ACF Fall 2014: *Nemo auditur propriam derpitudinem allegans*
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Tossups

1. Part of this book consists of a captain's log, in which the captain reveals how his ship's crew disappeared one by one as they transported some boxes filled with earth. In this novel, the crazy Renfield eats birds that he has fed spiders while living in an insane asylum run by John Seward. This novel opens with a man's diary of his imprisonment in a castle, before Jonathan Harker escapes to join Arthur Holmwood, Quincey Morris, and Mina Murray. After Lucy Westenra passes away in this novel, Van Helsing leads a group which stabs her reanimated corpse with a stake and stuffs its mouth with garlic. For 10 points, name this Bram Stoker novel about a Transylvanian vampire.
ANSWER: ***Dracula***

2. A yearly event in this region typically congregates around the confluence of the Mara and Grumeti Rivers. This region's lone volcano, Ol Doinyo Lengai, is the only one in the world that erupts natro-carbonatite lava. The south of this region contains the large, seasonal Lake Eyasi. Jakaya Kikwete has supported a controversial proposed road through this region. The national park named for this region borders a conservation area named for Ngorongoro crater that contains Olduvai Gorge. The northernmost part of this region is the Maasai Mara in Kenya. For 10 points, name this region of Tanzania that is home to a massive wildebeest migration.
ANSWER: the **Serengeti** [accept **Serengeti** National Park]

3. This artist painted the title artist resting an arm in a crutch with a bottle of wine balanced on his outstretched over-long leg in *The Ghost of Vermeer of Delft Which Can Be Used As a Table*. He pasted a photo of Shirley Temple's head over on top of a red sphinx in another painting. One of his works is just a plaster lobster attached to a telephone, and he made a red sofa shaped like Mae West's lips. This artist painted a flower growing from an egg as the title character stares into a pool in *Metamorphosis of Narcissus*. He collaborated with Luis Buñuel on the films *L'Age d'Or* and *Un Chien Andalou*. For 10 points, name this Spanish surrealist who painted melting clocks in *The Persistence of Memory*.
ANSWER: Salvador **Dalí** [or Salvador Domingo Felipe **Dalí** i Domènech, 1ˢᵗ Marqués de Dalí de Pubol]

4. At one point in this game, a character drinks brandy with an 'emergency induction port,' which is actually just a straw. Another character in this game challenges the player to a shooting contest on the Citadel. In this game, the protagonist's guilt is depicted by dream sequences featuring the voices of comrades killed by the player's decisions. Romanceable characters in this game include Samantha Traynor and Steve Cortez. In this game the player can choose to sabotage the genophage cure, release the Rachni queen, and save the Quarians or the Geth. For 10 points, name this 2012 game with a controversial ending, the final in a series where Commander Shepard fights the Reapers.
ANSWER: ***Mass Effect 3***

5. An embassy in this country was evacuated during Operation Eagle Pull. Nate Thayer interviewed the defendant of a treason trial in this country. In this country, a man known as Comrade Duch operated a facility called S-21 that was located at a former high school. The so-called "New People" were targeted in this country following Year Zero. The GRUNK was a government-in-exile led by this country's deposed king Sihanouk. A regime in this country seized the *USS Mayaguez* and buried its victims in the Killing Fields. For 10 points, name this Southeast Asian nation where Pol Pot led the genocidal Khmer Rouge regime from Phnom Penh.
ANSWER: Kingdom of **Cambodia** [or Democratic **Kampuchea**]

6. John Stuart Mill proposed five methods for use in this field as part of a "Ratiocinative and Inductive" study of it. An area of this field of study defines accessibility relations that hold between different possible worlds. An influential set of six early writings in this field are collected in the *Organon*. Saul Kripke studied the modal type of this discipline. This field is the subject of a "concept script" created by Gottlob Frege. Notations like the universal and existential quantifiers are used in the predicate form of this discipline, which is sometimes called its first-order form. For 10 points, name this field of philosophy that studies reasoning.
ANSWER: **logic** [or modal **logic**; or predicate **logic**; or first-order **logic**]

7. The ratio of two values of this quantity determines the magnitude of the kinetic isotope effect. Dividing the natural log of two by this quantity yields the half-life of a first order reaction. In one equation, this quantity is multiplied by several terms raised to partial orders, and in the Arrhenius equation, this quantity is related to the pre-exponential factor, the gas constant, activation energy, and temperature. For a first-order reaction, this quantity has units of inverse seconds, whereas for a zero-order reaction, it has units of moles per liter per second. For 10 points, name this constant which is used to find the change in the concentrations of the reactants or products, and is symbolized k.
ANSWER: **rate constant** [or **k** until mentioned; do not accept or prompt on "rate" or "reaction rate"]

8. This leader was forced to withdraw the volunteer Blue Legions after the Laurel Incident. This man was controversially buried in the basilica at the Valley of the Fallen. Propaganda adopted by this leader included the anthem "Facing the Sun" and the symbol of a yoke with five arrows. He is sometimes accused of being involved in the plane crashes that killed his allies Jose Sanjurjo and Emilio Mola. This general defeated Abd el-Krim in the Rif War. The Condor Legion was sent to assist this man's forces and carried out the bombing of Guernica on his orders. For 10 points, name this leader of the Falange, a "generalissimo" who was succeeded by King Juan Carlos after ruling Spain for several decades.
ANSWER: Francisco **Franco** Bahamonde

9. This substance accumulates in the bodies of patients whose receptors for this substance's carriers are unable to recognize apoprotein B100. Drugs that inhibit the synthesis of this substance target HMG-CoA reductase, which catalyzes the formation of mevalonate. This derivative of squalene is a precursor of estrogens, androgens, and other steroid hormones. This molecule maintains the fluidity of the plasma membrane at low temperatures. High levels of this compound can build up in arteries and form plaques, leading to myocardial infarctions and strokes. For 10 points, name this lipid substance, whose "good" and "bad" kinds are carried by HDLs and LDLs, respectively.
ANSWER: **cholesterol** [or **3-beta-cholest-5-en-3-ol**]

10. A character in this play sarcastically claims to be a "tsar of the underworld" in a speech in which he calls another character a "babbling old witch." This play features two scenes in which a woman sells subscriptions to *The Companion* over the phone. It is revealed that a character in this play has been visiting the penguins at the zoo instead of going to Rubicam's Business College. In the last scene, this play's protagonist is told to "blow the candles out" by the narrator, her brother Tom. That protagonist of this play was nicknamed "Blue Roses" by a "gentleman caller" named Jim O'Connor. For 10 points, name this Tennessee Williams play titled for Laura Wingfield's collection of statuettes.
ANSWER: The **Glass Menagerie**

11. A ruler of this region dealt with a revolt by tying the citizens of Liège together and dumping them in a river. Nicolas Rolin was the chancellor to a ruler of this region who tried to organize a crusade against the Turks at the Feast of the Pheasant. After thugs from this region murdered Louis of Orleans, the Armagnac faction declared war on a ruler of this region, John the Fearless. A duke of this region organized the League of the Public Weal against Louis XI and was killed at the Battle of Nancy. That man was Charles the Bold. Soldiers from this region under Duke Philip the Good ransomed Joan of Arc to the British. For 10 points, name this former duchy, a region in France that is known for its namesake dark red wine.
ANSWER: Duchy of **Burgundy** [or Duché de **Bourgogne**]

12. A fictional character from this country living in Paris is abandoned by the Serpent Club, and begins to confuse Talita, the wife of his friend Manolo Traveler, with his former lover, La Maga. A novel from this country includes long footnotes on psychological theories about homosexuality, and is written as a dialogue between two prisoners telling each other old film plots. A novel from this country has a "table of instructions" that lets the reader jump around chapters like in a certain children's game. This country was home to the authors of *Kiss of the Spider Woman* and *Hopscotch*. For 10 points, name this South American country home to Manuel Puig and Julio Cortazar.
ANSWER: **Argentina** [or **Argentine Republic**; or Republica **Argentina**]

13. Near the opening of one film, this actor's character famously says "there are some things a man just can't run away from"; later in that film, he notes "Well, I guess you can't break out of prison and into society in the same week." Another of his characters shoots three charging men after being told he's full of "bold talk for a one-eyed fat man." He was the first film actor to play a character who is hired to kill Tom Chaney by the Kim Darby-played fourteen-year-old girl Mattie Ross to avenge her father's death. For 10 points, name this actor who played Rooster Cogburn in *True Grit* and the Ringo Kid in *Stagecoach*, and starred in many other Westerns.
ANSWER: John **Wayne** [or Marion Mitchell **Morrison**; or Marion Robert **Morrison**]

14. These entities can be used to arbitrarily closely approximate a continuous function on a closed interval according to the Stone-Weierstrass theorem. These functions intersect at knots in splines, which are constructed piecewise from them for purposes of interpolation. A method named for Cardano demonstrates how to find the solutions to one subclass of this family of functions, and Abel and Ruffini proved there was no general solution to them when their degree was greater than four. For 10 points, name these functions which consist of a sum of coefficients times powers of a variable, such as "x-cubed plus two-x-squared minus one."
ANSWER: **polynomial**s

15. In the primaries prior to this election, a candidate lost one state by a large margin after stating "the good news [for my wife] is that she campaigns in California while I campaign in New Jersey." During the Democratic primaries prior to this election, a candidate mocked his opponent with the phrase "where's the beef?" The Republican candidate in this election used the slogan "Morning Again in America" to champion his successful economic programs. The Democratic loser of this presidential election selected Geraldine Ferraro as his running mate. For 10 points, name this election in which Walter Mondale lost in a landslide to the incumbent Ronald Reagan.
ANSWER: United States Presidential Election of **1984** [prompt on "84"]

16. In a scene from act three of this opera, staccato flute arpeggios represent the sound of the "celestial harmony" that the title character hallucinates. At the end of that scene, the title character of this opera is accompanied only by the flute and has to sing a high F. This opera's second act ends after the title character reluctantly signs a marriage contract, with the sextet -"Chi mi frena." After the title character of this opera stabs her husband Arturo, she imagines being married to Edgardo in a scene beginning "Il dolce suono...." For 10 points, name this Gaetano Donizetti opera based on a Walter Scott novel, in which the title character has a "mad scene."
ANSWER: ***Lucia di Lammermoor***

17. In the mythology of this country, an apprentice burns a man's body after six and a half days, which forces that man to take up the body of a dead beggar and use an iron crutch. The first man in this country's mythology was a primitive horned giant who was born from an egg and separated the earth and sky. According to this country's mythology, the havoc that ten suns wreaked on the earth forced an archer to shoot nine of them down, and that archer's wife floated to the moon after she drank the elixir of immortality. For 10 points, name this country whose mythology includes stories about the Eight Immortals and the Three Pure Ones, one of whom is the Jade Emperor.
ANSWER: **China** [or **Chinese** mythology; or **Zhonghua**; or **Zhongguo**]

18. In one work by this author, the first title character meets the second title character while the latter is sleeping near the Sphinx. Towards the end of one of his plays, a scholar of Greek announces that he is a foundling and is thus eligible to inherit a certain business. In that play by this author of *Caesar and Cleopatra*, the title character is engaged to Adolphus Cusins and is disappointed when the Salvation Army accepts money from a whiskey distillery and an arms manufacturer, Andrew Undershaft. For 10 points, name this Irish playwright of *Major Barbara* who wrote about Henry Higgins's bet over whether he can teach Eliza Doolittle to forget her Cockney accent in *Pygmalion*.
ANSWER: George Bernard **Shaw**

19. A book defining the measurement of these phenomena was written by Arthur Burns and Wesley Mitchell. Hyman Minsky proposed that these phenomena are generated endogenously in his financial instability hypothesis. A proposed long-term version of this concept was named in honor of Nikolai Kondratiev, and another type is named for Simon Kuznets. A book defining various lengths of these events was written by Joseph Schumpeter. The National Bureau of Economic Research claims an average length of six years for these phenomena, with the most recent one beginning in 2009. For 10 points, identify these alternating periods of growth and decline in the economy.
ANSWER: **business cycle**s [prompt on answers like "economic cycles" or "boom and bust cycles"; prompt on "recessions" or "depressions" or similar answers]

20. This scientist's prediction of an aperiodic crystal containing genetic code inspired Watson and Crick, who had read his book *What is Life?* A PDE named for this physicist includes a multiplicative minus h-bar-squared over 2 mu times Laplacian plus potential energy term. That is the one-particle case of an equation stating i h-bar d-psi dt equals Hamiltonian times the wavefunction, this man's namesake time-dependent equation. One of this man's thought experiments attacks the Copenhagen interpretation of quantum mechanics by considering a box containing a Geiger counter and vial of poison. For 10 points, identify this physicist whose namesake cat is both dead and alive.
ANSWER: Erwin **Schrödinger** [or Erwin Rudolf Josef Alexander **Schrödinger**]

Extras

During one of these events in Derby, villagers placed coins in the Vinegar Stone. Nathaniel Hodges described one of these events in the treatise *Loimologia*. After one of these events, demographer John Graunt published an analysis of the Bills of Mortality. In response to one of these events, the unpopular Statute of Laborers was issued. One of these events was said to make people "cruel as dogs to one another" by a man who also chronicled the Great Fire, Samuel Pepys. Another of these events inspired processions of Flagellants across Europe. For 10 points, name these outbreaks of a certain disease, the most famous of which was called the Black Death.
ANSWER: bubonic **plague**s [or **Black Death** before mentioned; or Great **Plague** of London]

<Do not read if Colonel By A + Ottawa packet has been read>
One play by this author opens with a man happily repeating the word "spool" when he finds a recording he made when he was 39 years old. That play, written for the actor Patrick Magee, features an old writer reminiscing bitterly on his younger self. One of this author's characters delivers a winding speech repeating phrases like "Testew and Cunard" and "the stones" and "the skull" after another man places a hat on his head and commands him to think. In a play by this author of *Krapp's Last Tape*, Lucky and Pozzo meet Vladimir and Estragon, who consider hanging themselves if the title character does not show up. For 10 points, name this Irish playwright of *Waiting for Godot*.
ANSWER: Samuel **Beckett** [or Samuel Barclay **Beckett**]

Bonuses

1. Just like the characters in the *Kalevala*, this man's tale is told in trochaic tetrameter. For 10 points each:
[10] Identify this son of the wind Mudjekeewis, who bests the evil Pearl-Feather and tells his people to accept Christianity.
ANSWER: **Hiawatha**
[10] *The Song of Hiawatha* was penned by this 19th century American poet, who also wrote "Paul Revere's Ride."
ANSWER: Henry Wadsworth **Longfellow**
[10] In this other Longfellow poem, the title character is separated from her lover Gabriel when the Acadians are kicked out of their homeland. They re-unite just in time for him to die.
ANSWER: ***Evangeline***

2. This man ordered the flogging of his 70 year-old mother because he believed she was conspiring against him. For 10 points each:
[10] Name this South American president whose grave was dug by his mistress Eliza Lynch after he died at the Battle of Cerro Cora.
ANSWER: Francisco **Solano Lopez**
[10] Solano Lopez sparked the War of the Triple Alliance by invading this country's Mato Grosso province. This Portuguese-speaking country was ruled by two emperors named Pedro from Rio de Janeiro.
ANSWER: **Brazil**
[10] Bolivia became a landlocked country after losing this other 19th-century war to Chile. This war, which was ended by the Treaty of Ancon, was fought over deposits of guano and saltpeter in the Atacama desert.
ANSWER: War of the **Pacific** [or Guerra del **Pacifico**]

3. Name the following cuts of beef, for 10 points each.
[10] This extremely tender cut is taken from the small end of the tenderloin. It is usually both rather expensive and kind of small.
ANSWER: **filet** mignon [or **filet** de bœuf; or petit **filet**]
[10] This cut comes off the shoulder of the cow. Because it is nice and fatty, it is often used in ground beef and pot roast.
ANSWER: **chuck** steak
[10] This flat cut is taken off the diaphragm of the cow, as part of the "plate" cut. It, like flank steak, is rather flat, and is often used in making fajitas [fuh-HEE-tuhs].
ANSWER: **skirt** steak

4. Answer the following about exciting feuds in the history of science, for 10 points each.
[10] Newton and Leibniz feuded over who actually invented this mathematical discipline. Newton's method of fluxions is equivalent to this field's operation of differentiation.
ANSWER: **calculus**
[10] Idiotic French revolutionary Jean-Paul Marat advanced a number of bogus theories refuted by this scientist, who figured out oxygen aids in combustion. The price of success? His head, in 1794.
ANSWER: Antoine-Laurent de **Lavoisier**
[10] The hilariously named Othniel Charles Marsh and his rival Edward Drinker Cope spent their whole lives trying both to ruin each other's reputations and find more of these objects.
ANSWER: dinosaur **fossil**s [or **bone**s; prompt on "**dinosaur**s"]

5. Answer the following about the study of child psychology, for 10 points each.
[10] This Stanford professor studied how toddlers exhibited greater aggression after seeing adults act aggressively in his Bobo doll experiment.
ANSWER: Albert **Bandura**
[10] The Bobo doll experiment was a foundational study of the "social" type of this developmental process. The social form of this process describes how it can be accomplished through observation without any reinforcement.
ANSWER: **learning** [accept word forms]
[10] This Soviet Russian psychoanalyst described "zones of proximal development" that define what children can do with or without outside help in the learning process.
ANSWER: Lev Semyonovich **Vygotsky**

6. This quantity can be calculated as the square of the momentum divided by twice the mass. For 10 points each:
[10] Name this type of energy that an object possesses due to its motion. For a non-rotating object this quantity can be calculated as one half mass times velocity squared.
ANSWER: **kinetic** energy
[10] This operator in classical mechanics is equal to the sum of kinetic energy and potential energy.
ANSWER: **Hamiltonian**
[10] This man names a theorem in Hamiltonian mechanics which states that the density of particles in phase-space is a constant. This French mathematician also proved that every bounded, entire complex function is constant.
ANSWER: Joseph **Liouville**

7. This leader used BBC radio to broadcast a speech called the Appeal of 18 June. For 10 points each:
[10] Name this leader of French resistance during World War II who later served as the first president of the Fifth Republic.
ANSWER: Charles **de Gaulle**
[10] Graffiti depicting de Gaulle as "the shit-in-the-bed" appeared during student protests in May of this year. The Prague Spring also occurred in this year.
ANSWER: **1968** [prompt on "**68**"]
[10] As president, de Gaulle also faced the Algerian war of independence, which was ended by this treaty. These "accords" were opposed by the right-wing OAS.
ANSWER: **Evian** Accords

8. Name some things that have happened to Midwestern rivers, for 10 points each.
[10] By the 1960s, Ohio's Cuyahoga ["kye-uh-HOE-guh"] River was so polluted that it regularly experienced this kind of unusual event.
ANSWER: it caught on **fire** [accept equivalents like "it **burn**ed"]
[10] As part of the project to create the Chicago Sanitary and Ship Canal, this engineering feat was performed on the Chicago River.
ANSWER: **reversing** its flow [accept equivalents like "they made it **flow** in the **opposite** direction"]
[10] This kind of natural disaster happens regularly along the Mississippi River, such as in 2011, when this kind of event killed almost 400 people. Cities are often sandbagged to protect against these disasters.
ANSWER: **flood**ing [accept equivalents like "**overflowing** its banks" or just "**floods**"]

9. This man designed the similar Bridge of Strings in Jerusalem and Sundial Bridge at Turtle Bay in Redding, California. For 10 points each:
[10] Name this controversial architect, known for his cantilever-spar cable-stayed bridges, who designed the tallest building in Sweden, the Turning Torso in Malmö.
ANSWER: Santiago **Calatrava** Valls
[10] This other architect designed the Park Güell and the Casa Milà as well as the still-unfinished Sagrada Família.
ANSWER: Antoni **Gaudí** i Cornet
[10] Both Santiago Calatrava and Antoni Gaudí were born in this country.
ANSWER: Kingdom of **Spain** [or Reino de **España**]

10. This denomination adheres to a set of texts called the "Twenty-Five Articles". For 10 points each:
[10] Name this Christian denomination founded by John Wesley. It focuses on the personal relationship with God rather than a formal theology.
ANSWER: **Methodism** [or the **Methodist** Church]
[10] Another influential early Methodist preacher was George Whitefield, who was a leader of the first of these widespread religious revivals in America.
ANSWER: **Great Awakening**s [or First **Great Awakening**]
[10] Wesley was influenced by this religious movement that emphasized the saving nature of grace for all humans. Its rise to prominence was condemned by the Dutch Reformed Church in the Synod of Dort.
ANSWER: **Arminian**ism

11. *Note to Moderator*: *Do NOT read the alternate answers to the first part aloud*
Arnold Schoenberg said that the finale of this work "start[s] with a cry and end[s] with a moan." For 10 points each
[10] Name this B-minor symphony, its composer's last. The second movement of this symphony is a "limping" waltz in 5 4 time.
ANSWER: "**Pathétique**" Symphony [or **Tchaikovsky**'s **6**th Symphony in B minor, Opus 74]
[10] The "Pathétique" symphony was written by this composer, who also wrote the *Marche Slave* and the *1812 Overture*.
ANSWER: Pyotr Illyich **Tchaikovsky** [accept "Peter" instead of "Pyotr"]
[10] Eduard Hanslick said that this D-major Tchaikovsky work "stinks to the ears," perhaps referring to places in the first movement with the theme over a trumpet fanfare. Its solo part was written for Leopold Auer.
ANSWER: **Violin Concerto** in D Major, **Opus 35** [accept either underlined part]

12. The heroine of this play is saved from having to serve as a priestess for King Thoas when her brother Orestes arrives with Pylades. For 10 points each:
[10] Name this play in which Artemis saves a daughter of Agamemnon from being sacrificed by replacing her with a deer and whisking her away to a region on the Crimean peninsula.
ANSWER: *Iphigenia in Tauris* [or *Iphigenia Among the Taurians*]
[10] In this tragedy by the author of Iphigenia in Tauris, Dionysus gets revenge on Agave by driving her and many other women mad and making them rip apart Agave's son, King Pentheus.
ANSWER: The *Bacchae* [or The *Bacchantes*]
[10] This author of *Iphigenia in Tauris* and *The Bacchae* was regarded as one of the three great tragedians of Athens.
ANSWER: **Euripides**

13. This man resigned from his position as Secretary of War just before the House deliberated articles of impeachment. For 10 points each:
[10] Name this man who was accused of receiving kickbacks from Caleb Marsh, whom this man appointed to operate the Fort Sill trading post in 1870.
ANSWER: William **Belknap**
[10] William Belknap resigned during the scandal-ridden presidency of this former general who succeeded Andrew Johnson. His Secretary of State, Hamilton Fish, was able to defuse the Virginius Incident with Spain.
ANSWER: Ulysses S. **Grant** [or Hiram Ulysses **Grant**]
[10] In this Grant administration scandal, distillers of the namesake drink bribed government officials to avoid paying taxes. Grant's Private Secretary, Orville Babcock, was implicated in this scandal.
ANSWER: **Whiskey Ring**

14. This man laments the death of a friend who is cursed by the gods, and afterwards becomes fearful of death himself and seeks out Utnapishtim, the survivor of a great flood. For 10 points each:
[10] Name this divine king whose tyrannical rule over the city of Uruk leads the gods to create the wild man Enkidu to oppose him. He is the namesake of an ancient Sumerian epic.
ANSWER: **Gilgamesh** [or *Epic of **Gilgamesh***]
[10] Enkidu is tamed by Shamhat, who is a devotee of this goddess. This goddess asks her parents Anu and Antu to send the Bull of Heaven to attack Gilgamesh in revenge for his rejection of her romantic advances.
ANSWER: **Ishtar** [or **Inanna**]
[10] Gilgamesh and Enkidu go on a quest to defeat this ogre, whom Enlin created to guard the Cedar Forest. Enlil is angry over the killing of this monster, and exacts revenge by killing Enkidu.
ANSWER: **Humbaba** [or **Huwawa**]

15. This setup enables a set of reactants to be heated for a long time without any loss of mass. For 10 points each:
[10] Name this laboratory procedure in which liquid reactants are boiled, cooled, and then heated again after returning to the original mixture.
ANSWER: **reflux** [accept word forms]
[10] This physical process occurs in the heated reactants after they pass the reflux ring. An example of this exothermic phase change is the formation of dew on windowpanes.
ANSWER: **condensation** [accept word forms]
[10] A reflux setup is often used when preparing these functional groups in a reaction named for Emil Fischer. In that reaction, these functional groups are produced by reacting a carboxylic acid and alcohol in reflux.
ANSWER: **ester**s [or **ester**ification]

16. A more recent painting depicts three cross-dressing founding fathers standing in front of this painting. For 10 points each:
[10] Name this huge Emanuel Leutze painting. It includes anachronisms like an old version of the American flag.
ANSWER: ***Washington Crossing the Delaware***
[10] *Washington Crossing the Delaware* hangs in the background of *Daughters of Revolution*, which was painted by this American artist. He depicted his sister and his dentist in front of the Dibble House in *American Gothic*.
ANSWER: Grant DeVolson **Wood**
[10] Wood was a member of this American art movement, along with John Steuart Curry and Thomas Hart Benton. This movement focused on realistic depictions of the Midwest.
ANSWER: American **Regionalism** [accept word forms]

17. A member of this school distinguished between "the way of truth" and "the way of opinion" in his philosophical poem *On Nature*. For 10 points each:
[10] Name this ancient school of philosophy that believed that everything was composed of one universal pantheistic substance. Its members included Parmenides and Zeno.
ANSWER: **Elea**tic school
[10] Zeno of Elea was famous for creating many of these scenarios that result in absurd conclusions. An example of one of them is the claim that since an arrow must not be moving at any given instant, it cannot move at all.
ANSWER: **paradox**es
[10] Another of Zeno's paradoxes states that this hero can never overtake a tortoise in a footrace in which the tortoise has a head start, since he will always need some time to reach the tortoise's previous position.
ANSWER: **Achilles**

18. Though it is carcinogenic, ethidium bromide is often used as a dye when performing this technique. For 10 points each:
[10] Identify this laboratory procedure in which an electric current is run through an agarose or polyacrylamide gel to separate samples of protein, DNA, or RNA.
ANSWER: gel **electrophoresis**
[10] Gel electrophoresis is performed before this technique, which is used to identify proteins. It is named after a similar technique used to detect particular stretches of DNA.
ANSWER: **Western** blot [accept **protein immunoblot**]
[10] Early Western blots often used milk as the "blocking" type of these substances. The sponge and filter paper are immersed in the "transfer" type of these substances when moving the protein from a gel to a PDVF membrane.
ANSWER: **buffer**s

19. This character is told "As flies to wanton boys are we to the gods. They kill us for their sport," and later leads a blind character to some imaginary cliffs. For 10 points each:
[10] Name this character from a Shakespeare play. He is the son of the Earl of Gloucester and the half-brother of Edmund, who he fatally wounds in the final scene.
ANSWER: **Edgar**
[10] Edgar appears in this Shakespearean tragedy. The title character goes mad after dividing his kingdom and losing the respect of his children.
ANSWER: ***King Lear***
[10] Near the beginning of the play, King Lear's daughters are given a chance to tell him how much they love him, in order to inherit land. Cordelia refuses to speak; name either of her two sisters who choose to lie and get estates.
ANSWER: **Regan** or **Goneril**

20. While trapped in a cave in Yodfat, this man survived a suicide pact in which every third person standing in a circle was killed. For 10 points each;
[10] Name this Jewish historian became a friend to and translator for the Roman emperor Titus. His works include *The Jewish War* and *Against Apion*.
ANSWER: **Josephus**
[10] Before becoming emperor, Titus had led the sacking of this holy city in Judea, which resulted in the destruction of its Second Temple.
ANSWER: **Jerusalem** [or **Yerushalayim**; or al-**Quds**; or **Aelia Capitolina**]
[10] Titus was the son of this Roman emperor, whose last words were "I think I'm turning into a god." This founder of the Flavian dynasty took power at the end of the Year of the Four Emperors.
ANSWER: **Vespasian** [or Titus Flavius Caesar **Vespasianus** Augustus]

Extra

These sites generally are located at convergent plate boundaries. For 10 points each:
[10] Identify this type of region, where one slab of lithosphere slides under the other. Earthquakes often happen in their Wadati-Benioff zones.
ANSWER: **subduction zone**s
[10] When an oceanic plate collides with a continental plate, it is generally the one to undergo subduction, because it is primarily composed of this rock which is denser than continental granite.
ANSWER: **basalt**
[10] The deepest-focus earthquakes are generally no deeper than the bottom of this section of the mantle, which stretches from about 400 to 660 kilometers. It separates the upper and lower mantle.
ANSWER: **transition zone**