melanoma.
ANSWER: **skin**

7. This novel's narrator finds benzene to wipe off a message written in purple lipstick across a woman's stomach before she wakes up and calls him "boo'ful" over and over. Emma asks for a dance at a fancy club called the Chthonian in this novel, in which a man known as Supercargo eggs on a fight between veterans in the Golden Day bar. This novel's title character lets a room from Mary Rambo and becomes friends with Brother Clifton. This book's narrator attends a rally at which "No more dispossessing of the dispossessed!" is chanted. At a eulogy in this novel, Ras the Destroyer incites massive race riots, during which the narrator falls underground via a manhole and concludes that his personal identity is unnoticed by white people. For 10 points, name this novel by Ralph Ellison.
ANSWER: **Invisible Man**

8. A certain "Mestre Jacome" who served this man is identified with a Majorcan Jew named Jehudà Cresques. After his failed attack on the Marinid sultanate, this man's brother Ferdinand the Holy Prince was taken prisoner and died in captivity at Fez. This member of the Illustrious Generation funded his activities through his mastery of the Order of Christ, and like his brother Edward the Philosopher, he was a son of Philippa of Lancaster. This man sent Gil Eanes on an expedition to pass Cape Bojador, and many of his feats were made possible by the development of caravels. This man convinced his father John I to conquer the Moroccan port of Ceuta. For 10 points, name this member of the House of Avis, a Portuguese patron of exploration who helped launch the Age of Discovery.
ANSWER: **Henry the Navigator** [or Prince **Henry** of **Avis**; or Infante Dom **Henrique** de **Avis**, Duke of Viseu]

9. The speaker of one poem in this collection describes himself as "the word without echoes, he who lost everything and he who had everything" after addressing "you who are silent," a white bee "drunk with honey" that buzzes in the speaker's soul. This collection contains a poem that includes the lines "The night is starry and the stars are blue and shiver in the distance" and "Love is so short, forgetting is so long." The speaker declares, "You look like a world lying in surrender" after noting the "white hills, white thighs" of the title thing in "Body of a Woman." The speaker of the last poem in this collection repeatedly exclaims "In you everything sank!" right after a poem beginning "Tonight I can write the saddest lines." For 10 points, name this early poetry collection by Pablo Neruda.
ANSWER: **Twenty Love Poems and a Song of Despair** [or **Veinte poemas de amor y una canción desesperada**]

10. A sedimentary basin named for this period in western Texas has the world's thickest deposits dating from here. Its latter part involved the upward rifting of the Cimmerian subcontinent, an event that formed the Neo-Tethys sea. Swamp-loving lycopod trees were gradually replaced in continental interiors by advanced species of seed ferns and conifers in this period. Olson's extinction is a small event that occurred in the middle of this period. By the end of this period, dicynodonts and gorgonopsians dominated terrestrial fauna. The supercontinent Pangea existed throughout this period, which the Siberian traps may have ended. The Carboniferous period preceded, for 10 points, what last geologic period of the Paleozoic, which ended with a massive extinction event that ushered in the Triassic?
ANSWER: Permian period

11. This poem's speaker questions the "joy we ever should come near" if "we were things born / Not to shed a tear" and asks, "What objects are the fountains / Of thy happy strain?" Images in this poem include a "rose embowered / In its own green leaves" and a "glow-worm golden / In a dell of dew." This poem's speaker states "The world should listen then – as I am listening now" after declaring that if the title figure would teach him "half the gladness / That thy brain must know, / Such harmonious madness / From my lips would flow." This poem begins with its speaker exclaiming, "Hail to thee, blithe Spirit!" For 10 points, name this poem addressing a bird, by Percy Shelley.
ANSWER: "To a Skylark"

12. Previously unknown works by this composer were featured at the Concerti Tigulliani organized by Olga Rudge and Ezra Pound, who helped popularize his music. Fritz Kreisler wrote a C major concerto that he falsely attributed to this composer. Alfredo Casella organized a week in 1939 honoring him, reviving his now-popular Gloria. His works were most thoroughly catalogued by Peter Ryom, who gave them their RV numbers. Bach's *Concerto for Four Harpsichords* is an adaptation of the tenth piece in this composer's *L'Estro Armonico*. He imitated the barking of a dog in the first of the programmatic violin concerti that open his *The Contest Between Harmony and Invention*. For 10 points, name this Italian violinist of the Baroque era who composed *The Four Seasons*.
ANSWER: Antonio Vivaldi

13. A bored office worker in a poem by this man asks many questions of a shopkeeper so "that their hands might touch...that their faces, their lips / might move close together as though by chance." The speaker of another poem by this author of "He Asked About the Quality" asks why his leaders have "put on bracelets with so many amethysts, / and rings sparkling with magnificent emeralds." The speaker of a poem by this man advises the reader to "hope your road is a long one" and notes that you will not encounter obstacles "unless you bring them along inside your soul." The title figure of a fourth poem by this man is told to "say goodbye to her, to the Alexandria you are losing." For 10 points, name this Modern Greek poet of "Waiting for the Barbarians," "Ithaka," and "The God Abandons Antony."
ANSWER: Constantine Cavafy

14. This property, when combined with a set of behaviors including pseudogap phenomena, spectral weight transfer, and T -linear resistivity, produces Mott insulators. Spin-polarized STM uses tips made from materials with this property, which occurs in manganese-nickel and manganese-platinum alloys. Triangular lattices of interactions with this property results in geometrical frustration, according to a model where this property exists if all of the interaction terms J_{ij} [J-sub-i-j] are negative. At room temperature, chromium is the only pure element with this property, but it becomes paramagnetic above its 308K Néel temperature. For 10 points, name this property among two described by the Ising model, a magnetic state that exists when neighboring spins point in opposite directions.
ANSWER: antiferromagnetism [do not accept or prompt on "ferromagnetism"]

15. A Barbara Kruger work superimposes the caption "You invest in the divinity of the masterpiece" on the center of this painting. In his essay entitled "Who's Who [in this work]," Leo Steinberg argued that the way one figure uses only his thumb and index finger to grip the shoulder of another reflects Eucharistic practice. In an adjacent painting, this work's title figure sleeps with his back to a tree stump, while in this work, he rests on a green hill and faces a mass of bodies surrounded by a large red cloth, resembling a brain. This entry in a larger series is between depictions of the prophets Rehoboam and Asa, and follows the separation of land from sea. For 10 points, name this Michelangelo work in the Sistine Chapel that shows the title figure and his Maker touching index fingers.

ANSWER: *The Creation of Adam* [prompt on "Sistine Chapel" or "Sistine Chapel ceiling" before "sleeps"]

16. This sect reveres a type of honesty called "guarding one's tongue." This sect rose to prominence in the Chouf mountains. The phrase "covenant of blood" refers to this faith's willingness to serve in an army led by another faith. A "universal mind" or *aql* figures into this sect, which reveres the tomb of Sabalan. Adherents believe in exoteric, esoteric, and "double hidden" meanings within their Epistles of Wisdom, which are accessible by its majority-female *uqqal* subgroup but forbidden to *juhhal*. This faith, which bans intermarriage and conversion, draws on Platonist and Ismaili Shi'a tradition and venerates the caliph al-Hakim. For 10 points, name this secretive monotheistic faith symbolized by a five-colored star, which has historically fought for Israel and against its homeland of Lebanon.

ANSWER: **Druze** [or **Muwahiddun**; or **Ahl-al-Tawhid**; or **Jabal**; do not accept or prompt on "Muslim," "Ismaili," or "Shi'a"; be careful not to accept "Jews" and ask teams to spell if there is confusion about pronunciation]

17. A painting of this battle by William Henry Powell in the US Capitol shows its winning commander standing in a rowboat with his brother as four other men row it through enemy gunfire, a feat which actually happened. In anticipation of this battle, the winning side moved its base away from Black Rock and started building ships behind a sandbar at Presque Isle. Robert Barclay lost this battle, during which Jesse Elliott failed to engage and the *Lawrence* surrendered despite a battle flag on its side reading "Don't give up the ship." At its end, after the *Queen Charlotte* was sunk in Put-In Bay, the message "We have met the enemy and they are ours" was relayed by Oliver Hazard Perry. For 10 points, name this key naval engagement from the War of 1812, fought on a Great Lake.

ANSWER: Battle of **Lake Erie** [accept Battle of **Put-in Bay** before "Put-In" is read]

18. This thinker distinguished between "inner" and "outer" word associations, and used tension vs. relaxation as one of three dichotomies in his tridimensional theory of feeling. This psychologist created a theory where the objects of "apprehension" must be focalized using the process of "apperception." Following the work of Donders, this man measured how long it takes to differentiate two stimuli, as part of his extensive experiments on reaction time. This man originated the method of "introspection" as part of his psychology of "voluntarism," contrasted with the "structuralism" of his student Edward Titchener. This author of *Principles of Physiological Psychology* founded a lab in Leipzig after studying under Hermann von Helmholtz. For 10 points, name this German founder of experimental psychology.

ANSWER: Wilhelm **Wundt**

19. This man gave a speech in support of Ken Cuccinelli in which he used the movie *Gattaca* to talk about eugenics. After he wrote about an "insidious drug-war weapon," *The Washington Times* cut his weekly column. This man proposed slashing taxes in places with high unemployment like Cincinnati and Detroit as part of his plan for Economic Freedom Zones. This Republican called the intelligence community "drunk with power" during a March 2014 speech at the Berkeley Forum. In 2013, this man led a thirteen hour filibuster against John Brennan's appointment as CIA director. This former ophthalmologist serves as his state's junior senator alongside Mitch McConnell. For 10 points, name this Kentucky senator and libertarian, the son of former Texas congressman Ron.

ANSWER: **Rand Paul** [or **Randal** Howard **Paul**; prompt on **Paul**]

20. This nation's analogue of Molly Pitcher gave her name to an auxiliary women's battalion in operation during World War II, called Lotta Svärd. A bishop generally credited with establishing this country's written tradition wrote a primer called ABC-kiria. Frederick Charles of Hesse was the only king of this country, which produced a soldier nicknamed "White Death" for being the deadliest sniper in history. This home of Simo Häyhä, prime minister Risto Ryti, and Mikael Agrikola won the Battle of Suomussalmi during a war that led into the Continuation War, in which it built a defensive line running from Taipale to its namesake Gulf. For 10 points, name this country once led by Gustaf Mannerheim, a Baltic nation that fought the Winter War against the neighboring Soviets.

ANSWER: **Finland** [or **Suomi**]

TB. This character was sent to England to fight in the army of Oliver Cromwell in a novel in which he finally gets his revenge on a man who wronged him in his first appearance. This character wounds Jussac, a member of the Red Guards, and later has an affair with his landlord's wife Constance. This man has a tryst with one of the main villain's agents by disguising himself as her lover, the Comte de Wardes. This hero of the novel *Twenty Years After* eventually dies in battle after reading that he has been promoted to Marshal of France. This Gascon helps a title group tromp around in opposition to Milady de Winter. For 10 points, name this youngster who assists Athos, Porthos, and Aramis in Alexandre Dumas's *The Three Musketeers*.

ANSWER: **d'Artagnan** [or Charles Ogier de **Batz** de **Castelmore**, Comte d'Artagnan]

Bonuses

Note to moderator: Do not read the alternate answer to the first part of this bonus aloud.

1. This security bug in a common Unix software program was considered by some experts to be more significant than the previous Heartbleed bug. For 10 points each:

[10] Give the common name for this critical security bug officially announced in September 2014, which left CGI servers and PHP code using the `exec()` function vulnerable to attack.

ANSWER: Shellshock [or Bashdoor]

[10] Shellshock was a security bug which targeted this popular Unix/Linux shell and scripting language, which can be compared to others like Zsh and Dash.

ANSWER: Bash

[10] This keyboard shortcut on Bash kills whatever process you are running. Using this keyboard shortcut on Windows copies whatever text or file is highlighted, to be followed often by Control-V.

ANSWER: Control-C [or Ctrl-C; accept clear equivalents indicating that the user is pressing both the Ctrl key and the C key at the same time; do not accept "Command-C"]

2. In this story, an ex-soldier drunkenly describes how two gold-embroidery girls fell to the ground while they physically fight over him. For 10 points each:

[10] Name this story in which the soldier successfully seduces Tanya after a challenge from a baker, leading to the collective heartbreak of a group of pretzel-makers who loved her.

ANSWER: "Twenty-six Men and a Girl" [or "Dvadtsat shest i odna"]

[10] "Twenty-six Men and a Girl" is a story by this Soviet realist author who described the effects of a cholera epidemic in *Children of the Sun* and included an actor among many apartment dwellers in *The Lower Depths*.

ANSWER: Maxim Gorky

[10] In this Gorky novel, Pavel is arrested at a May Day demonstration and exiled despite a heartfelt speech in court. The title character makes copies of Pavel's speech and is beaten at a railway station while distributing them.

ANSWER: *The* Mother [or Mat]

3. The European type of these contracts can be exercised only on the expiration date, while the American type can be exercised on any date up the expiration date. For 10 points each:

[10] Name these derivative contracts that include calls and puts. They give the buyer of the contract the right, but not the obligation, to buy or sell an underlying asset in the future.

ANSWER: option

[10] Options are valued using this mathematical model that won two of its creators the 1997 Nobel Prize in Economics. From it, one can derive a formula for option pricing using parameters like the current price of the underlying stock and the option's strike price.

ANSWER: Black-Scholes-Merton model

[10] This long options strategy requires one to purchase both a call and a put on the same asset, causing the payoff to increase when the asset price changes in either direction. Its payoff diagram takes the shape of a V.

ANSWER: straddle

4. This pathway produces a net two NADH molecules and two ATP molecules from the breakdown of a single glucose into a pair of pyruvates. For 10 points each:

[10] Name this first pathway of both aerobic and anaerobic respiration.

ANSWER: **glycolysis**

[10] A member of this family of enzymes phosphorylates glucose in the first step of glycolysis. The specific glycolysis enzyme is frequently referred to by this general name as well.

ANSWER: **hexokinases** [prompt on "kinase(s)"]

[10] Pyruvate is the simplest example of the class of compounds containing both this functional group and a carboxylic acid group. In pyruvate, it occupies the alpha position.

ANSWER: **ketone** [prompt on "carbonyl"]

5. In 1919, this piece's composer heavily revised the original version from 1915, dropping the bass clarinet and collapsing it from four movements into three. For 10 points each:

[10] Name this E-flat composition whose third movement opens with a brisk melody in string tremolos followed by a passage in the horns known as the "swan hymn" or "swan-call motif."

ANSWER: Jean **Sibelius's Symphony No. 5** in E-Flat Major [or Jean **Sibelius's Fifth Symphony**]

[10] Sibelius hailed from this country, whose myths inspired his tone poems *Tapiola* and *Kullervo*.

ANSWER: **Finland** [or **Suomi**]

[10] Sibelius's tone poem *The Swan of Tuonela* is the most well-known part of this suite composed of four programmatic pieces based on Finnish myth.

ANSWER: **Lemminkäinen Suite** [or **Four Legends from the Kalevala**]

6. This term can be used to describe the silver(I) ["silver one"] cation. For 10 points each:

[10] Name this term used to describe Lewis acids or bases that have large atomic or ionic radii, low oxidation states and high polarizabilities.

ANSWER: **soft**

[10] These rules, formulated by a Polish-American physicist, allow one to predict the covalent or ionic character of a bond based on cation and anion charges and radii. They make predictions similar to hard-soft acid-base theory.

ANSWER: **Fajans'** rules

[10] Twice the chemical hardness of a species is approximately equal to the negative partial derivative, with respect to electron number, of the Mulliken definition of this chemical property. Pauling first proposed this chemical property in 1932, and his scale for it gives fluorine a value of 3.98.

ANSWER: **electronegativity**

7. This river is home to the river dolphin *Inia geoffrensis humboldtiana*, and its namesake crocodile is the largest predator in South America. For 10 points each:

[10] Name this river which drains the Llanos and flows past Ciudad Guayana before emptying into the Gulf of Paria. The Casiquiare Canal connects it to the Rio Negro, and the Meta is one of its tributaries originating in Colombia.

ANSWER: **Orinoco** river

[10] The Orinoco river system is mostly located in Venezuela, also home to this largest lake in South America. Venezuela got its name when Amerigo Vespucci likened native huts on this lake to a "little Venice."

ANSWER: Lake **Maracaibo**

[10] The Orinoco flows past this city of east-central Venezuela, the capital and namesake of its largest state by area. This city was founded as Angostura before being renamed in 1846.

ANSWER: Ciudad **Bolívar** [or **Bolívar** City]

8. After helping secure this monarch's position on the throne, Baldomero Espartero, Prince of Vergara ruled as regent until Leopoldo O'Donnell forced him out of power. For 10 points each:

[10] Name this ruler who presided over the *Década Moderada* and was succeeded by the Savoyard prince Amadeo I after being forced into exile by the Battle of Alcolea.

ANSWER: Isabella II of Spain [or Isabel II]

[10] Isabella became queen after the death of her father Ferdinand VII, but was opposed by this faction, who sought to enforce the Salic Law. This faction fought a series of three wars against the monarchy during the 19th century.

ANSWER: Carlists [or Carlismo; or Carlistas]

[10] Isabella was deposed by Juan Prim and Francisco Serrano in an event with this name. A better known event of this name saw William and Mary replace James II as rulers of England, and is sometimes called "Bloodless."

ANSWER: Glorious Revolution [or La Gloriosa]

9. This poem's speaker asks, "Who wants a turn to himself in the show? / And who wants a seat in the stand?" For 10 points each:

[10] Name this Jessie Pope poem whose speaker says, "Come along, lads" and declares, "Your country is up to her neck in a fight, / And she's looking and calling for you."

ANSWER: "Who's for the Game?"

[10] Wilfred Owen originally dedicated this poem to Jessie Pope. This poem describes soldiers "bent double, like old beggars under sacks" who were tricked by the title "old Lie" from a poem by Horace.

ANSWER: "Dulce et Decorum Est"

[10] This other WWI poet and friend of Wilfred Owen described a man who screams, "O Christ, they're coming at us!" before being killed during a battle in the "jolly old rain" in his poem "Counter-Attack."

ANSWER: Siegfried Sassoon

10. In Native American myth, this role is exemplified by culture heroes like Coyote, who stole fire for mankind, and Raven, who released the sun, moon, and stars. For 10 points each:

[10] Name this common archetype from myth of a cunning figure who causes mischief by outwitting others. A common example is the Norse god Loki.

ANSWER: trickster figures [or trickster heroes; accept trickster gods, even though they aren't always necessarily gods; prompt on "culture hero"]

[10] This trickster hero caught the sun with a lasso made of his sister's hair and beat it with the jawbone of his great-grandmother. He died crawling into the sleeping Hina when she woke up and crushed him between her legs.

ANSWER: Maui

[10] This Yoruban trickster and messenger *orisha* once posed as a trader and tricked a man with two wives into buying nicer and nicer hats for each of them. In Santería, there are 101 different "roads" to manifestations of him.

ANSWER: Eshu [or Esu; or Exu; or Eleggua; prompt on "Legba" or "Elegba"]

11. In a surviving fragment from Xenophanes, a believer in this theory commands bystanders to stop beating a dog because he recognized something familiar in its voice. For 10 points each:

[10] Name this ancient Greek philosophical theory. In the last book of Plato's *Republic*, a man named Er confirms this theory, and relates that individuals choose how it plays out, during a "myth" he tells after awaking in bed.

ANSWER: transmigration of souls [or metempsychosis; prompt on "reincarnation" or descriptive answers such as "coming back to life as an animal"]

[10] This pre-Socratic philosopher from Samos expounded upon the transmigration of souls when he wasn't connecting musical intervals to whole number ratios or analyzing the sides of right triangles.

ANSWER: Pythagoras

[10] According to Plutarch, this pre-Socratic author of *Purifications* believed in transmigration of souls. This man codified the list of four classical elements, which he said were used by Love and Strife to shape the cosmos.

ANSWER: Empedocles

12. This story's protagonist encounters a scarecrow, which she mistakes for a ghost, and a black dog that knocks her into a ditch. For 10 points each:

[10] Name this story in which Phoenix Jackson walks through the woods to get medicine for her grandson, who has swallowed lye.

ANSWER: "A Worn Path"

[10] This Mississippian author who included "A Worn Path" in her collection *A Curtain of Green* also wrote about R. J. Bowman's heart attack in "Death of a Traveling Salesman."

ANSWER: Eudora Welty

[10] In this Welty story framed as two conversations between the hairdresser Leota and Mrs. Fletcher, the wild-haired women at the salon are Medusa figures who complain about their lazy, useless husbands.

ANSWER: "Petrified Man"

13. They're not the Komnenoi, but a branch of this dynasty ruled the Despotate of Epirus, while another came to power with the help of his cousin, who spread a rumor about the death of Romanos IV in battle. For 10 points each:

[10] Name this Byzantine family that produced emperors like Constantine X and Michael VII. A non-ruling member, Andronikos, betrayed the Byzantine forces at the Battle of Manzikert.

ANSWER: Doukas [or Doukai; or Doukids]

[10] The Battle of Manzikert was a win for this Turkic group, which conquered much of the Middle East and set up the Sultanate of Rum in Anatolia. They were led by Alp Arslan at the battle.

ANSWER: Seljuk Turks [or Seljuk Empire]

[10] After losing the throne, Romanos IV underwent this punishment. Other victims of this mutilation included Isaac II Angelos and 99 of every 100 Bulgars who were captured by Basil II.

ANSWER: blinding [accept any answer indicating that one's eyes are made to stop functioning]

14. This album includes the opener "My Foolish Heart," as well as versions of "Detour Ahead," "My Romance," and the title song, and the group's bassist Scott LaFaro died ten days after it was recorded. For 10 points each:

[10] Name this 1961 live album recorded by a trio also featuring drummer Paul Motian. The session that produced this album also produced *Sunday at the Village Vanguard*.

ANSWER: Waltz for Debby

[10] This jazz pianist wrote "Waltz for Debby" and led the trio that recorded it. He also recorded the solo album *Conversations with Myself*, and co-wrote "Blue in Green" and "Flamenco Sketches."

ANSWER: Bill Evans

[10] "Blue in Green" and "Flamenco Sketches" appeared on this seminal album by Miles Davis, with whom Evans collaborated as the pianist in his sextet.

ANSWER: Kind of Blue

15. This technique, developed by Smagorinsky, Lilly, and Deardorff during their efforts toward numerical weather prediction, uses filters to remove small-scale effects from the Navier-Stokes equations. For 10 points each:

[10] Name this mathematical model for studying turbulence, premised on Kolmogorov's 1941 theory that for small scales, statistics are determined by the viscosity and rate of energy dissipation.

ANSWER: large eddy simulation [or LES]

[10] This type of flow, unlike turbulent flow, involves parallel fluid layers and no chaotic effects or eddies. It occurs at low Reynolds numbers.

ANSWER: laminar flow

[10] The creeping flow that occurs at very low Reynolds numbers is named for Stokes. Stokes also names a law stating that for spherical objects, *this force* is equal to 6-pi times viscosity times radius times velocity.

ANSWER: drag force [or air resistance; or fluid resistance]

16. Answer the following about foreign policy ...in Ramesses II's Egypt, for 10 points each.

[10] Ramesses signed the oldest surviving written peace treaty with this Anatolian empire's Hattusili III after an inconclusive chariot battle against them at Kadesh.

ANSWER: Hittite empire

[10] Before the battle of Kadesh, two spies lied that the Hittites were at this most populous city of Syria, a former Ayyubid capital where Silk Road traders went by traveling north from Damascus.

ANSWER: Aleppo [or Halab]

[10] This marauding subgroup of the Sea Peoples, defeated by Ramesses II early in his reign, later served as auxiliaries on his side at Kadesh. Unlike Vikings, they *actually* wore horned helmets consistently.

ANSWER: Sherden [or Shardana]

17. Two sets of red curtains appear on each side of the room in which this work is set, along with four captured military flags wrapped around spears that hang on the back wall. For 10 points each:

[10] Name this painting depicting 47 men, of whom only Stephen Hopkins wears a hat. Asher Durand built a great reputation as an engraver by copying this painting, in which five people hand the title document to a seated man.

ANSWER: *The Declaration of Independence*

[10] *Declaration of Independence* is located in the Capitol Rotunda, just like a painting of this scene in which a general rides his horse between two rows of soldiers, one flying a white flag and the other the stars and stripes.

ANSWER: surrender of Lord Charles Cornwallis [prompt on "British surrender in the American Revolution," etc.]

[10] Both of the aforementioned paintings were created by this early American artist. The image on the front of the 10 dollar bill is based on this man's portrait of Alexander Hamilton.

ANSWER: John Trumbull

18. This story's protagonist is filled with fear when she recalls her mother saying "Derevaun Seraun! Derevaun Seraun!" For 10 points each:

[10] Name this story in which the title character plans to escape her abusive father by going to Buenos Aires with the sailor Frank before panicking at the dock and clinging to the rail until Frank must leave her.

ANSWER: "Eveline"

[10] In this story from the same collection as "Eveline," the narrator is fascinated by the library of a deceased priest and is unable to buy a promised gift from the title fair because his uncle returned home too late.

ANSWER: "Araby"

[10] "Araby" is a story from this James Joyce collection. Gabriel Conroy gets morose after hearing about the early death of Michael Furey in "The Dead," another story from this collection.

ANSWER: Dubliners

19. Answer the following about Miaphysitism, the belief that Jesus, though consubstantial with us, has one nature merging His divine and human aspects, for 10 points each.

[10] This Caucasus country's Apostolic Church is among those still holding Miaphysite views. Gregory the Illuminator made it one of the first officially Christian nations.

ANSWER: Armenia [or Armenian Apostolic Church; or Armenian Orthodox Church]

[10] Two decades after the Council of Ephesus, in 451, this ecumenical council condemned Miaphysites as a mere variant of the Monophysites, which it deemed heretics. It established that Christ is "one Person in two natures".

ANSWER: Council of Chalcedon

[10] The Miaphysites were less radical than these early heretics, who believed Christ was fully divine -- so much so that His physical body was a mere illusion and He didn't actually die on the cross.

ANSWER: Docetism [or Docetists]

20. This office was created on the last night of James K. Polk's presidency, allowing Zachary Taylor to appoint its first holder, Thomas Ewing. For 10 points each:

[10] Name this cabinet position later held by Richard Ballinger, who ousted Gifford Pinchot from President Taft's Forestry Bureau, and Albert Fall, who leased federal oil reserves at Teapot Dome.

ANSWER: Secretary of the Interior [or Interior Secretary]

[10] Harold Ickes, FDR's Interior Secretary, used his authority over The Mall to arrange this event on Easter Sunday 1939, after the Daughters of the American Revolution refused to let a black performer use DC's Constitution Hall.

ANSWER: Marian Anderson's vocal concert in front of the Lincoln Memorial [prompt on partial answers]

[10] During the 2000s, Elouise Cobell et al. sued the Department of the Interior for gross mismanagement of these financial resources, which contain revenues from resource production activities on federally-held Indian land.

ANSWER: Indian land trusts [or Indian trust funds; or tribal trust accounts; or Individual Indian Money accounts; or IIM accounts; prompt on "accounts"]

21. In a controversial 1960 film by Michael Powell, the protagonist, Mark, is always anxious about going anywhere without this item. For 10 points each:

[10] Name this item to which Mark attaches a blade that he uses to murder his victims.

ANSWER: a camera [or a camera tripod] [That film is *Peeping Tom*.]

[10] At the climax of this earlier film, the protagonist uses several camera flashbulbs to temporarily blind the murderous antagonist, Lars Thorwald.

ANSWER: Rear Window

[10] *Rear Window* was directed by this British "master of suspense" who also directed *Psycho* and *The Birds*.

ANSWER: Alfred Hitchcock