

Tossups

0. According to tests conducted on Salisbury Plain, this thing is effective at a range of up to fifty yards. An interrogation centered on this thing includes a man with a sign reading “A GESTAPO OFFICER” hanging around his neck. This thing first claimed the life of Ernest Scribbler, and later claimed the life of a Scotland Yard inspector despite laments provided by fellow policemen. This thing, which was weaponized in the (*) Ardennes, reads “Wenn ist das Nunstück git und Slotermeyer? Ja! Beiherhund das Oder die Flipperwaldt gersput!” Attempts to recreate this thing’s effect, which include “My dog's got no nose!” “How does he smell?” “Awful!” and “Der ver zwei peanuts, valking down der strasse, and von vas assaulted! ...peanut” ultimately failed. For 10 points, name this thing used as a weapon against Nazi Germany in a Monty Python sketch.

ANSWER: the Funniest Joke in the World [accept “Killer Joke”] <KG>

1. This novel’s narrator is annoyed by a character singing “Does the Spearmint Lose Its Flavor on the Bedpost Overnight?” A character named Harding in this novel often boasts about his wife’s large breasts. At the outset of this novel, the narrator promises that “it’s the truth even if it didn’t happen.” In this novel, Charles Cheswick drowns himself in a swimming pool, and another character cuts his (*) throat because he’s worried his mother will discover that he lost his virginity to a prostitute. This novel’s narrator breaks a window with a control panel after using a pillow to smother the lobotomized main character, a boisterous inmate who engages in a power struggle with the “Big Nurse,” Ratched. For 10 points, name this Ken Kesey novel about Randle McMurphy and the other inhabitants of a mental asylum.

ANSWER: One Flew Over the Cuckoo’s Nest <WN>

2. The captain of this city’s guard was lynched in 1736 after Andrew Wilson’s body was cut down from the gallows. Lord Hertford led a campaign that left much of this city burnt in 1544. In this city, a mosaic heart occupies the spot where the Old Tolbooth jail once stood. Seventeen miniature coffins and dolls unearthed in this city are theorized to correspond to the seventeen victims of (*) William Burke and William Hare, who brought their murder victims to Robert Knox for use in anatomy lectures. The Porteous Riots occurred in this city, where John Knox preached from St. Giles’ Cathedral. This city’s Holyrood Palace is a residence for the British royal family. Prince Philip is the Duke of this city, which is the largest in Midlothian and lies on the Firth of Forth. For 10 points, name this capital city of Scotland.

ANSWER: Edinburgh <KG>

3. Ponding water on top of the soil surface can help to remove this substance from the root zone in its namesake leaching. Exposed sheets of this substance can flow by open-toed, or extrusive advance, and buried ones can flow via thrusting advance. Its incompressibility and high ductility allow it to upwell and breach the surface, where it forms namesake glaciers. Diapirism in this substance forms namesake (*) domes and can create an effective petroleum trap. Evaporation of water on a smooth landscape creates their namesake flats. Temperature and concentration of this material affect the density of ocean water and drive thermohaline circulation. For 10 points, name this mineral which is mostly composed of sodium chloride.

ANSWER: salt [or halite] <BM>

4. This country’s cuisine uses fruit from the *Berberis* shrub called *zereshk*. The Gilaki language is spoken in this country’s city of Ramsar, known for its abnormally high levels of natural background radiation. This country currently provides the only natural habitat for the Asiatic cheetah. Hara trees make up the mangrove forests found on this country’s island of (*) Qeshm. One of the world’s largest leopard subspecies inhabits this

country's northern Alborz Mountains, which includes Mount Damavand, Asia's highest volcano. One of this country's few pockets of low-lying land is found in its southwestern Khuzestan province. This country objected to *National Geographic's* use of the term "Arabian Gulf" in atlases. For 10 points, name this large country south of the Caspian Sea and north of the Persian Gulf.

ANSWER: **Iran** [or Islamic Republic of **Iran**; or Jomhuri-ye Eslami-ye **Iran**] <KG>

5. In 1996, a 300,000-person "White March" demanding criminal justice reform took place in this country's capital. A 1960-61 general strike in this country was influenced by the political leanings of André Renard. In this country, the issue of secular education sparked two so-called "School Wars." In 2003, it became the world's second country to legalize gay marriage. A succession of prime ministers from the Christian Social Party and the Christian People's Party was interrupted by Guy (*) Verhofstadt, a member of this country's VLD. In the early 1960's, this country was officially divided into four language areas: its bilingual capital, home to NATO's headquarters, and French, German, and Dutch areas. For 10 points, name this country home to both Walloon and Flemish-supporting movements.

ANSWER: **Belgium** [or Kingdom of **Belgium**; or Koninkrijk **België**; or Royaume de **Belgique**] <KG>

6. In this painting, a naked man pierced through by a spear rides a bull. A doctor in this painting examines a patient's teeth next to a diagram of a worm-eaten heart. At the top left of this painting, the rebel angels turn into insects as they are cast out of Heaven. A pink-winged angel is the only character to see Christ surrounded by clouds at this painting's top center. This painting's left shows, from top to bottom, the creation of (*) Eve, her temptation by the serpent, and Adam and Eve's expulsion. When closed, this triptych depicts a wayfarer warding off a dog with a stick. A holy man places a ladder on the title object of this triptych, which has two visible wheels. For 10 points, name this Hieronymus Bosch triptych which shares its name with a John Constable painting.

ANSWER: *The* **Haywain** *Triptych* <WN>

7. An essay defending this doctrine, in opposition to a "heresy" which succeeded the "epic mania," says that the phrase "long poem" is an oxymoron, and quotes poems like Thomas Hood's "The Bridge of Sighs" in full. Walter Pater and Algernon Swinburne were among the first to use this phrase in English in their reviews of William Morris and William Blake, respectively. This doctrine is defended in "The Poetic Principle" by Edgar Allan Poe, as well as in the conclusion of Oscar Wilde's preface to *The Picture of Dorian Gray*. In *Morning Yet on Creation Day*, (*) Chinua Achebe called this doctrine "just another piece of deodorised dog shit." In France, it was championed by the Parnassian movement. This doctrine was popularized by the preface to *Mademoiselle de Maupin* by Théophile Gautier. For 10 points, name this slogan stating that art need not have any moral or didactic function.

ANSWER: **art for art's sake** [or l'**art pour l'art**] <WN>

8. The asthma and COPD drug salbuterol is sometimes administered in an emergency to lower the blood levels of this substance. The antibiotic valinomycin selectively complexes with this substance. The normal range of serum values for this ion is 3.5 to 5 millimoles. "Peaked" T waves, followed by the loss of P waves and the appearance of a "sine wave" morphology, occur on an EKG of patients with high blood levels of this ion. Aldosterone (*) increases the rate of secretion of this ion in the collecting duct of the kidney. The reversal potential of this ion is -80 mV ["millivolts"], just below a neuron's resting potential. Two of these ions are pumped in and three of a lighter ion are pumped out in a common ATPase. For 10 points, name this alkali metal ion exchanged with sodium in a common pump.

ANSWER: **potassium** [or **K+**] <AG>

9. Alexander Siloti is best known for transposing one of these pieces down from E minor to B minor in his piano arrangement. A C minor piece of this kind built on quarter note chords was the basis of 22 variations by Rachmaninov. In a D minor piece of this kind, the left hand slowly continually alternates between playing D-E and E-F. The key switches between D-flat major and C-sharp minor in Chopin's op. 28, no. 15, which is one of these pieces that (*) repeats the note A-flat. *Footsteps in the Snow* and a piece inspired by the Ys legend, *The Sunken Cathedral*, are among Debussy's pieces of this type. J.S. Bach wrote a set of these pieces and fugues in every major and minor key in *The Well-Tempered Clavier*. For 10 points, name this type of piece that typically doesn't, as its name might suggest, serve as an introduction.

ANSWER: preludes <AG>

10. A Biblical event in one of these locations inspired the Catholic devotional practice of the Holy Hour. The Song of Solomon 4:12 describes one of these places as "my sister, my spouse, a spring shut up, a fountain sealed." A person is described as sweating blood in one of these places, which is interpreted literally in some traditions. The phrase "The spirit is willing but the flesh is weak" is from Matthew's description of an event that took place in one of these locations. (*) Jezebel and Ahab plotted to kill Naboth in order to steal one of these places from him. Jesus asked Peter, John and James to stay awake in one of these places, where he prayed after the Last Supper. Lilith leaves one of these locations and is replaced by a woman created from a rib. For 10 points, name these places including Gethsemane and Eden.

ANSWER: gardens [accept vineyards] <WN>

11. Either Aeneas or this figure left behind a statue of Dionysus forged by Hephaestus in a chest after fleeing a city. As retribution for a crime committed against this figure, the Locrians were bound to send two maidens to another city every year for one thousand years. One of this figure's suitors was killed by Idomeneus and was named Othryoneus. This twin sister of Helenus was (*) raped in one of Athena's temples by Ajax the Lesser. Earlier, this figure's countrymen refused to heed her warning to "beware the Greeks bearing gifts." Agamemnon took this woman back to Mycenae as a concubine, and the two were later murdered by Aegisthus and Clytemnestra. For 10 points, name this daughter of King Priam who was cursed by Apollo to have no one ever believe her prophecies.

ANSWER: Cassandra [or Alexandra] <JM>

12. In a play by this author, a giant chrysanthemum bursts from a flower bud on the roof of a castle built on a dung-heap. In that play, the Officer is asked "Do you think that time and space exist?" after the characters are transported to a quarantine island. A play by this author begins with a student who had saved people from a collapsing building the night before asking for a drink from the apparition of a (*) milkmaid. Amalia warns the protagonist of that play not to take revenge on the Colonel. This author of a chamber play about Jacob Hummel is best known for a drama whose title character flirts with the servant Jean and ends up killing herself with a razor. For 10 points, name this author of *A Dream Play* and *The Ghost Sonata*, as well as *Miss Julie*.

ANSWER: August Strindberg

13. A character in this film reads a letter saying "See you soon, idiots" and quips to his companion, "It's for you." The protagonist of this film is represented by a flute version of the main theme, in contrast to the ocarina version representing another character. A character in this film says "When you have to shoot, shoot, don't talk" after killing a man who had ambushed him while he was in the bathtub. This film's soundtrack includes the song "The (*) Ecstasy of Gold." A circular open space in the middle of a cemetery is the setting of this film's climactic Mexican standoff between Tuco, Angel Eyes and Blondie, the title characters. For 10 points, name this third film in a Sergio Leone trilogy starring Clint Eastwood, following *A Fistful of Dollars* and *For a Few Dollars More*.

ANSWER: *The* *Good, the Bad and the Ugly* [or *Il* *buono, il brutto, il cattivo*] <WN>

14. The founder of one of these groups wrote pamphlets like *How to Get Out or Stay Out of the Insane Asylum*, and created a magazine for military wives called *U.S. Lady*. An organization of this type originally called WUFENS was founded by a man who was assassinated by John Patler at a shopping center in Arlington, Virginia. That man was (*) George Lincoln Rockwell. Along with the KKK, one of these groups committed the Greensboro massacre. One of these groups won a landmark 1977 First Amendment case resulting from its leader Frank Collin's plan to march through the Illinois town of Skokie, which had a heavily Jewish population. For 10 points, name these groups which include the National Socialist Party of America.

ANSWER: American neo-Nazi parties [prompt on "white supremacist groups" and other similar answers] <WN>

15. The first holder of this position to draft an annual budget in advance of the fiscal year got his nickname for his lowly start as a tarragon vendor. One holder of this position was nicknamed the "gravedigger" for his habit of mass-burying dissidents who rose up in the Jelali Revolts. This office was known as *pervane*, meaning "advice," until it fell into the hands of the Candarli family. The offices of the Chief Black Eunuch and the (*) Sheikh-ul Islam were immediately below this one in prestige. The Albanian-born Koprulu family monopolized this position in the mid to late 17th century. These people were at the center of the Sublime Porte and met "under the dome" of the Topkapi Palace. For 10 points, name these prime ministers of the Ottoman Sultan.

ANSWER: Ottoman Grand Vizier [prompt on partial answer] <AG>

16. Baker, Littrow, and Steinheil each name doublets which consist of a crown piece of this substance and a flint piece. A naive extrapolation of their entropy as a function of temperature shows that they must undergo a phase transition at the Kauzmann temperature. One substance of this type has the feature that no spin configuration can make the exchange energy of all nearest neighbors negative. That results in disorder in the orientation of neighboring particles' magnetic fields, termed (*) geometric frustration. These materials may be in a rubbery state at temperatures above a transition named for them. These materials may be created by cooling a liquid too rapidly for crystallization to occur, and the most common types of this non-crystalline solid are made from silicon dioxide. For 10 points, name this amorphous solid which is often transparent.

ANSWER: spin glass [prompt on "amorphous solid"]<BM>

17. Atomic sensitivity factors are used to normalize peaks in techniques that collect these things. When these things have a specific pass energy, they can be collected via a hemispherical analyzer to improve resolution. KLL and LMM peaks are often observed in a form of spectroscopy using these particles that relies on an effect discovered by (*) Lise Meitner. Sample collisions can create secondary or backscattered versions of these particles. These particles are emitted in the Auger effect. The work function is the energy photons need to eject these particles when hitting a surface. These particles can be shot out of cathode ray tubes and made up the plums in J. J. Thomson's plum pudding model. For 10 points, name these negatively charged particles.

ANSWER: electrons [accept photoelectrons] <SD>

18. This book contains a passage about someone who is too stupid to memorize the names of numbers, and as a consequence can observe a clock but not tell what time it is striking. This book says that, just as bad weather consists of an inclination to rain followed by actual rain, war consists of a disposition towards fighting followed by actual fighting. According to this book, understanding is a form of imagination, which in turn is a decaying sense perception. This book blames misinterpretation of (*) Scripture for creating a "kingdom of darkness." Its author's earlier book *De Cive* introduced the idea of the war of all against all, which this book uses to characterize man in the state of nature. For 10 points, name this treatise by Thomas Hobbes.

ANSWER: Leviathan <WN>

19. In this country, two characters are reconciled when a woman convinces both of them to drink from a bottle of milk which has been warmed up for a dead child. In this country, Harriet is hit in the face by a bouquet thrown at a performance of *Lucia di Lammermoor*. This country is where a frivolous woman falls in love with a dentist's son despite being supervised by the more level-headed Caroline Abbott. Another visitor to this country is chaperoned by (*) Charlotte Bartlett and goes on a tour with the novelist Eleanor Lavish. That character's complaints about her hotel accommodations lead Mr. Emerson to offer to switch rooms with her. For 10 points, name this tourist destination in E. M. Forster's novels *Where Angels Fear to Tread* and *A Room with a View*, which are partly set in Tuscany.

ANSWER: Italy [or Italia; or Italian Republic; or Repubblica Italiana] <WN>

20. Kassin and Wrightsman created a scale for use in this process. Jo-Ellan Dimitrius is a renowned consultant for this process. This process first involves the creation of a "venire." The Vicinage Clause imposes restrictions on this process. This process can involve what is colloquially called "Witherspooning," which results in a (*) "death-qualified" product. The so-called "scientific" approach to this process was pioneered in the early 1970s. Batson challenges are sometimes invoked during this process. During the *voir dire* portion of this process, peremptory challenges can be used to exclude people. For 10 points, name this process of choosing a panel of twelve peers for a court case.

ANSWER: jury selection [or clear equivalents; accept voir dire before mentioned] <WN>

Tiebreaker: A commander in this war had his arm publicly amputated, accompanied by a fanfare, and commemorated it with a medallion saying "Altera restat," or "I've still got the other one." Near the beginning of this war, twenty-seven leaders of a revolt were executed in the Old Town Square. A commander in this war was killed in Cheb by Walter (*) Devereux. Ernst von Mansfeld and Christian of Brunswick lost this war's Battle of Fleurus. The Finnish Hakkapeliitta cavalry participated in this war's Battle of Rain, which repeated the result of an earlier battle which followed the sack of Magdeburg by Pappenheim and Tilly. Gustavus Adolphus won this war's first Battle of Breitenfeld. For 10 points, name this war ended by the Peace of Westphalia, which lasted from 1618 to 1648.

ANSWER: Thirty Years' War <WN>

Bonuses

1. Name these twentieth-century authors of novels about the lives of Chinese peasants, for 10 points each.

[10] This winner of the 2012 Nobel in Literature chronicled three generations of a distillery-operating peasant family in his novel *Red Sorghum*.

ANSWER: Mo Yan [or Guan Moye]

[10] This author, who adopted a pen name meaning "contradiction," depicted the hardships of villagers involved in sericulture in *Spring Silkworms*, and depicted the cosmopolitan city of Shanghai in *Midnight*.

ANSWER: Mao Dun [or Shen Dehong; or Shen Yaobing]

[10] This daughter of American missionaries wrote about the poor farmer Wang Lung in her inferior novel *The Good Earth*.

ANSWER: Pearl S. Buck [or Pearl Sydenstricker Buck; or Sai Zhenzhu] <AG>

2. Answer the following about some recent disease outbreaks, for 10 points each.

[10] In late 2014, an outbreak of this disease began at Disneyland and eventually infected 131 people, over 70 percent of whom were unvaccinated. Along with mumps and rubella, this disease is prevented by the MMR vaccine.

ANSWER: measles [or rubeola; do not accept "German measles"]

[10] 186 people in South Korea caught this disease during the summer of 2015. An April 2014 outbreak of it occurred in Saudi Arabia, its country of origin.

ANSWER: **MERS** [or **Middle East respiratory syndrome**; or **camel flu**]

[10] Brazil declared a state of emergency after over 2,000 babies were born with shrunk skulls, which were caused by an outbreak of this mosquito-borne virus that was confined to Africa and Southeast Asia until 2007.

ANSWER: **Zika** virus <KG>

3. Name some Gustave Flaubert characters, for 10 points each.

[10] This wife of a doctor has affairs with Rodolphe Boulanger and Léon Dupuis and ultimately poisons herself in Flaubert's most famous novel.

ANSWER: **Emma Bovary** [accept either name]

[10] In *Sentimental Education*, Frédéric Moreau has a tempestuous friendship with this law student, who ends up marrying Louise Roque.

ANSWER: **Camille Deslauriers** [accept either name]

[10] In an unfinished novel by Flaubert, this copyist decides to try and become versed in every major branch of knowledge with his friend Pécuchet.

ANSWER: **François** Denys Bartholomée **Bouvard** [accept either name] <WN>

4. This religion lacks a formal creed, but many of its followers adhere to a set of "principles and purposes." For 10 points each:

[10] Name this liberal religion founded in 1961.

ANSWER: **Unitarian** Universalism [or Unitarian **Universalism**; or **UU**]

[10] As their name indicates, Unitarians reject this doctrine, which states that God's hypostases are the Father, Son and the Holy Ghost.

ANSWER: the **trinity** [accept word forms, such as **trinitarianism**]

[10] The most popular symbol of Unitarianism is this object, which is commonly surrounded by two overlapping circles.

ANSWER: a flaming **chalice** <WN>

5. Answer the following about ethnomusicology, for 10 points each.

[10] This composer of the ballet *The Miraculous Mandarin* and the opera *Duke Bluebeard's Castle* relentlessly collected and arranged folk music from his native Hungary.

ANSWER: Bela **Bartok** [or Bela Viktor Janos **Bartok**]

[10] The couple Judith and Alton L. Becker studied the "grammars" intrinsic to this style of music that inspired Poulenc's double piano concerto and Debussy's string quartet. This percussion ensemble comes from Bali and Java.

ANSWER: **gamelan**

[10] This psychologist pioneered the whole field of comparative musicology with his 1911 study *The Origins of Music*, theorized that tones were sensory and imaginary, and archived primitive music.

ANSWER: Carl **Stumpf** <AG>

6. The French explorer Marc-Joseph Marion du Fresne was killed in this country in 1792. For 10 points each:

[10] Name this country that was first circumnavigated by James Cook while he was searching for Terra Australis.

ANSWER: **New Zealand** [or **Aotearoa**]

[10] The first European to reach New Zealand was this explorer who landed at Murderer's Bay in 1642 on his flagship *Heemskerck*.

ANSWER: Abel **Tasman** [or Abel Janszoon **Tasman**]

[10] Like the Europeans, the Polynesians themselves were not native to New Zealand; general consensus suggests that they settled the islands in this century.

ANSWER: **13th** century [or the **1200s**] <JM>

7. Because there were about seven times more protons than neutrons in the early universe, the hydrogen nucleus was about four times more abundant than this one. For 10 points each:

[10] Name this second lightest element which made up 24% of the baryonic matter in the early universe.

ANSWER: helium-4 [or He-4]

[10] All that helium was made by this process of nuclear fusion that took place in the first 20 minutes of the universe's existence.

ANSWER: big bang nucleosynthesis [prompt on "nucleosynthesis"]

[10] BBN couldn't make all the heavy elements because of the "roadblock" occurring at these two values. No stable isotopes exist with these numbers of nucleons, so the universe had to wait for the triple alpha process to occur in stellar nucleosynthesis.

ANSWER: 5 and 8 [in either order] <BM>

8. Troops supporting this leader stormed his country's White House, the same building where he gave a speech atop a tank in 1991. For 10 points each:

[10] Name this first president of a post-Soviet Russia.

ANSWER: Boris Yeltsin

[10] Yeltsin released the black box tapes from this airline's Flight 007, which was shot down by a Soviet pilot who allegedly mistook it for a spy plane in 1983.

ANSWER: Korean Air Lines

[10] Yeltsin also allowed a team to visit the region around this city to investigate a 1979 anthrax outbreak. The Soviets covered up news of the outbreak by blaming the deaths on tainted meat.

ANSWER: Sverdlovsk [or Yekaterinburg] <KG>

9. In 2004, Japanese researchers were able to reduce this phenomenon in the gene Igf2, resulting in the birth of a mouse with two sets of maternal chromosomes. For 10 points each:

[10] Name this epigenetic phenomenon in which only either the maternal or the paternal allele is expressed. When it happens in the long arm of chromosome 15, Prader-Willi and Angelman syndrome can result.

ANSWER: genomic imprinting [prompt to be less specific on answers such as methylation]

[10] The NOEY2 gene in this family is maternally imprinted, and its reduced expression has been linked to ovarian and breast cancers. Arf, Rho, Ran, and Rab are all part of this protein family's "superfamily."

ANSWER: Ras

[10] Genomic imprinting has been compared to the 2:1 ratio of maternal to paternal genomes produced by the double fertilization in these flowering plants, the counterparts to gymnosperms.

ANSWER: angiosperms [or Angiospermae; or Magnoliophyta] <KG/AG>

10. A duel between these two figures is broken up after Juturna, the sister of one of the participants, pretends to be a man named Camers and incites one's force to attack the other's. For 10 points each:

[10] Name these two fighters. One, a Trojan prince, is about to spare the other, a king of Rutuli, but notices he is wearing the belt of his dead friend Pallas, so he kills him anyway.

ANSWER: Aeneas and Turnus [accept in either order]

[10] This man was an ally of Turnus. He was about to be killed by Aeneas, but is rescued by his son, who is killed instead. Feeling ashamed, he fought and lost to Aeneas anyway, and asked to be buried in the same grave as his son.

ANSWER: Mezentius

[10] The reason why Aeneas has to face so many tribulations is because this Roman equivalent of Hera is really angry with him, which is why she encourages Turnus to wage war.

ANSWER: Juno <SD>

11. The most famous segments of the opera *Almira* are a chaconne and this type of dance, which makes up the initial theme of the “later Folia.” For 10 points each:

[10] Name this dance in triple meter of Spanish or Central American origin that usually made up the third movement in Baroque suites. The most famous one is the fourth movement of a certain composer’s *Keyboard Suite in D minor*.

ANSWER: sarabande

[10] This German-born British composer of that famous sarabande produced three suites for a concert on the River Thames, collectively known as *Water Music*.

ANSWER: George Frideric Handel

[10] This 1741 composition starts with an aria in sarabande form, upon which the next thirty sections are based. Apocryphally it was composed as a sleep aid for Count Keyserlingk.

ANSWER: Goldberg Variations [or BWV 988] <AG>

12. Pre-Socratic philosophers had lots of ideas about what made the universe run. For 10 points each:

[10] Thales thought that everything was made of this classical element, which Aristotle said was primarily cold and secondarily wet.

ANSWER: water

[10] The four elements were first proposed by this Sicilian, who also believed that the elements were brought together and separated by love and strife.

ANSWER: Empedocles

[10] Anaximander posited this boundless thing as the first principle of the universe. A journal of ancient philosophy and science is named for it.

ANSWER: apeiron <WN>

13. Name some things from Wikipedia’s wonderful List of Humorous Units of Measurement. For 10 points each:

[10] A donkey power is about a third of a horsepower, or about 250 of this unit of power which is equal to Joules per second. 60 of them is common for incandescent light bulbs.

ANSWER: watts

[10] A barn-megaparsec has units of this quantity. This quantity is a variable of the microcanonical ensemble and is the conjugate of pressure.

ANSWER: volume

[10] The FFF system uses a firkin to measure this quantity. The Planck unit for this quantity is extremely large, leading to the hierarchy problem.

ANSWER: mass <BM>

14. Marvin Harris wrote about the religious significance of these animals. For 10 points each:

[10] Name these animals. Melville Herskovits wrote about the significance of owning these animals in East Africa, such as among the Maasai.

ANSWER: cattle [accept cows or bulls]

[10] In *The Rise of Anthropological Theory*, Marvin Harris introduced this theoretical paradigm in anthropology, influenced by Karl Marx and Thomas Malthus. It makes use of the emic/etic distinction.

ANSWER: cultural materialism

[10] Harris argued that Aztec human sacrifice was accompanied by this practice, to make up for the low-protein Aztec diet.

ANSWER: cannibalism [or clear equivalents] <WN>

15. The poet Timocreon composed many drinking songs criticizing this man. For 10 points each:

[10] Name this man, who became the governor of Magnesia under the rule of Artaxerxes I after being drove out of Argos.

ANSWER: **Themistocles**

[10] Themistocles's downfall began after he was kicked out of Athens through this process, which involved casting votes using pottery shards.

ANSWER: **ostracism** [accept word forms, such as **ostracized**]

[10] This rival of Themistocles wrote his own name on a voting shard after an encounter with an illiterate voter, who supposedly hated hearing this man be called "the Just."

ANSWER: **Aristides** <KG>

16. Answer the following about painters who have been the subject of recent documentaries, for 10 points each:

[10] A 2013 documentary follows the marriage of the Neo-Dadaist painter Ushio Shinohara, who unusually creates paintings by hitting the canvas with these objects.

ANSWER: **boxing gloves**

[10] A 2014 documentary follows the New York residency of Banksy, an artist best known for his work in this medium. Its other practitioners include Jean-Michel Basquiat and Keith Haring.

ANSWER: **graffiti** [or **street** art]

[10] Teller of Penn and Teller fame directed a 2013 documentary about Tim Jenison's attempt to recreate a painting by this artist. This man painted *The Procureess* and *The Geographer*.

ANSWER: Jan **Vermeer** [or Johannes **Vermeer**] <WN>

17. With Miller, this man names a system that uses four indices denoted h, k, i, and l, and which is used for hexagonal and trigonal lattices. For 10 points each:

[10] Name this Frenchman who names space-filling lattices. Five of his namesake lattices exist in two dimensions, while 14 exist in three dimensions.

ANSWER: Auguste **Bravais**

[10] Bravais lattices describe these solids that made up of atoms in an ordered, repeating structure. They are composed of unit cells such as a face-centered cubic.

ANSWER: **crystals**

[10] Defects in crystals can be described by this object, which is a quantification of the difference between a perfect lattice and a distorted lattice, thereby giving direction and magnitude of a displacement.

ANSWER: **Burgers vector** [prompt on "**vector**", I guess] <SD>

18. The title character of this poem saw "Time like a pulse shake fierce / Through all the worlds," and "spoke as when / The stars sang in their spheres." For 10 points each:

[10] Name this poem narrated by a woman who "leaned out / From the gold bar of Heaven," praying to be reunited with her still-living lover.

ANSWER: "The **Blessed Damozel**"

[10] "The Blessed Damozel" was written by an author with this last name whose sister, Christina, penned the poem "Goblin Market."

ANSWER: **Rossetti** [or Dante Gabriel **Rossetti**; or Christina **Rossetti**]

[10] The introductory poem in Dante Gabriel Rossetti's collection *The House of Life* calls this form of writing "a moment's monument." Wordsworth slammed critics for being mindless of its "just honours" in a poem titled "Scorn not" this form of writing.

ANSWER: the **sonnet** [do not accept or prompt on any other answers] <AG>

19. This man and his brother Pierre organized themselves on the island of Barataria. For 10 points each:

[10] Name this pirate. Governor William Claiborne put out an order for his capture, and later, many of his supporters and ships were captured by Commodore Daniel Patterson, but he was eventually pardoned.

ANSWER: Jean **Lafitte**

[10] Lafitte was instrumental in the American victory at New Orleans, during which this British major-general died while leading troops alongside Admiral Alexander Cochrane.

ANSWER: Edward **Pakenham**

[10] The Battle of New Orleans occurred after the Treaty of Ghent had already ended this war between the British and the Americans.

ANSWER: War of **1812** <SD>

20. The appendix to the novel in which this character appears details the fate of the main characters, including an entry for this character saying simply "They endured." For 10 points each:

[10] Name this woman who is the focus of a section taking place on Easter Sunday, 1928. She takes a character to church and lets her grandson Luster drive him to a graveyard.

ANSWER: **Dilsey**

[10] Dilsey cares for this mentally handicapped character, who thinks that his sister Caddy smells like trees.

ANSWER: **Benjy** Compson [or **Benjamin** Compson; or **Benjy** **Compson**]

[10] Dilsey and Benjy Compson appear in *The Sound and the Fury*, a novel which liberally employs this technique, which fluidly depicts a character's thoughts, often eschewing punctuation.

ANSWER: **stream of consciousness** <WN>

Extra: Two important points found on these constructs are the triple point and critical point. For 10 points each:

[10] Name these plots that have areas representing the solid, liquid, and gas states of substances. The most common ones show temperature on the x-axis and pressure on the y-axis.

ANSWER: **phase diagrams**

[10] This kind of point that can be found on many phase diagrams is especially important because it indicates the chemical composition and temperature corresponding to the lowest melting point of a mixture of components.

ANSWER: **eutectic** point

[10] One approach to constructing phase diagrams applies this method which determines the order and angles of reactions in multicomponent systems, which can be placed in namesake bundles around an invariant point.

ANSWER: **Schreinemakers** method [accept **Schreinemakers** analysis] <SD>