

Tossups

1. **This quantity is equal to 10 to the power quantity apparent magnitude minus absolute magnitude plus 5, all over 5, and the difference between the apparent and absolute magnitude is often called the modulus of this quantity. Baryon acoustic oscillations provide a standard for measuring this quantity. Two versions of this quantity, one of which can change over time and the other which is constant, are related by the (*) scale factor; those are the co-moving and proper versions of it. Leavitt's fixed period-luminosity relationship for Cepheid variables allows their use for measuring this quantity. Measures of this quantity are calibrated using stellar parallax. The radial velocity is equal to this value times the Hubble parameter according to Hubble's law, which is used to relate it to redshift. For 10 points, name this parameter which is measured in parsecs and light-years.**
ANSWER: distance [accept things like "how far away things are" or equivalents]

2. **One of this man's essays says that abusive language and swearing are legacies of slavery; that is *The Struggle for Cultured Speech*. George Breitman edited a 14-volume collection of his works. This man attacked Karl Kautsky in a work sometimes published as *Democracy and Dictatorship*. This man called a particular ideology "Bonapartism" and criticized that ideology's "zigzags" in policy in one work. This man applied the word "degenerated" to (*) states in which the bureaucracy has taken over, a condition he called his country's "Thermidor". In one work he advocated creating a vanguard party to perpetuate the worldwide "permanent revolution", and he argued heavily against "socialism in one country". For 10 points, name this author of *The Revolution Betrayed* who was purged and exiled to Mexico, where he was killed on orders from his rival, Stalin.**
ANSWER: Leon Trotsky

3. **One theory of this force states that the square of its coupling constant times the square root of 2 over 8 is proportional to G_{Fik} . The constraint $V_{ik} V_{jk}^*$, summed over all k , equals zero, gives the unitarity triangles that constrain a mathematical device used to describe this force. The particles that mediate this force were discovered using stochastic cooling in the UA1 and UA2 collaborations, which collided protons and antiprotons together; that experiment won (*) Rubbia and van Der Meer the Nobel Prize. The aforementioned matrix contains a CP-violating phase and is named for Cabibo, Kobayashi, and Masakawa. Glashow, Weinberg, and Salam unified it with electromagnetism, and this force mediates beta decay. For 10 points, name this force that is mediated by the W and Z particles.**
ANSWER: weak force

4. **According to the Jewish calendar, this is the earlier of two holidays on which the Unetannah Tokef piyyut is recited. In the days leading up to this holiday, the akeidah, chatanu, and techinah prayers are recited in the Ashkenazi tradition as their selichot prayers. One of the customs on this holiday traces its origin to the *Sefer Maharil* of Rabbi Molin and involves throwing bread into water to represent the casting off of sins; that tradition is called (*) tashlikh. The ba'al tekiyah performs one traditional rite on this holiday, while another tradition is to eat apples dipped in honey on this first of the Days of Awe, which involves 100 blows on the shofar. For 10 points, name this Jewish holiday on the first two days of Tishrei that recently marked the beginning of the 5,774th year.**
ANSWER: Rosh Hashanah [prompt on "Jewish New Year"]

5. **In this novel, after the protagonist's maid brings her a man's marriage proposal by letter, she uses a candle to burn some dried flowers she had received from another man before accepting the proposal. A man once thought to be dead becomes of interest in this novel when someone wants to inspect his handwriting;**

that character's letters are sought out by Guppy who finds out that he was using the name (*) "Nemo." The mistress of Chesney Wold fears that news of her illegitimate child will be revealed, so she runs away and dies where her lover, Captain Hawdon, was buried. The protagonist ends up marrying Alan Woodcourt at the end of this novel that details Richard Carstone's obsession with the Chancery court case, *Jarndyce v. Jarndyce*. For 10 points, name this Charles Dickens novel centering on Esther Summerson who lives in the title location.

ANSWER: **Bleak House**

6. This sculptor added an African man wrestling with an animal to the center of a della Porta work, and he created a large shell with three bees sitting at its base. Another one of this artist's sculptures contains the Barberini coat of arms and is supported by four open-mouthed dolphins whose tail fins hold up a kneeling god who holds a (*) conch to his mouth. One figure sits on a bunch of coins while another holds an oar in a work by this artist that shows another man struggling to uncover his head from beneath a cloth. The four title characters surround an Egyptian obelisk in a sculpture by this man who showed an angel ready to drive an arrow into a swooning female. For 10 points, name this sculptor of *Triton* and *Fountain of the Four Rivers* as well as *Ecstasy of Saint Teresa*.

ANSWER: Gian Lorenzo **Bernini**

7. This author wrote a play in which a man starts a fight over another man having beaten his sister, but the fight is interrupted by a character who gets on top of a stove and starts yawning; that character had earlier declared that "all are equal" after another man stated, "We're all of us... nothing but the bare naked man." This author created a character who fasts for eight days in prison after being insulted in jail and participates in banned-book-reading sessions in Pavel's house that eventually lead to Pavel's arrest, which saddens (*) Pelegaya. This author wrote a play in which the Actor hangs himself after spending some time in Vassilissa and Kostilyoff's house with a thief, a gambler, and Luka. This author of *The Mother* used the socialist-realist style of literature in a work about a poor house. For 10 points, name this Russian author of *The Lower Depths*.

ANSWER: Maxim **Gorky** [or Alexei Maximovich **Peshkov**]

8. Charles Blackader had to make decisions on several court-martials after this event. During this event, the *HMS Bluebell* escorted Captain Karl Spindler to port, where he scuttled his ship; that ship, the *SMS Libau*, was masquerading as the Norwegian ship *Aud*. John Maxwell led the victorious forces in this event. The headquarters of instigators of this event were located in the General Post (*) Office. Attempting to secure German arms for the perpetrators of this event led to the execution of Roger Casement. James Connolly and Patrick Pearse were among the signatories of the Declaration of the Revolution that was promulgated during this event. For 10 points, name this 1916 revolt against British rule by the Irish Volunteers that was largely concentrated in Dublin.

ANSWER: **Easter Rising** [or **Easter Rebellion**; accept alternatives for **rebellion** such as **revolt**, **uprising**, etc.; or **Eiri Amach na Casca**]

9. One painting by this artist includes a golden statue in the background that faces away from the central event and includes a wounded drummer at the bottom left and the black servant Pompey in the center. This artist also included a tapestry of the defeat of the Spanish Armada behind a huge group of aristocrats in white and red robes who look on while Pitt the Elder collapses. The man in this artist's (*) *Head of a Negro* appears in another work by him, and he painted his half brother holding a gold chain on a table with his pet; that depiction of Henry Pelham is titled *Boy with Squirrel*. This man set another work in Havana Harbor where a boatswain drives a spear into the water to save a boy. For 10 points, name this painter of *Watson and the Shark*.

ANSWER: John Singleton **Copley**

10. One of these countries issued the "Letter of the two sorries" to the other following an aviation incident. Relations between these two countries were damaged when one country's premier was refused a handshake

by the other's secretary of state. Relations between these two countries improved with the release of the Three Communiqués. During Operation Allied Force, one of these countries accidentally bombed the other country's (*) embassy in Belgrade. Relations between these two countries improved after an incident in which Glen Cowan received a silk screen; that incident led Kissinger to feign sickness while on a trip to Pakistan to secretly plan a 1972 trip. For 10 points, name these two countries whose Ping-Pong diplomacy led to Nixon's visit to Mao. ANSWER: People's Republic of China and the United States of America [or PRC and USA; or Zhonghua Renmin Gongheguo and Mei Guo; or P.R. China and America; or any combination of the above as long as both are included]

11. This island's Lake Akan is famous for its moss balls. The country that controls this island claims that some nearby islands such as Iturup and Kunashir fall under this island's Nemuro subprefecture. This island is the largest of its country's 47 prefectures. This island was the site of the (*) 1972 Winter Olympics, which was held in a city that is much larger than its second and third largest cities; those other cities here are Asahikawa, which is in its centre and Hakodate, which is in its south. The Strait of La Perouse separates this island from Sakhalin Island in the north, and the Seikan Tunnel traverses the Sugaru Strait, which separates this island on which the Ainu live from Honshu in the south. For 10 points, name this northernmost of the four main islands of Japan. ANSWER: Hokkaido [or Ezo]

12. This conflict included the Battle of Fauborg St. Antoine, which resulted in the capitulation of a capital city. That capital city had earlier been besieged by a man who was imprisoned with his brother-in-law Henri d'Orléans a year after taking it. This conflict was subsumed into a war that ended with the Peace of the Pyrenees and it included the revolt of the Grand (*) Condé, who defected to Spain and was later defeated at the Battle of the Dunes. The Peace of Rueil ended the first phase of this conflict, which was led by the namesake rebellious courts. This conflict was split into two phases, one "of the *Parlements*" and one "of the Princes." It occurred during the regency of Anne of Austria, who dismissed and then recalled its target, Cardinal Mazarin. For 10 points, name this civil war in France during the minority of Louis XIV that takes its name from a sling. ANSWER: the Fronde [or *La Fronde*]

13. One tumor of this organ occurs often in patients with Denys-Drash syndrome and is caused by deletion of the WT1 gene on chromosome 11p. Clear cell carcinoma of this organ is common in von Hippel-Lindau syndrome. Mutations in cilia-localizing proteins causes a disease in which this organ is filled with cysts. One section of this organ requires podocin in order to form (*) slit pores, which lie opposite a basement membrane from an array of podocytes. One section of this organ inserts aquaporins into its membrane in response to ADH. One section of this organ contains the NKCC1 cotransporter in its thick limb and uses a countercurrent multiplier system to concentrate the filtrate. For 10 points, name this organ whose functional unit contains a group of capillaries called the glomerulus, the Bowman's capsule, and the loop of Henle as part of the nephron. ANSWER: kidney

14. In one story, this author wrote of a young girl who sleeps on the edge of her bed to make room for her imaginary friend even after a car ran over and killed that imaginary friend, Jimmy Jimmerino. In another story, a sergeant discovers an old package that contains a letter ending with several all caps "HELLO"s as well as a "lucky talisman," a wristwatch with broken crystal. In another story, a young girl becomes jealous of (*) Sharon Lipschutz who sat with an older man while he played the piano in a hotel lounge; that girl, Sybil Carpenter, learns how a certain animal dies when it gets too fat to escape its feeding hole. This author included "Uncle Wiggily in Connecticut" and "For Esme – with Love and Squalor" in his *Nine Stories*. For 10 points, name this creator of Seymour Glass in his "A Perfect Day for Bananafish." ANSWER: Jerome David Salinger

15. The right to conduct this work's American premiere was lost by Artur Rodzinski and Leopold Stokowski to the NBC Symphony Orchestra under Toscanini who broadcast the premiere on radio. The title "Memories" was removed from this work's second movement, which the composer called a "lyrical intermezzo," but is usually classified as a scherzo. This work earned comparisons to *Bolero* for the (*) twelve variations, all rising in volume, on the first movement's theme that used a melody from Lehar's *The Merry Widow* as well as a previously lambasted opera by the same composer. This symphony also contains a very long snare drum part in the first movement for its "invasion theme." For 10 points, name this symphonic testament to Soviet victims in World War II that was composed by Shostakovich.

ANSWER: Shostakovich's Symphony No. 7 in C major, Op. 60 [or Leningrad Symphony; accept Symphony No. 7 in C major, Op. 60 after "Shostakovich" is read]

16. Molecules with this property have a value of 1 in their namesake harmonic oscillator model, which has a normalization constant of 257.7. Chorismate undergoes a Claisen rearrangement in the bacterial pathway for creating amino acids with this property. Molecules with this property have an even number of doubly degenerate orbitals as plotted on Frost's circle, and molecules with this property have a negative diamagnetic susceptibility exaltation. The final deprotonation in the Friedel-Crafts acylation regenerates this (*) property of the substrate. Molecules with this property show diatropic current on NMR, and hydrogens of molecules with this property show chemical shifts between 6 and 9.5 ppm. This property is exhibited by planar molecules that have four n plus two pi electrons according to Huckel's rule. For 10 points, name this property of a molecule

ANSWER: aromaticity [accept word forms of "aromatic"]

17. Dorothy Lee cited these people's language as an example of coding reality non-linearly. These people practice a type of ritual warfare known as kyasa, which led to the development of a particularly violent form of cricket. *Baloma* are spirits of the dead among these people, which enter the body during pregnancy. One work about these people discusses how women are given (*) yams as presents. An important work about this culture lists a series of spells in the appendix. The chiefs of this culture participate in a ritual involving white armbands being travelling south and red shell necklaces going north; that ritual was studied in Marcel Mauss' *The Gift*. For 10 points, name these people whose gardening practices were the subject of *Coral Gardens and their Magic*, and whose kula ring exchange was discussed in Malinowski's "Argonauts of the Western Pacific".

ANSWER: Trobriand islanders [prompt on "Melanesians"]

18. This poet wrote, "neither, Torquatus, your race, nor your eloquence, nor your piety will restore you," in a poem ending, "nor is Theseus powerful enough to break the chains for dear Pirithous." This author described, "my childhood... beyond the bounds of nurturing Apulia," while another poem from the same collection says to "place in the hours that come as little faith as you can;" that collection begins with a dedication to Maecenas and consists of (*) four books. This author of the *Carmen Saeculare* wrote, "as is painting, so is poetry," and wrote two books each of *Epistles* and *Satires*. This author coined the phrase, "in medias res," while one of his collections used a form earlier developed by Pindar and includes the phrase, "Carpe diem." For 10 points name this Roman poet of *Ars Poetica* and his collection of *Odes*.

ANSWER: Horace [or Quintus Horatius Flaccus]

19. In Hesiod's *Theogony*, this figure is the mother of Latinus. In the Apollonius of Rhodes's *Argonautica*, this figure comforts her niece Medea. In Ovid's *Metamorphoses*, this figure is defeated by Eurylochus. Some of this figure's jealous fits resulted in the a King of Latium being turned into a bird and the love interest of Glaucus being turned into a monster. In one story, after this figure's son kills her former lover, she marries that former lover's son; that work is the (*) *Telegony*. This figure tells one hero how to travel to the underworld and to speak with Tiresias about how to overturn one of Poseidon's curses. Hermes travelled to Aiaia to deliver moly to a hero who would proceed to sleep with this figure for a year. For 10 points, name this enchantress who

turns Odysseus's men into pigs.

ANSWER: Circe [or Kirke]

20. A member of this party who campaigned under the slogan “don’t get confused” was shot and killed a few days before the sitting president’s brother-in-law Massieu, resulting in the slain candidate’s campaign manager and former Education Secretary winning instead. Further, the currency was devalued in the “December mistake” during that awful year for this incumbent party, 1994. Snipers employed by officials of this party massacred several student protesters at the Plaza of the (*) Three Cultures ten days before the Olympics in the Tlatelolco Massacre. Plutarco Calles founded this political party, whose other presidents included the aforementioned Ernesto Zedillo and PEMEX founder Lazaro Cardenas. Its 71-year reign came to an end when it lost the 2000 election to the rival PAN party. For 10 points, name this currently in-power Mexican political party.

ANSWER: PRI [or Partido Revolucinario Institucional; or Institutional Revolutionary Party; or Partido Nacional Revolucionario; or National Revolutionary Party; or PNR; or Partido de la Revolucion Mexicana; or Party of the Mexican Revolution; or PRM]

TB. In this novel, a man murders another man with a scythe after his fifteen year-old granddaughter, who had just given birth to a child, is abandoned by that man; when that murderer is found, he slits his daughter’s throat. This novel ends with the question, “Why do you hate the South?” which prompts the narrator to think, “I don’t hate it! I don’t hate it!” The central family’s house, known as The (*) Hundred, is finally burned down by the young Clytie, and the main plot is told mostly as part of a conversation between Shreve and his Harvard roommate who was himself told the story by Rosa Coldfield. Another character in this novel murders his half-brother Charles Bon when he realizes that Charles is half black. For 10 points, name this novel by William Faulkner about the family of Thomas Sutpen.

ANSWER: Absalom, Absalom!

Bonuses

1. The “Fast and playful” section of a solo piano piece by this composer was used for the finale of his *Symphony No. 1 in B flat major*. For 10 points each:

[10] Name this composer who composed his “Spring Symphony” shortly after marrying Clara Wieck.

ANSWER: Robert Schumann

[10] This set of thirteen solo piano pieces by Schumann was originally called “Easy Pieces,” and it includes sections like “Of Foreign Lands and Peoples” and “Traumerei.”

ANSWER: Kinderszenen [or “Scenes from Childhood”]

[10] Schumann also wrote one of these works in G minor that is marked “as fast as possible” and is later marked “faster still.” Schumann also wrote two “Grand” ones of these as well as three “for the Young.”

ANSWER: piano sonatas [prompt on partial answer]

2. In a chapter about the “structures and restructures” of the title entity, this work theorizes that the European imagination has romanticized Egypt and the Middle East. For 10 points each:

[10] Name this book by Edward Said which argues that the West has viewed the East as barbarians in the context of the title discipline.

ANSWER: Orientalism

[10] Edward Said was a major scholar in this discipline, a branch of critical theory devoted to studying the lingering effects of imperialism. Frantz Fanon and Gayatri Spivak are other greats in this field.

ANSWER: postcolonial studies or postcolonialism

[10] This author of *Islam and the West* and *From Babel to Dragomans* engaged in numerous public debates with Edward Said, arguing against the theses of *Orientalism*.

ANSWER: Bernard Lewis

3. This incident was caused by the murder of Ahmed Bouchiki, a Moroccan waiter. For 10 points each:

[10] Name this incident in which agents trying to assassinate Ali Hassan Salameh killed an innocent man in Norway and then were caught by Norwegian police.

ANSWER: Lillehammer Affair

[10] The Lillehammer Affair occurred during this operation to kill the members of Black September responsible for the 1972 Munich Massacre.

ANSWER: Operation Wrath of God [or Operation Bayonet]

[10] The Lillehammer Affair and Operation Wrath of God were acts of this country’s Mossad agency, which also carried out Operation Spring of Youth to kill leaders of the Palestinian Liberation Organization.

ANSWER: State of Israel [or *Medinat Yisrael*; or *Dawlat Isra’il*]

4. This poem states, “And think, this heart, all evil shed away... Gives somewhere back the thoughts of England given.” For 10 points each:

[10] Name this poem that begins, “If I should die, think this of me: That there’s some corner of a foreign field That is for ever England.”

ANSWER: “The Soldier”

[10] “The Soldier” was written by Rupert Brooke during this conflict that also inspired much of Siegfried Sassoon’s poetry.

ANSWER: World War I [accept equivalents like First World War; prompt on partial answer]

[10] This other poem was also published during World War I and tells of a narrator whose narrator asks for “a tall ship,” “a windy day,” and “a merry yarn” and says he “must go down to the seas again, to the lonely sea and sky.”

ANSWER: “Sea Fever”

5. This technique is commonly performed until the equivalence point is reached. For 10 points each:

[10] Name this technique which is often used to find the concentration of an acid in a sample by slowly adding in base, or vice versa. This technique often uses a buret.

ANSWER: **titration**

[10] In this method, an excess of a reagent is added to a sample intentionally, and then titrated. It is commonly used when a reagent will form a precipitate with the sample, which can then be dissolved by this procedure

ANSWER: **back** titration [or **reverse** titration]

[10] In this type of titration, a chelating agent like EDTA is added to a sample to determine the concentration of metal ions in a solution.

ANSWER: **complexometric** titration

6. Ramiro Bastos and Mundinho Falcao are competing agriculturists in this novel set in Ilheus. For 10 points each:

[10] Name this novel in which the title character is hired as a cook by Nacib Saad before she begins a romantic relationship with him.

ANSWER: **Gabriela, Clove and Cinnamon**

[10] *Gabriela, Clove and Cinnamon* was written by Jorge Amado, an author from this country. Machado de Assis is another great author from this country.

ANSWER: **Brazil** [or the Federative Republic of **Brazil**]

[10] This other novel by Jorge Amado tells of the title promiscuous girl who returns to her hometown after twenty-six years and uses connections from her career as a prostitute to prevent the installation of a chemical factory.

ANSWER: **Tieta**, *the Goat Girl: Or, the Return of the Prodigal Daughter* [or **Tieta do Agreste**, or **Tieta from Agreste**]

7. Along with First John, this book was the subject of Isaac Newton's text *A Historical Account of Two Notable Corruptions of Scripture*. For 10 points each:

[10] Name this New Testament book which includes the famous phrase "for the love of money is the root of all evil." Its author tells the title man that he suffers not a woman to teach.

ANSWER: Paul's **First** Epistle to **Timothy** [or **Timothy 1**; prompt on "Timothy"]

[10] Like many other epistles, such as Romans and Corinthians, First Timothy is written by this prolific apostle.

ANSWER: **Paul** [or **Saul**]

[10] According to tradition, Timothy was the first bishop of this city. In Revelation, this city is said to have "forsaken its first love." The pilgrimage site called the "House of the Virgin Mary" is in this city.

ANSWER: **Ephesus**

8. This operation on a character gives the set of strings that consist of 0 or more repetitions of that character. For 10 points each:

[10] Name this regular expression. A variant of this regex is denoted with a plus-sign and indicates 1 or more instead of 0 or more.

ANSWER: **Kleene star** [or **Kleene operator** or **Kleene closure**; do not accept **Kleene plus**]

[10] The Kleene star is this type of operator that takes only one input. It is a special case of functions of the same name that are denoted by a set with an arrow to another set.

ANSWER: **unary**

[10] Regular expressions are generally used for searching, reading, and writing in this type of data. Programs for processing this kind of data include WordPad and Microsoft Word.

ANSWER: **text**

9. This empire was ruled by the Arsacid Dynasty and had a noble House of Karen. For 10 points each:

[10] Name this empire once led by a ruler who executed Orobasus for sitting in a subordinate position to Sulla during negotiations with Ariobarzanes I of Cappadocia. Its mounted archers employed a namesake “shot” tactic.

ANSWER: **Parthian** Empire [or **Arsacid** Empire before “Arsacid” is read]

[10] Parthian horse archers were used to devastating effect at the Battle of Carrhae against this rich member of the First Triumvirate who was allegedly killed with molten gold.

ANSWER: Marcus Licinius **Crassus**

[10] This general led the Parthian forces at Carrhae while in service to Orodes II of Parthia, who had him executed because of his military success. He belonged to a namesake noble Parthian noble house.

ANSWER: Rustaham **Surena**-Pahlav

10. The “new” and “new new” theories of this process utilize the Ricardo-Sraffa theoretical foundation. For 10 points each:

[10] Name this process that is described by the Heckscher-Ohlin model and is classically predicated on comparative advantage.

ANSWER: **trade** [or international **trade**]

[10] This criticism of the Heckscher-Ohlin theorem was based on its namesake’s findings that the US imported capital-intensive goods despite its abundance of capital.

ANSWER: **Leontief’s paradox**

[10] These effects in New Trade Theory explain that transportation costs may incentivize production to concentrate near the largest market for a good where producers can utilize economies of scale. They were explicated in a 1980 Krugman paper.

ANSWER: **home market** effects [or **HMEs**]

11. One form of this deity is the wind god Ehecatl. For 10 points each:

[10] Name this feathered serpent deity from the Aztec pantheon who created man by drizzling blood on bones that he obtained from Mictlan.

ANSWER: **Quetzalcoatl**

[10] A potential classic period Mayan equivalent to Quetzalcoatl was this feathered serpent deity. The temple of El Castillo at Chichen Itza is dedicated to him.

ANSWER: **Kukulcan** [do NOT accept “Gugumatz”, as that is a different figure]

[10] Quetzalcoatl once turned into one of these creatures to enter a mountain to bring maize to humankind. In other mythologies, all of Indras past lives were shown as these creatures, and Eurymedusa was seduced by Zeus in this form.

ANSWER: **ant**

12. One article that advocated expanding this party’s electoral base was Julius Bachem’s “We Must Get Out of the Tower!” For 10 points each:

[10] Name this German political party once led by Ludwig Windthorst that had cross-class, but not cross-denominational appeal. It was accused of Ultramontanism and thus attacked during Bismarck’s *Kulturkampf*.

ANSWER: Catholic **Centre** Party [or the German **Centre** Party; or the *Deutsche Zentrumspartei*; prompt on “Catholic” or “Catholic party”]

[10] Chancellor Franz von Papen, a former member of the *Zentrum*, persuaded this President of the Weimar Republic and Great War hero to appoint Hitler as chancellor.

ANSWER: Paul von **Hindenburg**

[10] This other member of the *Zentrum* was Franz von Papen’s predecessor as chancellor. His secret plan to restore the Hohenzollern monarchy failed and his deflationary policies led to economic decline.

ANSWER: Heinrich **Brüning**

13. This collection is separated into the sections “In Life” and “In Death,” and it tells how “the world’s delight is a brief dream.” For 10 points each:

[10] Name this collection of 366 poems that begins with the line, “You who hear the sound, in scattered rhymes.”

ANSWER: *Il Canzoniere* [or *Rime Sparse* or *Song Book*; accept *Scattered Rhymes* before read]

[10] This author of *Il Canzoniere* dedicated many of his sonnets to his beloved Laura.

ANSWER: Petrarch [or Francesco Petrarca]

[10] This collection of writings was inspired by a set of works by Cicero and includes Petrarch’s account of his ascent of Mont Ventoux.

ANSWER: *Epistolae familiaris* [or *Familiar Letters*]

14. The deamination of this pyrimidine base forms uracil, which is a common source of error during DNA replication or PCR. For 10 points each:

[10] Name this nitrogenous base that forms three hydrogen bonds with guanine.

ANSWER: Cytosine [or cytidine]

[10] Cytosine is the main base that undergoes this chemical modification, which occurs at CpG islands in order to silence genes. In mismatch repair, this modification is used to distinguish the template strand from the new strand.

ANSWER: methylation

[10] In the IUPAC degenerate nucleotide nomenclature, this is the letter used to denote a base that is either a T or a C. In other words, this letter denotes a pyrimidine.

ANSWER: Y

15. One member of this art movement paired poems and collages in her *Picture Book*. For 10 points each:

[10] Name this avant-garde group of artists that included Man Ray and Marcel Duchamp. It takes its name from a word meaning “hobby-horse.”

ANSWER: Dadaism

[10] Name this Dada artist and photomontage pioneer who criticized the condition of women in her “Cut with the Dada Kitchen Knife through the Last Weimar Beer-Belly Cultural Epoch in Germany.”

ANSWER: Hannah Hoch

[10] Otto Dix was influenced by Dada to include collage in his work. Dix was a member of this art movement, whose representative works include *The Eclipse of the Sun* and the *Departure* triptych.

ANSWER: New Objectivity [or Neue Sachlichkeit]

16. This man starts to gain literacy from Sophia Auld and is later sent to work for Master Hugh. For 10 points each:

[10] Name this man who detailed his time under the negro-breaker Mr. Covey in his autobiography and also published the *North Star* abolitionist newspaper for a time.

ANSWER: Frederick Douglas [or Frederick Augustus Washington Bailey]

[10] This book details the life of Linda Brent, who is repeatedly assaulted by Dr. Flint and has a consensual affair with Mr. Sands from which she bears two children. The protagonist famously spends seven years in a crawl space.

ANSWER: *Incidents in the Life of a Slave Girl*

[10] This other book tells of the author’s struggle to finance his education at the Hampton Institute as well as Samuel Armstrong’s encouragement to establish a school in Tuskegee, Alabama.

ANSWER: *Up From Slavery*

17. The resistivity of these materials is equal to the Vollema value times ϵ to the negative square of the applied magnetic field plus the Pietrow constant. For 10 points each:

[10] Name these materials that consist of magnetic nanoparticles suspended in a carrier solvent. Despite their name, they are actually superparamagnetic, since they don’t maintain magnetization in the absence of a field.

ANSWER: ferrofluid

[10] Ferromagnets become paramagnetic above this temperature. Above this temperature, a law describing magnetic susceptibility partly named for Weiss applies.

ANSWER: **Curie** temperature

[10] The Curie-Weiss law relies on the permeability of free space. The permeability of free space is exactly equal to this value times ten to the negative seventh power newtons per ampere squared.

ANSWER: **four pi** or **pi times four** [accept equivalents, but do not accept approximations]

18. The Five Laws of the field about these institutions were published in 1931 by a thinker who created Colon Classification. For 10 points each:

[10] Name these institutions that are described as “organisms” by S.R. Ranagathan.

ANSWER: **libraries** [or **library** and information science; or **library** studies]

[10] These identifiers can only be issued in the United States by the private firm RR Bowker, which sells one of these for \$125. Since 2007, all new entries in this system formalized by ISO 2108 have had 13 digits.

ANSWER: **ISBN** [or **International Standard Book Number**; or **ISO 2108** before mention]

[10] The founder of library science in the United States was this Columbia librarian and professor, who has a namesake decimal system for cataloging nonfiction books.

ANSWER: Melville Louis Kossuth **Dewey** [or **Dewey** decimal system]

19. This ballet features the “Peasant” pas de deux as well as the several dances feature “Grape Harvesters” and “Winemakers.” For 10 points each:

[10] Name this ballet in which Bathilde gifts a necklace to a figure who later tries to prevent Myrtha from killing a man who had earlier disguised himself as a villager.

ANSWER: **Giselle**, *ou Les Wilis* [or **Giselle**, *or The Wilis*]

[10] The music to *Giselle* was written by this composer who also wrote *Le corsair*.

ANSWER: Adolphe Charles **Adam**

[10] The librettist of *Giselle*, Saint-George, also wrote the libretto to *The Fair Maid of Perth*, an opera by this composer of *Carmen*.

ANSWER: Georges **Bizet** [or Alexandre Cesar Leopold **Bizet**]

20. One chief of this people led them to Corrine, Utah to convert to Mormonism and receive aid from the missionary George Hill. For 10 points each:

[10] Name this aboriginal people, who were resettled in the Fort Hall Reservation in Idaho away from their ancestral homes in Utah.

ANSWER: **Shoshone** [or **Shoshoni**]

[10] This aforementioned chief of the Shoshone had earlier fled Utah with his people to avoid the Bear River massacre perpetrated by Colonel Connor.

ANSWER: **Pocatello**

[10] This woman is the most famous member of the Shoshone. She served as a guide to the Lewis and Clark Expedition.

ANSWER: **Sacagawea** [or **Sakakawea**]