

1. **Jeanne Bar** disguised herself as a man in order to participate in an instance of this action. During another instance of this action, its participants looted the firehitter *Nuestra Señora de la Concepción*. Humabon killed many participants at a feast during one of these actions. Different accounts of that aforementioned action were published by (*) Maximilianus Transylvanus and Antonio Pigafetta. The first Frenchman to accomplish this action lent his name to the island of Bougainville. Juan Sebastian Elcano continued the first example of this action after many of his fellow men were killed by Lapu-Lapu's warriors at Mactan in the Philippines. Francis Drake accomplished this feat using the *Golden Hind*. For 10 points, identify this feat commonly credited to Ferdinand Magellan.

ANSWER: circumnavigating the Earth [or: sailing around the world, obvious equivalents; in place of *Earth*, accept: world, globe, obvious equivalents]

2. **This character makes her husband jealous by the way she spreads her legs while staying overnight under a small mosquito net with him and two of her friends. She takes dancing lessons from Countess Shlemskaya, and dances with people like Hamada and Kumagai, two of the many men who she has affairs with. She rides her husband like a horse and calls him Papa,** because they initially meet when she is (*) 15 and he is 28. The novel in which she appears is the source of the term *modern girl*, or *modan gaaru*, to refer to women like her. This character intrigues Joji Kawai because of her resemblance to Mary Pickford and her Western name. For 10 points, name this title character of a Junichiro Tanizaki novel.

ANSWER: Naomi

3. **Eric Wolf's most famous book is named after the people without history in this place. A chapter on relics of tree worship on this continent appears in a book which discusses this continent's practice of making dollies out of grain to host the spirit of the grain, which had been left homeless by the harvest. The Faustian civilization originated on this continent, according to Oswald Spengler. Karl (*) Polanyi's *The Great Transformation* is about the market society on this continent. The practice of ritual priest-murder in this continent's town of Nemi is discussed in James Frazer's *The Golden Bough*.** For 10 points, name this continent which was home to anthropologists like Claude Lévi-Strauss.

ANSWER: Europe

4. **The Tucson, or decadal, format is used to store data about these items, and is read by COFECHA, the most important program for working with them. Ed Cook elucidated a model of these items as a linear aggregate of an unknown time series. Charles Stockton and Gordon Jacoby used these items to reconstruct the streamflow of the Colorado River, showing that the flow on which water rights was based was overestimated by thirty percent. These items can be classified as either complacent or sensitive. These items are compared on (*) skeleton plots, which allows one to discover signal years when cross-dating. Stresses can create false examples of these things, which complicates the normal identification of these items by their alternating light and dark pattern.** For 10 points, name these items central to dendrochronology that are also known as growth rings.

ANSWER: tree rings [or: tree ring series; until it is read, accept: tree growth rings]

5. **This musician's first hit was a standard he composed which was based on the blues song "The Boy in the Boat". He demonstrated his ability to adopt comedic accents and voices in a song that includes the spoken line "your pedal extremities really are obnoxious". He accompanied Adelaide Hall's version of "I Can't Give You Anything but Love" on the organ. Nell Carter rose to fame after appearing in a five-person Broadway revue which included this man's songs "Squeeze Me" and (*) "Your Feet's Too Big". The poet Andy Razaf wrote the words for his major hits, including one which opens "I have no use for other sweets of any kind". In another song he promises "I'm happy on the shelf babe". For 10 points, name this jazz pianist of "Honeysuckle Rose" and "Ain't Misbehavin'".**
ANSWER: Fats Waller [or: Thomas Wright Waller]

6. **This man was raised on a farm bequeathed to his family by Thomas Paine. This man's expedition founded a camp along the Green River that was nicknamed "Fort Nonsense" and no longer stands today. Washington Irving wrote a book about this man's 1832-34 expedition, which was funded by John Jacob Astor and was marked by numerous fur traders refusing to trade with him. This man names a dam fitted with fish ladders that was built downstream from the (*) Grand Coulee Dam. A prehistoric lake named for this man drained through the Snake River, further shaping Hells Canyon. George Eyston and Craig Breedlove set many land speed records at an area named for this man. For 10 points, name this explorer of the American west who lends his name to some salt flats in Utah.**
ANSWER: Benjamin Bonneville

7. **A painting by this artist is called "Painting Bitten by a Man" because he literally took a bite out of the canvas. Another painting by this artist has a slit in the middle with two balls sitting inside it. He made the etchings for an edition of Samuel Beckett's "Fizzles". The numbers 0 to 9 are superimposed on each other in one of his paintings. In his painting "False Start", he (*) stenciled the names of colors on differently-colored splotches of paint. The names of the U.S. states are stenciled on his painting "Map". He is most famous for his encaustic paintings of a certain object, including one in which three of them are sitting on top of each other. For 10 points, name this artist known for his paintings of American flags.**
ANSWER: Jasper Johns

8. **A classic application of Babinet's principle is to show that this system has the same far-field pattern as a slot. Though usually only applicable in quantum mechanics, a one-third or four-pi thirds delta term, depending on units, appears in the electric field of this system to account for the origin. The radiation from an oscillating examples of this system is (*) transverse in the magnetic field. At large distances, its potential in spherical coordinates is proportional to the cosine of theta over r-squared. As opposed to a scalar or second-rank tensor, its moment of is a vector and its electric field has a characteristic one over distance cubed dependence. For 10 points, name this system that, in simplest form, consists of two equal and opposite charges separated by distance.**
ANSWER: electric dipole

9. Two answers required. In a letter to the other, one of these authors called critics camp-following eunuchs of literature and declared all criticism is shit anyway. One of them told Edmund Wilson that the other's story *I Want to Know Why* merely derives from boys and horses in downplaying its striking similarities to his own story *My Old Man*. One of these authors encouraged the other to go to Paris and wrote him letters of introduction to Gertrude Stein and Ezra Pound. One of these authors got the other a four book deal with the publisher Boni and Liveright, a contract the second writer wriggled out of by submitting a sure-to-be-rejected manuscript drafted over (*) seven days. That hastily written novel substitutes Indian whooping for the high shrill laughter of the negress and is a parody of the other author's *Dark Laughter* titled *The Torrents of Spring*. For 10 points, name these men, the authors of *The Sun Also Rises* and *Winesburg, Ohio*.

ANSWER: Sherwood Anderson and Ernest Hemingway

10. This city is where the anonymous Archpoet composed a confession included in the *Carmina Burana*, in which he states I am resolved to die in a tavern. A bishop from this city moved the relics of St. Augustine of Hippo to its church of San Pietro in Ciel d'Oro. Another bishop from this city became Archbishop of Canterbury after Stigand was deposed and sent to Winchester. That bishop, appointed by William the Conqueror, is (*) Lanfranc. Richard de la Pole was killed by Georg Frundsberg's landsknechts at a battle in this city, after which a captured king wrote to his mother All is lost, except honor. It's not Milan, but this city was the capital of an early Lombard kingdom. For 10 points, name this Italian city where Francis I was captured by Charles V in 1525.

ANSWER: Pavia

11. An author of this surname was inspired by a Roman bas-relief of a walking woman to write the novel *Gradiva*, which is the subject of a Freud essay on delusion and dream. Another author of this surname wrote about sailors from the town of Marstal in the epic novel *We, the Drowned*. An author of this surname created Mikkel Thøgersen, who works as a mercenary for the title character, Christian II. That author of *The* (*) *Fall of the King* wrote a series of six novels spanning human history from the Ice Age to Christopher Columbus, inspired by his theories about evolution. For 10 points, identify this surname of the Danish Nobel laureate who wrote *The Long Journey*.

ANSWER: Jensen

12. Westergaard and Mitchell's synthetic crossing medium is used to provide nutrients to this organism. This organism is the one most often used to study the gene silencing mechanisms of quelling, MIP, and RIP. Though its website is straight out of 1995, you can get various knockout samples of this organism from FGSC. Long, glass race tubes are used when culturing this organism to study circadian rhythms because one can easily observe (*) conidial bands. The two mating types of this heterothallic species are symbolized big A and little a. Though subsequently revised, the one-gene-one-enzyme hypothesis came from experiments with its nutritional mutants that were conducted by Beadle and Tatum. For 10 points, name this model organism that's a type of bread mold.

ANSWER: Neurospora crassa [or: N. crassa; prompt on: red bread mold]

13. Prior to accomplishing this feat, Bob Hoffman encouraged his players to be superdogs. In a *Player's Tribune* column about performing this feat, a current Portland Trailblazers guard recalls licking his lips after a particularly vicious crossover. In a YouTube clip, Kevin Harlan asks, Is this the dagger? over an Eric Maynor free throw line jumper that capped off (*) VCU's accomplishment of this feat. Jim Nantz screamed, Absolute madness! after Lehigh performed this feat in 2012 in the first round, just like Mercer did two years later to a team starring Jabari Parker. For 10 points, name this basketball mitzvah that prevents Mike Krzyzewski from scowling on the sidelines of later games of the NCAA tournament.

ANSWER: eliminating Duke from the NCAA tournament

14. A poem about this document describes it being transported in the coat linings of itinerant seaman and describes its author face-down in the doorway at Brattle Street. It asks will they drive us from our property and homes, which we have earned with our blood? This document is divided into four articles, including one titled Our Wretchedness in Consequence of the Preachers of the Religion of Jesus Christ and one which attacks the colonizing plan. The publication of this document directly led Governor William B. Giles to push an (*) anti-literacy law through the Virginia legislature. This document, which was written without an amanuensis, was published in Boston in 1829, two years before Nat Turner's rebellion. For 10 points, name this anti-slavery pamphlet published by David Walker.

ANSWER: Walker's Appeal, in Four Articles; Together with a Preamble to the Coloured Citizens of the World, but in Particular, and Very Expressly, to Those of the United States of America, Written in Boston, State of Massachusetts, September 28, 1829 [or David Walker's Appeal; or the Appeal]

15. A poem by this author states that in the sea of life we mortal millions live alone, comparing people to islands who feel they were once part of a single continent. In another poem, he describes a character who is free from the sick fatigue and languid doubt which plagues most people. The speaker of that poem by this author declares No, no, thou hast not felt the (*) lapse of hours! to try to convince himself that the title character is still alive two hundred years. That poem, based on a story told by Joseph Glanvill, is about a man who leaves Oxford to wander around. His most famous poem includes the memorable image of a darkling plain. For 10 points, name this poet of To Marguerite, The Scholar-Gipsy, and Dover Beach.

ANSWER: Matthew Arnold

16. In the Taguchi method of experimental design, this term is applied to the number of rows in the orthogonal array, minus one. A type of these things for a molecule can be classified into the irreducible representations of the point group of the molecule. Given a sufficient drop in temperature, these things can become frozen, which gives rise to the stiff and loose dichotomy. They add either (*) one-half kT or kT to a molecule's internal energy, by the equipartition theorem. Vibrational motion in nonlinear molecules has three N minus six of these things. This term is applied to a number calculated as the number of components minus number of phases minus two in Gibbs's phase rule. For 10 points, name these things whose number corresponds to the parameters required to specify a molecule's configuration.

ANSWER: a molecule's degrees of freedom [or: DOF, modes]

17. Lodovico Carracci painted Saint Sebastian's body being thrown into this location. During the construction of this location, so many laborers committed suicide that their bodies were crucified to deter future workers thinking of doing the same. According to Herodian, Elagabalus was eventually brought to this location after his assassination. Pliny the Elder emphasized how this structure remained intact for seven hundred years since the time of Tarquinius Priscus. As aedile, Marcus Agrippa worked to (*) enlarge this structure and is said to have personally sailed through it. This structure helped to reduce the prevalence of malaria in ancient Rome by draining the wetlands at the future site of the Roman Forum and redirecting the water to the Tiber. For 10 points, name this Great Sewer of Rome.

ANSWER: Cloaca Maxima [prompt on: cloaca , Roman sewage system , sewer]

18. In one story, this man's blood is mixed with clay and used to heal the eye of a king. He converts eight thousand men in the city of Lycia when he plants his staff in the ground and it flowers and grows fruit. Archers fail to execute this man when their arrows hang in the air near his flesh. Originally called Reprobis, this Canaanite served a knight who pretended to be the devil until that knight betrayed the fact that he was afraid of the cross. This (*) seven-foot tall saint is depicted in Orthodox art with the head of a dog. Medals depicting this man are frequently displayed in automobiles. In his most famous story, this saint helps an impossibly heavy child after devoting his life to carrying travelers across a dangerous river. For 10 points, name this patron saint of travelers whose name means Christ-Bearer.

ANSWER: Saint Christopher

19. Two answers required. Movements by this composer for this instrument exhibiting his development-exposition style include the and the Combat of Death and of Life from *Les Corps Glorieux* and *Le Verbe*. The complete corpus of this composer's works for this instrument have been recorded by both Olivier Latry and Gillian Weir. This composer's first major work for this instrument replaced the third movement of an earlier orchestral suite, played on the trumpet and cymbals, with *Transports de joie*. His best known works for this instrument are (*) *L'Ascension* and *La Nativité du Seigneur*, both composed after becoming the player of this instrument at the Church of the Holy Trinity. For 10 points, name this French-Catholic composer and his instrument-of-choice, a large instrument consisting of rows of tuned pipes.

ANSWER: Olivier Messiaen and the organ [or explications that have the required parts, such as: Olivier Messiaen's organ works]

20. Visions this god sent to Aelius Aristides are detailed in Aristides' *Sacred Discourses*, an important description of pagan religiosity. After predicting the future of this god, Chiron's daughter Ocyrhoe metamorphosed into a horse. Ovid relates that this god's cult arrived at Rome when he sailed to an island in the Tiber as a snake. In Greece, devotees worshiped this father of Machaon by (*) incubating in his shrines to receive dreams, especially at Epidaurus. This man's name comes from the word for to cut open, because he was cut out of his mother's womb on her funeral pyre; that mother was Coronis. Zeus Cyclopes were killed for forging the thunderbolt that slew this man, who had displayed *hubris* by raising the dead. For 10 points, name this son of Apollo, the Greek god of medicine.

ANSWER: Asclepius

1. In these systems, laser transitions do not end at the ground state, but instead at a level above the ground states that is quickly depopulated. For 10 points each:

[10] Name this type of system commonly used for laser gain mediums because population inversion is not dependent on the pumping power. A ubiquitous example is Nd:YAG.

ANSWER: **four-level** system

[10] Though three-level gain mediums are much less efficient than four-level mediums, Theodore Maiman's development of the laser actually relied on a three-level gain medium: this crystal.

ANSWER: **ruby** [or: **corundum with chromium 3+ inclusions**; prompt on: **corundum**]

[10] In spontaneous emission, this coefficient can be used to calculate the rate at which spontaneous, radiative downward transitions occur.

ANSWER: Einstein's **A** coefficient

2. This composer called Liszt the Alcibiades of the piano and said that some of Liszt's imitators have none of [his] talents except the hair. For 10 points each:

[10] Name this Louisiana-born composer of piano pieces like *Bamboula* and *The Banjo*. He traveled extensively in South America, and died after playing his piece *Morte!*

ANSWER: Louis Moreau **Gottschalk**

[10] Gottschalk's relative, Louis Ferdinand Gottschalk, was a renowned composer of this type of music, much like Ennio Morricone and Hans Zimmer.

ANSWER: **film** scores

[10] This composer scored *Citizen Kane*, but is best known for his work on Hitchcock movies, including *Psycho* and *Vertigo*.

ANSWER: Bernard **Herrmann** [or: Max **Herman**]

3. This man collaborated with his wife Hannah on the book *Al Smith: Hero of the Cities*. For 10 points each:

[10] Name this progressive American biographer and historian who profiled John D. Rockefeller and Andrew Carnegie in *The Robber Barons*, a book which popularized its title phrase.

ANSWER: Matthew **Josephson**

[10] One of the industrialists profiled in *The Robber Barons* was this steamship and railroad magnate who was known as the Commodore.

ANSWER: Cornelius **Vanderbilt**

[10] This other progressive American historian examined the financial motives of the Founding Fathers in his book *An Economic Interpretation of the Constitution of the United States*.

ANSWER: Charles A. **Beard**

4. This character holds a lantern and declares that this thorn-bush is my thorn-bush and this dog, my dog. For 10 points each:

[10] Name this member of the Mechanicals, who portrays Moonshine in *Pyramus and Thisbe*.

ANSWER: **Robin Starveling** [accept either name]

[10] Robin Starveling, like Robin Goodfellow, appears in this Shakespeare comedy, in which Theseus marries Hippolyta.

ANSWER: A **Midsummer Night's Dream**

[10] Tom Snout was originally assigned to play Pyramus's father, but ends up playing this role instead, which requires him to hold up his fingers.

ANSWER: the **wall** between Pyramus and Thisbe

5. Faurisson's Holocaust denial is presented as an example of the double bind involved in this type of situation. For 10 points each:

[10] Name this type of conflict, contrasted with a litigation, in which the parties cannot agree on a common rule of judgment, and the victim is unable to present the fact that they have been wronged.

ANSWER: **differend**

[10] The differend was theorized by this author of *The Postmodern Condition*.

ANSWER: Jean-François **Lyotard**

[10] *The Postmodern Condition* is subtitled "A Report on" this concept, which is studied in epistemology.

ANSWER: **knowledge**

6. One of these divisions named Dunwich was mostly swallowed up by the sea, but still sent officials to Parliament. For 10 points each:

[10] Name these divisions, which, unlike similar "pocket" divisions, were abolished by the Great Reform Act of 1832. These constituents were prone to vote manipulation by landowners, since very few people voted within them.

ANSWER: **rotten boroughs**

[10] This classic example of a rotten borough is located on a hill near Salisbury and Stonehenge. It remained uninhabited since the 1300s, but still sent two members to Parliament by the time the Great Reform Act was passed.

ANSWER: **Old Sarum**

[10] This man, who was succeeded by Earl Grey as Prime Minister, advocated against the Great Reform Act and earlier defeated Napoleon's forces at the Battle of Waterloo.

ANSWER: Arthur **Wellesley** [or: the Duke of **Wellington**]

7. Joan Crawford flounced out of public life with the line "If that's the way I look, they won't see me anymore" after unflattering pictures of her showed up in the papers from a party she was hosting for this actress. For 10 points each:

[10] Name this classic Hollywood actress who played an ace reporter under a Cary Grant-played newspaper editor in *His Girl Friday*, which, according to TCM, features "arguably the fastest dialogue delivery in the history of movies."

ANSWER: Rosalind **Russell**

[10] *His Girl Friday* is a screwball comedy that was directed by this cinema man and producer, who also directed *Bringing Up Baby*, *The Big Sleep*, *Rio Bravo*, and *Scarface*, among others.

ANSWER: Howard **Hawks**

[10] This Howard Hawks-directed film is particularly notable for its beautiful flying sequences over the Peruvian Andes. This film also features Rita Hayworth in one of her first A-list roles.

ANSWER: **Only Angels Have Wings**

8. Answer the following about tropisms and hormones in plants, for 10 points each.

[10] Auxins govern many tropisms in plants, including gravitropism and phototropism. What molecule is the most common auxin found in nature?

ANSWER: **indole-3-acetic acid** [or: **IAA**, **3-indoleacetic acid**; prompt on: **indoleacetic acid**]

[10] Though there is much debate about how IAA is synthesized, it seems that the most common tryptophan-dependent pathway for IAA synthesis involves deaminating tryptophan to this intermediate compound, then decarboxylates this intermediate to get indole-3-acetaldehyde, which is then oxidized to IAA.

ANSWER: **IPA** [or: **indole-3-pyruvic acid**]

[10] Early experiments by this biologist and his son Francis showed that the coleoptiles of grass seedlings is necessary for phototropism. A paradigm shift in science occurred after the publication of his *On the Origin of Species*.

ANSWER: Charles **Darwin**

9. This religious movement grew out of Brooklyn, but it is headquartered in an Eatonton, Georgia complex called Tama-Re that looks like an ancient Egyptian theme park. For 10 points each:

[10] Name this religion founded by Dwight York, who was convicted on child molestation charges in 2004.

ANSWER: **Nuwaubian** movement

[10] Dwight York taught that white people existed because Ham's son Canaan was afflicted with this disease. Jesus cured a man of this disease by touching him and telling him "Be clean."

ANSWER: **leprosy**

[10] York was influenced by this founder of Nation of Islam, who disappeared mysteriously in 1934.

ANSWER: Wallace D. **Fard** Muhammad

10. This playwright died shortly after playing his own role of Argan. For 10 points each:

[10] Name this author of *The Imaginary Invalid* and *Tartuffe*.

ANSWER: **Molière** [or: Jean-Baptiste **Poquelin**]

[10] After Molière's death, his acting company eventually evolved into this theater, Actors like Adrienne Lecouvreur and Sarah Bernhardt got their starts here.

ANSWER: **Comédie-Française** [or: Le **Théâtre-Français**]

[10] Molière often combined the theatre with this art form, such as in *The Imaginary Invalid* and *The Bourgeois Gentleman*.

ANSWER: **ballet** [prompt on: **dance**]

11. One character in this poem plans to "whisper heavenly labials in a world of gutturals," while another says she shall run before him, diffusing the vilest odors out of geraniums and unsmelled flowers. For 10 points each:

[10] Name this poem from *Harmonium* in which the First Girl, Second Girl, and Third Girl make a plan of action for when this yokel comes maundering, whetting his hacker.

ANSWER: The **Plot Against the Giant**

[10] The Plot Against the Giant was written by this American poet of "The Emperor of Ice Cream" and "The Snow Man."

ANSWER: Wallace **Stevens**

[10] The speaker of "The Snow Man" claims that one must have one of these things "to regard the frost and the boughs of the pine-trees crusted with snow."

ANSWER: a **mind of winter**

12. It is important not to interpret this value as the posterior probability of truth that the null hypothesis is false because such an interpretation is not even close to valid under any reasonable model. For 10 points each:

[10] Name this value for which one can reject the null hypothesis if it is less than the level of significance, which is often 0.05 or 0.01.

ANSWER: p value [prompt on: **probability** value]

[10] P values were introduced by R. A. Fisher, who drew inspiration from this statistician's 1908 article "The probable error of a mean", in which the *t*-distribution and *t*-test were introduced in a statistical context.

ANSWER: **Student** [or: William Sealy **Gosset**]

[10] Fisher introduced this type of analysis, a common pre-processing dimensionality reduction technique. In contrast to principal component analysis, it is a supervised method and tries to identify attributes that account for the most variance between classes.

ANSWER: **LDA** [or: **linear discriminant** analysis]

13. This movement's 1960 manifesto included projects listed under the headings "Ocean City" and "Space City". For 10 points each:

[10] Name this Japanese architecture movement that focused partly on self-contained urban megastructures.

ANSWER: **Metabolism** [or: **Metabolist** school]

[10] This leader of the Metabolist school designed a peace memorial park for Hiroshima and the Yoyogi National Gymnasium for the Tokyo Olympics.

ANSWER: Kenzo **Tange**

[10] The Yoyogi National Gymnasium was influenced by this man's Philips Pavilion. This Frenchman demonstrated his five points of architecture in the house Villa Savoye.

ANSWER: Le **Corbusier**

14. This politician's government arrested the leader of Popular Will, Leopoldo López, for inciting 2014 protests. For 10 points each:

[10] Name this leader whose country has consistently topped the Global Misery Index, despite fighting a so-called economic war. He defeated Henrique Capriles by a narrow 1.5% during a 2013 presidential election.

ANSWER: Nicolas **Maduro**

[10] Several airlines suspended service to this country over billions of dollars in unpaid debts. Maduro became president of this country after the death of Hugo Chavez.

ANSWER: **Venezuela**

[10] These community groups have fought against the waves of recent protests in Venezuela, often by attacking universities. They include the Fifth of March, La Piedrita, and the non-Uruguayan Tupamaros.

ANSWER: **colectivos** [or: **collectives**]

15. Answer the following about some Middle Eastern events that happened in 1990, for 10 points each.

[10] In 1990, Saddam Hussein sent his army on this campaign, which successfully brought rich oil fields under Hussein's control. It was the major impetus for the Gulf War.

ANSWER: the Iraqi **invasion of Kuwait** [in place of invasion, accept: obvious equivalents]

[10] The war in this country ended in 1990 after the Ta'if Agreement went into effect. This country was the site of the Sabra and Shatila Massacres and is where the Islamic Jihad detonated truck bombs at a U.S. barracks in 1983.

ANSWER: **Lebanon** [or: **Lebanese Republic**]

[10] Tensions after this event mounted after a new oil field was established in the Hadhramaut Governorate. This event resulted in a coalition government under Ali Salim al-Beidh and Ali Abdullah Saleh.

ANSWER: the **unification of** North and South **Yemen** [or: obvious equivalents]

16. A foot and a hand jut out from the rocks at the bottom of this painting, next to a crown and some bones. For 10 points each:

[10] Name this 1864 painting whose two title characters stare at each other as one of them hangs off the other's chest.

ANSWER: Gustave Moreau's **Oedipus and the Sphinx**

[10] Gustave Moreau's *Oedipus and the Sphinx* was likely influenced by this painter's version of the same scene. He painted an odalisque with too many vertebrae and *The Apotheosis of Homer*.

ANSWER: Jean-Auguste-Dominique **Ingres**

[10] In a very detailed painting by Gustave Moreau, this god has red rays emanating from his head. A woman strokes this god's beard in an Ingres painting.

ANSWER: **Jupiter** [do not accept or prompt on: Zeus]

17. In electrophilic aromatic substitutions involving a substituted benzene, electron donating groups, or activating groups, generally direct the electrophile to these two positions. For 10 points each:

[10] Name these two positions on a benzene ring that are the closest and farthest one can be from a substituent. These two positions are grouped with the meta position.

ANSWER: **ortho** and **para**

[10] Alkyl groups are generally ortho- and para- directing because they stabilize substituents via this phenomenon, which is the donation of electron density through the sigma bonds of molecules.

ANSWER: **inductive** effect [or: **inductive** stabilization]

[10] An example of a strong meta- directing group is this moiety that's structurally similar to a methyl group. It's attached to a benzene in fluoxetine, or Prozac, and a pyrazole in celecoxib, or Celebrex.

ANSWER: **CF₃** [or: **trifluoromethyl**]

18. In her book *When Books Went to War*, Molly Guptill Manning states that the most popular of these titles was *A Tree Grows in Brooklyn*. For 10 points each:

[10] Name these books which propelled the popularity of the paperback form when over 120 million of them were printed cheaply and given away to American soldiers during World War II.

ANSWER: **Armed Service Editions** [or: **ASEs**]

[10] This publisher chaired the committee that selected the ASEs. His namesake company publishes *Critical Editions* of important literature and currently employs Stephen Greenblatt as head editor of its staple *Anthology of English Literature*.

ANSWER: William Warder **Norton**

[10] The ASE blurb on this novel describes "A book of sea adventures describing a hazardous journey to the Antarctic, mutiny and cannibalism on board ship, a treacherous encounter with the inhabitants of a remote island."

ANSWER: *The* **Narrative of Arthur Gordon Pym**

19. A replacement for this material was forged at the same time as Odin's spear Gungnir and Frey's boat Skidbladnir. For 10 points each:

[10] Name this material that was stolen by Loki, who went down to Svartalfheim to replace it with gold shaped by the Sons of Ivaldi.

ANSWER: **Sif's hair**

[10] Loki bet Brokk and Eitri that they could not surpass the creations of the Sons of Ivaldi; Brokk and Eitri won that bet largely by forging three more gifts, including this hammer for Thor.

ANSWER: **Mjollnir**

[10] After their victory, Brokk and Eitri tried to take their winnings by cutting off Loki's head. When Loki noted that they would have to do so without harming his neck, the dwarves gave Loki this punishment instead.

ANSWER: they **sewed his mouth shut** with thread

20. Answer the following about the rampant violence in 1970s Germany, for 10 points each.

[10] Three leaders of this group, who were being held at the supermax Stammheim prison, committed suicide on Death Night by using a smuggled pistol. They were highly active during the German Autumn of 1977.

ANSWER: **Baader-Meinhof** Gang [or: **Red Army Faction**]

[10] The Red Army Faction was supported by Black September, a terrorist group that killed eleven Israeli athletes during the 1972 Summer Olympics in this German city.

ANSWER: **Munich** [or: **München**]

[10] This gang, which carried out even more attacks than the Red Army Faction, was responsible for assisting a pro-Palestine group in hijacking the flight that was later targeted by the Entebbe Raid.

ANSWER: **Revolutionary Cells** [or: **Revolutionäre Zellen**]