1. The artist said of one object in this painting that "in order for its mystery to be evoked, another immediately familiar object without mystery...was joined." The artist of this painting expressed a desire to see it displayed at the bottom of a staircase, so it could stab guests on their way to the ballroom, possibly with the dagger found in the double meaning of this painting's original title. This painting's setting was modeled on the dining room of art collector Edward James. It drew from its artist's earlier work *Not To Be Reproduced* to bring back its gigantic mirror, which sits atop a mantelpiece with two candlesticks and a clock. For 10 points, name this canvas in which a train juts out of a fireplace by Rene Magritte.
ANSWER: ***Time Transfixed*** [or La ***Duree poignardee**]*

2. Herbert Gruhl and Petra Kelly led a party with this name in Germany that merged with Alliance '90. The co-founder of a party by this name in France, Ginette Skandrani, was removed for her Holocaust denialism. The pan-European party of this name is currently paired with the European Free Alliance in the European parliament. From 1998 to 2005, this party in Germany was led by Joschka Fischer in a coalition government with the Social Democrats, and that party's current leader is the first ethnic Turk to head a political party in Germany. These parties started in the 1970s, when high oil prices led to an increase in the construction of nuclear power plants. For 10 points, give this name common among political parties with an environmental focus.
ANSWER: **Green** Party [or Die **Grünen**]

3. These beings can be summoned by a sacred rattle known as the asson. Subgroups of them include the older ones called "Rada" and the more warlike ones called "Petro." One of these beings who protects children holds an apple in his left hand and has a cigar in his mouth. Another of these beings resembles an old man wearing a straw hat and is found at the crossroads between humanity and the other types of these beings. A notorious one of them is married to Maman Brigitte and wears a top hat. These beings are intermediaries between humans and the creator god, Bondye. They include Papa Legba and Baron Samedi. For 10 points, name these spirits in voodoo.
ANSWER: **loa**s [do not accept "gods"]

4. Some islands in this country feature the fa abua system, in which valuables are given as compensation for the violation of unwritten rules. This country's largest province is Malaita, which is centered at Auki. Ironbottom Sound is south of Florida Island and Savo Island in this country, which contains a body of water that was called "the Slot" by soldiers in World War II. East of Papua New Guinea, it encompasses the New Georgia Sound, which runs through its middle between Bougainville and Guadalcanal. For 10 points, name this country in Oceania formed out of almost one thousand islands and whose capital is Honiara.
ANSWER: **Solomon Islands** [or **Solomons**]

5. One variant of this assay developed by Czerkinsky is used to find cells that release particular cytokines by spotting cells onto a membrane. Plates used for this procedure can be used to pan phage display libraries. Like a western blot, this assay can use bovine serum albumin as a blocking agent. The results of this assay are often reported as an index value with a pre-set cutoff. This assay can be made quantitative if a checkerboard titration is used beforehand. Variations of this assay include one in which antigen is added to an adsorbed antibody and another in which serum is added on top of already-adsorbed antigen; those are the sandwich and indirect forms. This assay uses a microtiter plate. For 10 points, name this assay used to find serum antibody concentrations or the presence of a particular antigen, commonly known by a five-letter acronym.

ANSWER: **ELISA** [or **Enzyme-linked Immunosorbent Assay**; or **ELISPOT**]

6. In a collaboration with Anthony Braxton and Lee Konitz, this musician revived a standard that he composed in thirty minutes in response to his bandmate's complaint that they didn't play enough original music. This musician's sacred music includes a cantata that combines quotations from Hillel and the Torah with speeches by Dr. King, known as *The Gates of Justice*. He composed the standard "In Your Own Sweet Way" and headed the group that recorded *At Carnegie Hall*, which featured Joe Morello on drums, Eugene Wright on double bass, and Paul Desmond on alto sax and produced "Blue Rondo a la Turk" and "Take Five." For 10 points, name this jazz musician whose quartet experimented with time signatures on their album *Time Out*.

ANSWER: Dave **Brubeck** [or David Warren **Brubeck**]

7. One form of this phenomenon accounts for the one-half term reconciling the doublet separation in hydrogen fine structure with the Landé g factor. This phenomenon is the observable result of frame-dragging on a particle near a large mass. Pure forms of it occur when nutation is constant. Classically, the frequency of this phenomenon can be calculated as the spin torque divided by the angular momentum of the larger rotation. Relativistic forms of this phenomenon are named for de Sitter and Thomas. The rate of this phenomenon for the perihelion of Mercury was an important verification of general relativity. It occurs in torque-free and torque-induced forms. For 10 points, name this phenomenon in which the axis of rotation changes orientation.

ANSWER: **precession** [or Thomas **precession**; or de Sitter **precession**]

8. One poem in this collection alludes to "a penniless rake who with kisses and bites tortures the breast of an old prostitute." That poem begins, "Folly, error, sin, avarice occupy our minds and labor our bodies." Another poem in this collection repeatedly implores the "wisest and fairest of the angels" betrayed by God to "take pity on my long misery!" The poet compares himself to a ridiculed bird whose giant wings prevent him from walking on land in another poem in this collection. This collection including "The Litanies of Satan" and "The Albatross" is divided into sections including "Death," "Wine," and "Spleen and Ideal." For 10 points, name this seminal poetry collection by Charles Baudelaire.

ANSWER: Les *Fleurs du Mal* [or The *Flowers of Evil*]

9. This language conjugates verbs according to "screeves," a setting encapsulating tense, aspect, and mood. Despite being nominative-accusative, its speakers can use a word-final "-m" to decline nouns in the ergative case. It contains a word meaning "you peel us" which is one syllable long and begins with an eight-consonant cluster, "gvprtskvni" (giv-purt-skiv-nee). This language, whose modern writing uses the 33-character mkhedruli alphabet, was used to write the epic *The Knight in the Panther's Skin*. Family names in this plosive-heavy Kartvelian language usually end in "-adze" or "-shvili." For 10 points, name this language spoken near the unrelated languages of Abkhaz and Ossetic in the Caucasus, the first language of Joseph Stalin.
ANSWER: **Georgian** language [or **Kartuli**]

10. A participant in this event named Otto later sought absolution from a vow he took from Honorius III. Some participants in this event may have assembled during the Lendit fair at Saint-Denis, where one leader of this event was a shepherd who supposedly performed miracles. Another leader of this event claimed that the seas would part, disappointing his followers when it failed to do anything at Genoa. Its leaders included Nicholas of Cologne and Stephen of Cloyes. Participants in this event were legendarily sold into slavery in Africa after its failure. For 10 points, name this 1212 "crusade" in which a larger number of young people proposed a conquering of the Holy Land.
ANSWER: **Children's** Crusade

11. Matthew Arnold took the phrase "sweetness and light" from a book by this writer, in which a brawl ensues after Aesop tells the Fable of the Spider and the Bee. He devised the name "Vanessa" to refer to Esther Vanhomrigh, the subject of his *Cadenus and Vanessa*. This author represented Martin Luther, John Calvin, and St. Peter as three brothers who inherit coats from their father in a defense of Anglicanism. A race of talking horses called the Houyhnhnms was created by this author of *The Battle of the Books* and *A Tale of a Tub*. For 10 points, name this Irish satirist who wrote "A Modest Proposal" and *Gulliver's Travels.*
ANSWER: Jonathan **Swift**

12. This woman is saved from a spell after her husband threatens to hang a pregnant mouse in public. This woman is trapped after touching a golden bowl inside a castle, after which the castle disappears in a cloud of mist. This woman's attendants smear dog blood on her mouth to frame her for a crime; she then does penance by sitting near a horseblock. Originally betrothed to Gwawl, she is won after her first husband invents the game of Badger-in-the-Bag. This woman, who is first seen riding a white horse, may be syncretized with the goddess Epona. She was eventually reunited with her golden-haired son Pryderi, whose father was Pwyll. For 10 points, name this woman from Welsh mythology.
ANSWER: **Rhiannon**

13. In one of this author's plays, a TV host films an unsuccessful segment about his Pritzker Prize-winning best friend, who later confides to him his sexual deviance. A low-flying plane frequently interrupts the conversation in another of his plays, which opens shortly after Nancy and Charlie finish their beach picnic. In another play by this man, a woman interprets a story about Mousie to be about her "hysterical pregnancy" in the section "Walpurgisnacht." That play focuses on increasingly traumatic games, like "Get the Guests" and "Bringing Up Baby." Leslie and Sylvia, two lizards, appear in this man's play *Seascape.* For 10 points, name this playwright who wrote about George and Martha in *Who's Afraid of Virginia Woolf?*
ANSWER: Edward Franklin **Albee**

14. In bacteria, the RuvABC complex facilitates this process. It involves the formation of DSBs by Spo11 (ess pee oh eleven), a member of the MRN complex, in eukaryotes. The coefficient of coincidence measures the probability that this phenomenon occurs twice. This process can be extended via a branch migration. A tetrahedral structure called a Holliday junction forms during this process. The distance over which the probability of this phenomenon occurring equals one percent is called a centimorgan. During this process, a synaptonemal complex is formed at the chiasmus. It occurs during the pachytene stage of prophase I. For 10 points, name this method of genetic recombination in which chromosomes exchange genetic material.
ANSWER: chromosomal **crossover** [or **crossing over**; accept word forms; prompt on "genetic recombination"]

15. In one novel by this author, Usaph Bumpass becomes a soldier in Stonewall Jackson's army during the Civil War. In another novel by this author, the protagonist marries a girl from the Home of Wayward Girls, who cheats on him. This author of *Confederates* described a half-white man who has an affair with the servant girl Gilda and goes on a murderous rampage in response to racism. He also wrote about a womanizing ammunitions manufacturer who visits Amon Goeth in the Krakow and Plaszow camps and saves over one hundred of his factory workers, who are all Jews. For 10 points, name this Australian author of *The Chant of Jimmie Blacksmith* and *Schindler's Ark*.
ANSWER: Thomas **Keneally**

16. For macromolecules, two different kinds of this quantity are required in order to use the Flory convention. Another kind of this quantity is given by the formula alpha over quantity l times c; that quantity is negative for an L-isomer and positive for a D-isomer. For two sterically hindered groups, this quantity is minimized in the gauche conformation and maximized in the anti confirmation, whereas for any two adjacent groups, this quantity is minimized in the eclipsed and maximized in the staggered conformation in Newman projections. The Ramachandran plot for a given amino acid yields all the possible combinations of two dihedral ones. In tetrahedral molecules, this quantity assumes the unusual value of 109.5. For 10 points, name this quantity that, for a linear molecule in VSEPR geometry, is 180 degrees.
ANSWER: **angle** [or **dihedral angle**; or **torsion angle**; or **bond angle**; or **specific rotation**]

17. William Pulteney led a faction within this leader's party that opposed his measures called the "patriot boys," who satirized this man's policies in *The Craftsman*. This man used Francis Atterbury's plot to kidnap the royal family to label his opponents as traitors. A leading member of the Kit-Cat Club, this man chaired the secret committee that impeached Viscount Bolingbroke for treason. Despite initial opposition, this creator of the "sinking fund" was prodded into declaring war on Spain in the War of Jenkins' Ear. This man originated the use of the residence at 10 Downing Street by holders of his highest office. For 10 points, name this politician commonly considered the first prime minister of Britain.
ANSWER: Robert **Walpole**

18. This number is the lowest allowed branch label for Dynkin diagrams. This number is the order of the smallest finite field. The continuum hypothesis states that there is no cardinal number between aleph-null and this number raised to the power of aleph-null. An idempotent matrix raised to this power equals itself. The zeta function for this value converges to pi squared over six. The Gauss-Markov theorem shows under certain conditions that minimizing the sum of residuals raised to this power gives the best linear unbiased estimator. For convex polyhedra, the number of vertices minus edges plus number of faces is equal to this number. For 10 points, identify this degree of polynomials that can be solved with the quadratic equation.
ANSWER: **two**

19. James Hammond claimed that a society without this practice may as well build "a house in the air" in a speech that outlined his "mudsill theory" to explain it. George Fitzhugh defended it in works like *Cannibals All!*. Opposing a resolution about discussing this practice led to John Quincy Adams receiving an ivory cane with "Right of Petition Triumphant" engraved on it. Wendell Phillips gave a speech at Faneuil Hall praising a man who was killed for opposition to this practice; that man was Elijah Lovejoy. Other opponents of it included Phillips' colleague, William Lloyd Garrison. For 10 points, name this "peculiar institution" ended in the United States by the Thirteenth Amendment.
ANSWER: American **slavery** [or obvious equivalents]

20. One of these works by this composer commemorated an eruption of Vesuvius. Another of these works by this composer pitted against an Offenbach piece at the "Concordia Ball" was given the nickname *Morning Papers*. The opening bars of another of these works by this composer were scribbled with the words "Alas, not by Johannes Brahms" on a postcard. Several of them are marked as laendler-style, including one which features a virtuoso zither solo. They include the originally choral *Wine, Woman, and Song* and one that opens with A major tremolo violins that plays during the space station docking sequence in *2001: A Space Odyssey*. For 10 points, name these 3/4 pieces, such as *The Blue Danube*, composed by a Viennese "king."
ANSWER: **waltz**es by **J**ohann **Strauss Jr.** [accept **J**ohann **Strauss II**, **J**ohann **Strauss the Younger**, or **J**ohann **Baptist Strauss**; prompt on partial answer]

21. In this poem, one character spreads her apron to receive the light of the moon "dragging the whole sky with it to the hills." Another character in this poem is haunted by his failure to dissuade a boy named Harold from pursuing a college education. That character is described as having "nothing to look backward to with pride, and nothing to look forward to with hope." In this poem's most famous lines, one character mutters to his wife that "Home is the place where, when you have to go there, they have to take you in." For 10 points, name this Robert Frost poem in which Warren brusquely reports his discovery of the corpse of Silas, the title laborer.
ANSWER: "The **Death of the Hired Man**"

22. On June 11, 2013, the co-founder of a political party in this country took back his resignation a day after quitting all of his positions in that party. That politician from this country resigned after his party chose a controversial new campaign committee chairman and was talked back by the RSS. This country is not Colombia, but it is negotiating a free trade agreement with Israel, from which it is hoping to learn more about water management. This country may have a Third Front formed to oppose its two largest coalitions in time for the 2014 Lok Sabha elections. For 10 points, name this country with BJP and Congress parties that is currently led by Manmohan Singh.
ANSWER: Republic of **India** [or **Bharat**iya Ganarajya]

23. This man's wife, Lucy, was responsible for his gaining the land held by the Waldo Patent, which allowed this man to build in Thomaston, Maine, his estate Montpelier. Silas Deane failed in his attempt to replace this man in one role by recruiting the Frenchman du Coudray. In that role, this general led such men as du Plessis, whose troops almost single handedly repulsed a British advance at the Battle of Monmouth. The seizure of Dorchester Heights occurred after an action in which this man made use of boats, sleds, and ox carts to transport cannon from Fort Ticonderoga to Boston. For 10 points, name this general during the American Revolution who also served as the first Secretary of War.
ANSWER: Henry **Knox**

1. This poet was killed by the Guardia Civil, who resented this man for a satirical poem he wrote about them in the lead-up to the Spanish Civil War. For 10 points each:
[10] Name this Spanish poet and playwright who wrote *Yerma* and *Blood Wedding.*
ANSWER: Federico Garcia **Lorca** [or Federico del Sagrado Corazon de Jesus Garcia **Lorca**]
[10] Garcia Lorca's first play is about the "evil spell" of one of these creatures, which enchants a cockroach. In Spanish, this insect's name is a slur against gay men.
ANSWER: **butterfly** [or **mariposa**]
[10] This object comes to a boy at a blacksmith's forge with a skirt of white nard flowers in a "Romance" from Lorca's *Gypsy Ballads*. It tells the boy that a crowd of gypsies on horseback will find him asleep on the anvil.
ANSWER: **moon** [or **luna**]

104-13-83-13201

2. Lyrics were added to this composer's "Patriotic Song" for a temporary national anthem used in Russia from 1990 to 2000. For 10 points each:
[10] Name this composer who orchestrated a folk dance with his *Kamarinskaya* and was inspired by trips to Spain to produce *Jota Aragonesa* and *A Night in Madrid*.
ANSWER: Mikhail Ivanovich **Glinka**
[10] Glinka was one of the forebears to this circle of Russian composers, which included Balakirev, Mussorgsky, and Borodin.
ANSWER: The **Five** [or The **Mighty Five**; or The **Mighty Handful**; or The **Mighty Coterie**; or **Moguchaya kuchka**]
[10] The Glinka Prize was awarded to this Tchaikovsky overture-fantasy with a famous "love theme," based on a work of literature.
ANSWER: ***Romeo and Juliet**, TH 42, CW 39

020-13-83-13202

3. One portion of this long poem compares a bad writer to a spider, suggesting that if you "break one cobweb through," then "he spins the slight, self-pleasing thread anew." For 10 points each:
[10] Name this poem that opens with the command, "Shut, shut the door, good John!" It asks the poet's physician friend to hide him from all of his admiring fans.
ANSWER: "**Epistle to Dr. Arbuthnot**"
[10] "Epistle to Dr. Arbuthnot" was written by this English satirist who wrote *The Rape of the Lock* and *An Essay on Criticism*.
ANSWER: Alexander **Pope**
[10] Pope's plea to Dr. Arbuthnot had some basis in reality—he walked around London with a Great Dane and two loaded pistols after the publication of this satire honoring the goddess Dulness and her hack writer lackeys, like Colley Cibber.
ANSWER: The ***Dunciad**

020-13-83-13203

4. The enumeration of an algorithm to solve an arbitrary equation of this type was the subject of Hilbert's tenth problem. For 10 points each:

[10] Name this type of equation to which the solutions are all be integers.

ANSWER: **Diophantine** equation

[10] This theorem states that the Diophantine equation a to the n plus b to the n equal c to the n has no solution for n greater than two. It was proven by Andrew Wiles.

ANSWER: **Fermat**'s **Last** Theorem [prompt on **Fermat**'s Theorem]

[10] This Russian mathematician completed the proof that Hilbert's tenth problem was unsolvable by showing that every recursively enumerable set is Diophantine.

ANSWER: Yuri Vladimirovich **Matiyasevich**

5. For 10 points each, answer the following about incest in Greek mythology.

[10] This woman's sons included two, Eteocles and Polyneices, fathered by a third, Oedipus.

ANSWER: **Jocasta**

[10] Adonis was born of a tree after this woman, his mother, seduced her father Cinyras and in shame attempted to hang herself.

ANSWER: **Myrrha**

[10] After learning that only a son born of his own daughter could kill his brother Atreus, this man raped his daughter Pelopia, who bore Aegisthus.

ANSWER: **Thyestes**

6. This dictator blamed his country's poor economy on a "Zionist Fifth Column," and Tadeusz Walichnowski wrote a book supporting that claim. For 10 points each:

[10] Name this Communist who was purged from the Politburo in 1949, but returned and governed Poland from 1956 to 1970.

ANSWER: Wladyslaw **Gomulka**

[10] A later movement in Communist Poland was this labor union led by Lech Walesa and founded in a Gdansk shipyard.

ANSWER: Independent Self-Governing Trade Union "**Solidarity**" [or Niezalezny Samorzad Zwiazkow Zawodowych "**Solidarnosc**"]

[10] Solidarity managed to get free elections following these talks. Talks of this name also occurred around the same time in such countries as Bulgaria and Hungary.

ANSWER: **Round Table** Talks

7. It begins when the infant achieves object permanence, the comprehension that items exist even when they cannot be seen. For 10 points each:

[10] Name this developmental phase occurring between a child's second and seventh years that is characterized by "centration" and "egocentrism."

ANSWER: **preoperational**

[10] Preoperational is the second phase in this Swiss psychologist's four-stage model of cognitive development.

ANSWER: Jean **Piaget**

[10] In this sub-stage of the preoperational stage, a child is able to use an ability generalized from object permanence and formulate objects that are not immediately present .

ANSWER: **symbolic function**

8. An exhibit of this art movement at the National Gallery in DC featured a chair designed by Morris and co. and the sculpture *Paolo and Francesca* by Alexander Munro. For 10 points each:
[10] Name this movement that often depicted Elizabeth Siddall in paintings such as Dante Gabriel Rossetti's *Beata Beatrix* and John Everett Millais's *Ophelia*.
ANSWER: **Pre-Raphaelite** Brotherhood [or **PRB**]
[10] In John Everett Millais's *The Blind Girl*, the title woman fails to see this rare occurrence displayed above houses in the background, though the child in her clutches gazes back at it.
ANSWER: **double rainbow** [prompt on **rainbow**]
[10] The Pre-Raphaelites came up with the charming nickname "Sir Sloshua" for Joshua Reynolds, who founded this institution whose inaugural class included J.M.W. Turner and Edwin Landseer.
ANSWER: **Royal Academy** of Arts [prompt on **RA**]

9. Answer the following about the Great Heathen Army, for 10 points each.
[10] The Viking army was led by Guthrum when it was defeated by this man at the Battle of Edington. This king of Wessex, known as "the Great," was noted for his educational and legal improvements.
ANSWER: **Alfred** the Great
[10] Legendarily, the Great Heathen Army was led by the sons of this legendary Norse ruler, the father of Ivar the Boneless and Bjorn Ironside. He was thrown into a pit of snakes by Aella of Northumbria.
ANSWER: **Ragnar** Lothbrok [or **Regner** Lodbrok; or **Regnar** Lodbrog; or **Ragnarr** Lodbrok]
[10] The Great Heathen Army also attacked this Anglo-Saxon kingdom, whose rulers included Offa and Penda.
ANSWER: **Mercia**

10. Answer the following about the Washington Naval Conference, for 10 points each.
[10] The conference, which was held from 1921 to 1922, was called during the presidency of what man, whose term was scandalized by the Teapot Dome affair?
ANSWER: Warren Gamaliel **Harding**
[10] This man was the Secretary of State who led the conference. He previously lost a tight election to Woodrow Wilson in 1916 and later became Chief Justice.
ANSWER: Charles Evans **Hughes**
[10] As Chief Justice, Hughes wrote the majority opinion in this 1931 case supporting freedom of the press. This case struck down a Minnesota law targeting "scandalous" newspapers.
ANSWER: *Near v. Minnesota*

11. These structures are spanned by the protein titin, which extends from Z-line to Z-line. For 10 points each:
[10] Name these functional units that give the striated appearance of skeletal and cardiac muscle.
ANSWER: **sarcomere**
[10] Isometric contractions of muscles are often analyzed by constructing this form of curve, which demonstrates that there is an optimal size for a sarcomere.
ANSWER: **length-tension** curve [or **length-force** curve]
[10] This ion is stored in the sarcoplasmic reticulum and is released during muscle contractions.
ANSWER: **calcium** ion [or **Ca**2+]

12. James Dallas Egbert was a player of this game who supposedly got lost in his school's steam tunnels while playing a live action version. For 10 points each:
[10] Name this role-playing game created by Gary Gygax, which was attacked as inducing suicides and Satan worship by people such as Patricia Pulling and psychiatrist Thomas Radecki.
ANSWER: **Dungeons & Dragons** [or **D&D**]
[10] This metal singer was sued in 1986 for allegedly causing the suicide of a teenager with a Randy Rhoads-penned song on one of his solo albums; he explained that "Suicide Solution" was actually a term he used to speak negatively about alcoholic beverages.
ANSWER: Ozzy **Osbourne** [or John Michael **Osbourne**]
[10] Thirty years previously, a similar moral panic occurred when psychiatrist Fredric Wertham published *Seduction of the Innocent*, a work attacking this industry's effect on children.
ANSWER: **comic book**s [or **comic magazine**s]

13. After enjoying a few days of safety in the house of Mr. Lehr, this character crosses the border again to hear a dying man's confession. For 10 points each:
[10] Name this character who evades the Lieutenant in his attempt to leave his home state, where his religion has been outlawed. On his way, he meets the initially untrustworthy mestizo.
ANSWER: whiskey **priest**
[10] The whiskey priest is the main character of this British author's novel *The Power and the Glory*.
ANSWER: Graham **Greene**
[10] This partly-autobiographical Greene novel traces the relationship between Sarah Miles, the wife of an impotent government worker, and the writer Maurice Bendrix.
ANSWER: *The **End of the Affair***

14. You are an indigenous South American peasant in the year 1535. For 10 points each, answer these questions about the exploitation of your labor.
[10] The Inca empire used this system to work on public projects at various times by drafting peasants like you between the ages of fifteen and fifty. The Spanish adapted it for use in mines such as Potosi.
ANSWER: **mit'a** system
[10] The Spanish developed this other system of small trusteeships, in which you and about a hundred other natives would be protected and Christianized by a local Spaniard in return for tribute or work. In practice, this just made you a plantation slave.
ANSWER: **encomienda** system
[10] Presuming you haven't died of smallpox like Huayna Capac did, you might find that this Inca emperor's deposition by Francisco Pizarro changed little for you, since you're not getting any of the gold this emperor filled the Ransom Room with.
ANSWER: **Atahualpa**

15. In this novel, the midwife Lone DuPres is shunned for allegedly causing birth defects in the children she helps deliver. For 10 points each:
[10] Name this 1997 novel which contrasts the men of the town of Ruby, Oklahoma, with women like Consolata and Pallas Truelove who live in a nearby convent.
ANSWER: *Paradise*
[10] *Paradise* is often interpreted as the third novel of a trilogy beginning with this book, whose title character is a two-year-old child murdered by the escaped slave Sethe.
ANSWER: *Beloved*
[10] *Paradise* and *Beloved* were written by this African American author of *Song of Solomon*.
ANSWER: Toni **Morrison** [or Chloe Anthony **Wofford**]

16. This monarch had a mistress named Zoe Talon, the Countess of Cayla. For 10 points each:
[10] Name this man who took the throne in 1814 during the Bourbon Restoration. He briefly lost power during the Hundred Days.
ANSWER: **Louis XVIII** [prompt on **Louis**]
[10] After Napoleon's ultimate defeat, Louis XVIII sent this man to represent France at the Congress of Vienna, which settled many political disputes after the Napoleonic Wars.
ANSWER: Charles-Maurice de **Talleyrand**-Perigord
[10] Under Louis XVIII's successor, Charles X, this 1825 law was passed. Almost never applied, it was meant to punish actions against sacred vessels containing holy objects by handing out the death penalty to those who profaned consecrated hosts.
ANSWER: **Anti-Sacrilege** Act

17. This architect's bridges include one closed by Communist authorities in 1969 and another that serves as a checkpoint between Moldova and Romania. For 10 points each:
[10] Name this architect who created a novel movable dome for the Nice Observatory and was hired as an engineer on another project after the sudden death of Eugene Viollet-le-Duc.
ANSWER: Alexandre Gustave **Eiffel**
[10] Eiffel built the iron supporting structure on the interior of this New York landmark, whose pedestal contains a bronze plaque reading "I lift my lamp beside the golden door!"
ANSWER: **Statue of Liberty** [or **Liberty Enlightening the World**; or La **Liberte Eclairant le Monde**]
[10] The Eiffel Tower served as the entrance arch for the Universal Exposition held in Paris in this year.
ANSWER: **1889**

18. This book's preface closes with the observation that "the owl of Minerva takes its flight only when the shades of night are gathering." For 10 points each:
[10] Name this 1820 book that postulates three spheres of the title concept, the second and third of which are morality and ethical life.
ANSWER: *Elements of the **Philosophy of Right*** [or *Grundlinien der **Philosophie des Rechts***]
[10] This German philosopher wrote the *Philosophy of Right*, came up with the thesis-antithesis-synthesis triad, and penned *The Phenomenology of Spirit*.
ANSWER: Georg Wilhelm Friedrich **Hegel**
[10] The most famous passage in *The Phenomenology of Spirit* describes this concept, whereby two independent self-consciousnesses fight each other, with one being subjugated, and neither being recognized as self-conscious by the other.
ANSWER: **master-slave** dialectic [or parable of the **lord and bondsman**; or **Herrschaft und Knechtschaft**]

19. Contours on which these things are constant are their namesake lines, which one can integrate the Euler equation along to derive the Bernoulli equation. For 10 points each:
[10] Name these scalar fields whose relationship to velocity is chosen to automatically satisfy continuity.
ANSWER: **stream** functions
[10] The stream function may be derived from vorticity via the equation named for this mathematician, which states that the Laplacian of a function is another function. The negative ratio of transverse to axial strain is this man's ratio.
ANSWER: Simeon Denis **Poisson**
[10] Stream functions are analogous to a similar function in electrostatics, which yields this quantity as the difference between two points along a line. It is the line integral of electric field along a path.
ANSWER: electrical **potential**

20. Two older types of this thing stored operands on top of the stack or implicitly in the accumulator. For 10 points each:
[10] Identify this interface between software and hardware that contains a functional definition of the operations, modes, and storage supported by the hardware and a description of how to invoke and access them.
ANSWER: **instruction set** architecture [or **ISA**]
[10] Modern instruction set architectures, such as load-store, extensively use these small amounts of storage found in processors. They are at the very top of the memory hierarchy.
ANSWER: processor **register**
[10] Right below registers in the memory hierarchy is this on-CPU memory that stores copies of data frequently used from main memory. Browsers implement an analog of it for temporary storage of images and other documents.
ANSWER: **cache**

21. This law works best in cases with monochromatic radiation and a dilute solution. For 10 points each:
[10] Name this law given that describes how absorbance equals pathlength times analyte concentration times epsilon.
ANSWER: **Beer**'s Law [or **Beer**-Lambert-Bouguer Law]
[10] Because all the values on the right side of the Beer's Law equation cancel out, absorbance has this property.
ANSWER: **dimensionless** [accept such answers as **it has no units**]
[10] Epsilon in Beer's Law stands for this value, which describes how easily light is transmitted through a substance at a given wavelength.
ANSWER: **molar absoptivity** [or molar **extinction coefficient**]