

1. **This quantity can be easily recalculated by including a term for the product of the mass of an object and the square of the distance involved. It is the subject of Steiner's theorem, also known as the (\*) parallel axis theorem.** One way to find this quantity is to integrate the square of a radius from an axis with respect to mass, and two-fifths of the product of mass and radius squared will yield it for a sphere. The product of this quantity and rotational velocity yields angular momentum. For 10 points, name this rotational analogue of mass.

ANSWER: moment of inertia [prompt on inertia; prompt on angular mass; prompt on rotational mass]

033-09-6-03102

2. **This President sent Winfield Scott to Maine during the Aroostook War. As a Senator, this politician set up a political organization known as the Albany Regency. This man was the first candidate for president of the (\*) Free Soil Party.** This man became President at the start of an economic panic caused in part by his predecessor's Specie Circular. That panic helped cause this President's loss to William Henry Harrison in 1840. For 10 points, name this New Yorker who was the handpicked successor to Andrew Jackson as President.

ANSWER: Martin Van Buren

023-09-6-03103

3. **This artist, and percussionist Rashied Ali, are the only two performers on the album *Interstellar Space*. This performer got his start at the Five Spot Café in Thelonious Monk's quartet. One of this man's seminal albums includes the tracks "Cousin Mary," "Countdown," and "Naima." This practitioner of the "sheets of sound" technique played alongside Cannonball Adderly on (\*) Miles Davis's *Kind of Blue*.** For 10 points, name this jazz composer and performer whose albums include *A Love Supreme*, and who recorded the tenor saxophone songs "Giant Steps" and "My Favorite Things."

ANSWER: John William Coltrane

026-09-6-03104

4. **One character in this work is described as "like an old-stone savage armed," and it asks "Where are the cows?" before declaring "But here there are no cows." In another part, the speaker notes how he could "say 'Elves' to him," before discussing the "boulders that have fallen each to each." This poem is set "on a day we meet to (\*) walk the line" and the speaker asserts "He is all pine and I am apple orchard." For 10 points, name this poem in which a man will not go behind his father's saying of "Good Fences Make Good Neighbors," written by Robert Frost.**

ANSWER: "Mending Wall"

033-09-6-03105

5. **The protagonist of this novel has a fling with her professor, Thomas Callahan, who dies in a car bombing shortly before the death of Gavin Verheek. This novel ends in the Bahamas, where the protagonist has met up with journalist Gray Grantham. The insidious Victor Mattiece is behind the nefarious deeds of this novel, whose protagonist is a (\*) Tulane law student, who theorizes that two Supreme Court Justices were murdered so that a Louisiana oilman could drill in a certain bird's endangered habitat.** For 10 points, name this novel by John Grisham, in which the title memorandum is named for a type of seabird.

ANSWER: *The Pelican Brief*

026-09-6-03106

6. **These entities are considered phaneritic if they are produced slowly or aphanitic if they are more rapid, a combination of the both would be porphyritic. The composition of these materials leads to them being classified as (\*) felsic or mafic, and all batholiths are composed of them. This rock type includes andesite and periodite, as well as the material that makes up much of the oceanic crust. For 10 points, rhyolite, gabbro, basalt, granite are what types of rocks, whose name suggest their origin by lava or magma?**

ANSWER: igneous rocks

033-09-6-03107

7. **This man served as a bodyguard for his mentor George Wishart, until Wishart's burning at the stake forced this man to take the pseudonym "John Sinclair" and enter servitude on a French galley. The three years he spent in Geneva inspired this man to create an organization known as The (\*) Kirk. For 10 points, name this author of the *History of the Reformation in Scotland* who founded the Presbyterian Church.**

ANSWER: John Knox

015-09-6-03108

8. **One of this author's title characters is a superhuman warrior who burns a Quran. This man wrote about the St. Bartholomew's Day Massacre in his play *The Massacre at Paris* and collaborated with Thomas Nashe on *Dido, Queen of Carthage*. Sir Walter Raleigh responded to one of his poems that begins "Come live with me and be my love," "The (\*) Passionate Shepherd to His Love." The title character of one of his plays dies in a boiling cauldron after scheming against the Christians. For 10 points, name the playwright of *Tamburlaine the Great* who described Barrabas in *The Jew of Malta* before dying in a barfight.**

ANSWER: Christopher "Kit" Marlowe

034-09-6-03109

9. **In the *Aeneid*, Aeneas meets Achaemenides (eye-kah-MEN-id-eez), who has been trapped by one of these creatures that wears "a ponderous whistle." After the murder of Asclepius for raising the dead, Apollo took revenge on these creatures in order to spite Zeus, as these creatures were responsible for creating Zeus's (\*) thunderbolt. After encountering "no man," one of these creatures has to call upon his father Poseidon to spite his enemy Odysseus for blinding him. For 10 points, name this race of Polyphemus (pah-LIFF-uh-muss), who were giants with only one eye.**

ANSWER: Cyclops [or Cyclopes]

052-09-6-03110

10. **This composer's Opus 20 broke with the Galante style by including non-symmetrical phrases and giving each instrument an equal voice. This composer was the first to regularly include dance forms such as the minuet in his symphonies, which include ones named "Philosopher" and (\*) "Drumroll." This composer's "London symphonies" include one whose second movement interrupts the theme of "Twinkle, Twinkle Little Star" with a sudden crashing chord. For 10 points, name this classical Austrian composer of the "Surprise" symphony.**

ANSWER: Franz Joseph Haydn

004-09-6-03111

11. **This nation's highest point is the Tajumulco Volcano. Ancient cities such as Nakbe and Xulnal (SHOOL-nawl) are prominent in this nation's Mirador Basin. This country's postal system was built by the United Fruit Company. Its northerneastern neighbor was once called British Honduras, but is now known as (\*) Belize. This country also borders regular Honduras, as well as El Salvador. For 10 points, name this country found to the southeast of Mexico.**

ANSWER: Republic of Guatemala [or Republica de Guatemala]

022-09-6-03112

12. **The diary of the schoolboy William Taswell provides an account of this event, that was worsened by the inaction of Thomas Bloodworth. Many people who tried to escape this event were trapped by the Roman Walls, that contained only eight gates. Samuel (\*) Pepys (peeps) provided a widely read account of this event, whose aftermath included the appointment of Christopher Wren to rebuild many churches. For 10 points, what was this seventeenth century disaster that consumed the capital of Great Britain?**

ANSWER: The Great Fire of London [prompt on partial answer; accept obvious equivalents]

040-09-6-03113

13. **In one poem by this writer, the speaker notices smallest things that were overlooked before in "The last Night that She lived." In another work by this author, the speaker notes "how public, like a frog" to tell the name to "an admiring bog." Earlier, that speaker asks "Don't tell! / They'd banish us, you know" before declaring, "I am (\*) Nobody." The horses' heads face toward eternity in another work, in which the speaker is in carriage with the title figure and Immortality. For 10 points, name the Amherst poet of "Because I could not stop for death."**

ANSWER: Emily Dickinson

034-09-6-03114

14. **This painter showed a brunette in red and green leaning over a blonde girl in white who is sitting at an instrument in his depiction of *Two Girls at the Piano*. This artist depicted a woman in a striped dress leaning over the back of a park bench in a painting that shows couples dancing at an outdoor ball. This father of the noted (\*) film director of *The Rules of the Game*, Jean, also depicted Gustave Caillebote wearing a straw hat under an awning. For 10 points, name this artist of *La Moulin de la Galette* and *The Luncheon of the Boating Party*.**

ANSWER: Pierre Auguste Renoir

026-09-6-03115

15. **In 1194, a political shift took place in this culture as a new "league" was formed among its cities, replacing the alliance built by prior kings from this group, Hunac Ceel and Kukulkan. Classical period kings of this group, such as Pakal, only ruled one city. This civilization's Post-Classic period began in 900 CE with the mysterious (\*) depopulation of its highlands. Bonampak, Palenque (pah-LEN-kay), Tixal, and Copán were among the centers of this group, which played the "pitzil" ball game. For 10 points, name this group whose Gautemalan and Yucatan cities included Chichen Itza.**

ANSWER: Mayans

019-09-6-03116

16. **After the love interest to the title character of this novel saves her friend from a band of gypsies, she decides that she isn't really interested in him after all. One mystery in this novel centers around the anonymous gift of a piano to the niece of Miss Bates. This book's characters suspect that the piano was given to her by her step-sister's husband, Mr. (\*) Dixon.** It is not until later that Jane Fairfax and Frank Churchill's secret engagement is revealed and the title character, who mentors Harriet Smith, realizes that it was Mr. Knightley whom she was actually in love with the whole time. For 10 points, name this Jane Austen novel about a romantic busybody.

ANSWER: Emma

040-09-6-03117

17. **This thinker said that simplicity and fruitfulness are the keys for economics to be a scientific discipline in his essay "The Methodology of Positive Economics." The idea that consumers base their consumption on long-term income is the basis of his "permanent income hypothesis." He collaborated with his wife Anna Schwartz on A (\*) *Monetary History of the United States*, and he produced the TV series *Free to Choose*.** For 10 points, name this American economist, a major figure of monetarism and the Chicago school.

ANSWER: Milton Friedman

034-09-6-03118

18. **A solid, liquid, or dense gas produces a spectrum of all wavelengths according to the first of this man's Three Laws of Spectroscopy. Those laws were discovered by this man and Robert Bunsen, with whom he discovered cesium and rubidium. He is best known for two (\*) rules, one of which states that the total potential change over an entire circuit is zero, and the other of which states that the sum of all currents entering a junction equals the sum of all currents leaving it.** For 10 points, name this German physicist with namesake Loop and Junction Rules.

ANSWER: Gustav Kirchhoff

003-09-6-03119

19. **In John 6, verse 9, this figure asks how five barley loaves and two fishes could feed five thousand people. Pope Paul VI sent relics of this saint to Greece in 1964. Legend states that he travelled up the Dnieper river to establish the future location of Kiev. He was executed on the order of Aegaeas (aa-JEE-us) in Patrae, and he was supposedly crucified on an (\*) X-shaped cross.** For 10 points, name this patron saint of Russia and Scotland, the brother of St. Peter.

ANSWER: Saint Andrew

030-09-6-03120

20. **This quantity can be calculated by taking the nuclear charge and dividing it by the square of the covalent radius. Another way to calculate this property involves calculating the square root of three types of bond dissociation energies. This property is often calculated as the average (\*) of electron affinity and the first ionization energy. It is calculated by the Mullikan Scale, and francium has the lowest value for this property. It was first proposed by Linus Pauling, who gave fluorine a value of 4.0.** For 10 points, name this tendency of an atom to attract electrons toward itself in a covalent bond.

ANSWER: electronegativity

033-09-6-03121

21. This man's book *The Saviors of God* elucidates his idea that God is not dead but is waiting to be created in the image of individuals that need him. This developer of "metacommunism" wrote a novel in which The Widow is stoned and beheaded after Pavli drowned himself in the ocean. He also described a figure who has a romantic relationship with (\*) Mary Magdalene, and he wrote a "modern sequel" to The Odyssey. For 10 points, name this author of *The Last Temptation of Christ* and *Zorba the Greek*.

ANSWER: Nikos Kazantzakis

030-09-6-03122

22. Classes within this phylum include **Holothuroidea** and **Crinoidea**. Members of this phylum possess **ambulacral grooves that assist in food transport and locomotion as well as ampullae and tube feet, a system known as the** (\*) water vascular system. Members of the most well-known class are known for their ability to regenerate lost arms. This phylum takes its name from the Greek for "spiny skin." For 10 points, name this marine phylum which includes sea urchins, sand dollars, and starfish.

ANSWER: Echinodermata [or echinoderms]

025-09-6-03123

23. This man used a tenuous dynastic connection to **Claudius II** to legitimize his rule. After receiving the support of the previous emperor, **Valerius**, this man warred with **Licinius**. This ruler, who put down a rebellion by **Maximian**, apocryphally granted **Pope Sylvester** dominion in his namesake (\*) "Donation." This man allegedly had a dream in which he was commanded to put crosses on his shields before defeating **Maxentius** at the Battle of **Milvian Bridge**. For 10 points, name this issuer of the Edict of **Milan**, who ruled from 306 to 337 and was the first Roman emperor to convert to Christianity.

ANSWER: Constantine I [or Constantine the Great; or Flavius Claudius Constantinus; prompt on Constantine]

015-09-6-03124

1. This leader passed a law banning the kidnapping of women, and was succeeded by his son Ogedei. For 10 points each:

[10] Name this early thirteenth century Mongol leader, whose forces conquered all the territory between China and the Caspian Sea.

ANSWER: **Genghis Khan** [or **Chinggis Khan**; or **Temujin**]

[10] Under Genghis's grandson Kublai Khan, the Mongols launched two invasions of this country, in 1274 and 1281, both of which were repelled.

ANSWER: **Japan** [or **Nippon**]

[10] This khanate ruled the western part of the Mongol Empire, including what is now southern Russia. It fought many wars with the Ilkhanate and was divided into Blue and White parts.

ANSWER: **Golden Horde** [or **Qipchaq Khanate**]

004-09-6-03201

2. This gambling addict was unable to immigrate to America because he missed his ferry. For 10 points each:

[10] Name the British writer, who expressed his nostalgia for the pastoral in “The Deserted Village” and wrote a novel about the Primrose family, *The Vicar of Wakefield*.

ANSWER: Oliver **Goldsmith**

[10] In this comedy by Goldsmith, Tony Lumpkin tricks Marlow to make him believe that he is in an inn, not the Hardcastle’s estate. In the end, Marlow happily marries Kate.

ANSWER: ***She Stoops to Conquer: Or, The Mistakes of a Night***

[10] Goldsmith attributed witty letters to a man of this ethnicity in *The Citizen of the World*. Works written by people of this ethnicity include *The Little Red Book* and *The Dream of the Red Chamber*.

ANSWER: **Chinese**

034-09-6-03202

3. The first two examples of this type of number are six and twenty-eight, and no odd ones have yet been discovered. For 10 points each:

[10] Name this type of number that is equal to the sum of all its proper divisors excluding itself.

ANSWER: **perfect** number

[10] Leonhard Euler proved that there is a one-to-one correspondence between perfect numbers and these prime numbers of the form two to the p power minus one.

ANSWER: **Mersenne** primes

[10] This ancient Greek mathematician proved that whenever two to the p power minus one is prime, multiplying that quantity by two to the p minus one power yields a perfect number.

ANSWER: **Euclid**

025-09-6-03203

4. Members of this paramilitary organization bombed the Conservative Party conference in Brighton in 1984 and assassinated Lord Louis Mountbatten in 1979. For 10 points each:

[10] Name this organization that attempts to gain independence for Ulster.

ANSWER: Provisional **IRA** [or Provisional **Irish Republican Army**]

[10] This Portuguese-American-Irish politician became head of Sinn Fein (shin FAYN) in 1918. He founded the Fianna Fail party in 1925 in protest against the Anglo-Irish Treaty and served several terms as prime minister and president of Ireland.

ANSWER: Eamon **De Valera** [or Edward **De Valera**]

[10] This man, a founder of the Irish Republican Army, led the guerrilla war against Britain from 1919 to 1921. He was assassinated in an ambush near Cork shortly after helping to negotiate the Anglo-Irish Treaty.

ANSWER: Michael **Collins**

030-09-6-03204

5. Name these American photographers, for 10 points each.

[10] This man founded the *Group f/64* (F-stop-sixty-four) and took many black-and-white photographs of Yosemite National Park.

ANSWER: Ansel Easton **Adams**

[10] This woman worked with the Farm Security Administration during the Great Depression and captured the enduring image of a woman with her hand on her chin, the photo *Migrant Mother*.

ANSWER: Dorothea **Lange** [or Dorothea **Nutzhorn**]

[10] This founder of the Photo-Secession movement took many pictures of the hands of his wife, the painter Georgia O'Keeffe.

ANSWER: Alfred **Stieglitz**

026-09-6-03205

6. For 10 points each, name these things associated with the work of the Dutch physicist Christian Huygens.

[10] Huygens derived a law for this force as  $m$  times  $v$  squared over  $r$ ; it is the outward inertial force that appears to act on rotating bodies.

ANSWER: **centrifugal** force

[10] This phenomenon occurs when a ray of light is split into an ordinary and extraordinary wave while passing through a crystal; Huygens observed it in calcite and tried to explain it using his wave theory of light.

ANSWER: **birefringence** [or **double refraction**]

[10] In his book *Horologium*, Huygens explained the principles behind this type of clock, the first of which he himself patented in 1657.

ANSWER: **pendulum** clock

040-09-6-03206

7. According to the gospels of Matthew and Mark, he betrays Jesus with a kiss. For 10 points each:

[10] Name this apostle, who received thirty pieces of silver for his treachery.

ANSWER: **Judas** Iscariot

[10] This other disciple traveled all the way to India after doubting the resurrected Jesus and asking to see his wounds.

ANSWER: **Thomas** [or **Didymus**]

[10] According to the Book of Acts, this person was voted in to replace Judas as the twelfth apostle.

ANSWER: **Matthias**

015-09-6-03207

8. One class in this phylum uses love darts to pierce its mate, and another has a tongue-like protrusion called the radula. For 10 points each:

[10] Name this phylum that contains gastropods, such as snails, bivalves, such as clams, and cephalopods, such as squids.

ANSWER: **mollusks** [or **Mollusca**]

[10] Many gastropods circulate this material in their circulatory system. This substance makes it unnecessary for gastropods to have blood and interstitial fluid.

ANSWER: **hemolymph**

[10] Bivalves exhibit the bilateral form of this property, which in starfish, comes in the pentaradial form.

ANSWER: **symmetry** [or word forms such as **symmetric**]

033-09-6-03208

9. Tiresias said that this figure would live to a ripe old age, but only if he didn't come to know himself. For 10 points each:

[10] Name this mythological figure, who eventually got into trouble after he saw his own reflection in a pool and fell in love.

ANSWER: **Narcissus**

[10] Narcissus spurned the advances of this nymph; after being rejected, she wasted away until only her voice remained.

ANSWER: **Echo**

[10] In Ovid's tale, Echo prayed to this goddess of retribution, leading to Narcissus's punishment of death.

ANSWER: **Nemesis** [or **Invidia**]

040-09-6-03209

10. Leo, a bank teller, is conned into stealing Horace's railroad bonds from the bank where he works, in this play. For 10 points each:

[10] Name this play in which two brothers, Oscar and Benjamin, are attempting to raise money to construct a cotton mill. It was later supplemented by the prequel *Another Part of the Forest*.

ANSWER: *The **Little Foxes***

[10] *The Little Foxes* was written by this American playwright, who also penned *The Children's Hour* and *Watch on the Rhine*.

ANSWER: Lillian **Hellman**

[10] Hellmann was the longtime companion of this detective fiction writer, who created The Continental Op and Sam Spade in such works as *The Thin Man* and *The Maltese Falcon*.

ANSWER: Samuel Dashiell **Hammett**

040-09-6-03210

11. For 10 points each, name these Republican Senators.

[10] This most moderate Republican in the Gang of Six holds a Senate seat formerly occupied by George Mitchell. This Mainer was also a member of the moderate Gang of Fourteen who ended the threat of the nuclear option for George Bush's judicial nominations.

ANSWER: Olympia **Snowe**

[10] This leader of the Gang of Fourteen negotiated an end to most filibusters and remains the senior Senator from Arizona.

ANSWER: John **McCain**

[10] This conservative Senator from Iowa drew flak earlier this year for asserting that AIG employees who got hefty bonuses should follow the "Japanese example" and commit suicide.

ANSWER: Chuck **Grassley**

053-09-6-03211

12. Imagery involving the sea is rife in this poem, in which the narrator thinks that the mermaids will not sing to him. For 10 points each:

[10] Identify this poem, whose title character wishes to be “a pair of rugged claws” and realizes that he is not Prince Hamlet.

ANSWER: “The Love Song of J. Alfred **Prufrock**”

[10] Prufrock’s thoughts are interrupted by the women coming and going, talking of this artist.

ANSWER: **Michelangelo**

[10] “The Love Song of J. Alfred Prufrock,” like “The Hollow Men” and “The Wasteland,” is a work by this American-born British poet.

ANSWER: Thomas Stearns **Eliot**

034-09-6-03212

13. This state's southwestern coast is lined with the cities of Cape Coral, Fort Myers, and Naples, which runs up to the Everglades. For 10 points each:

[10] Name this state, which has a university at Gainesville and houses a large Cuban population.

ANSWER: **Florida**

[10] This member of the Florida Keys has the largest area of those islands. It is the first island ones reach when driving down Highway 1.

ANSWER: Key **Largo**

[10] This site in Brevard county is the site of many of NASA’s space program operations, such as Alan Shepard’s launch. It was temporarily renamed for President Kennedy.

ANSWER: Cape **Canaveral**

027-09-6-03213

14. This event inspired Ludvik Vaculik to write the "Two Thousand Words." For 10 points each:

[10] Name this period of liberalization that began with Alexander Dubcek's (DOOB-checks) rise to power.

ANSWER: the **Prague Spring** [or **Prazska Jar**; or **Prazske Jaro**]

[10] The Prague Spring occurred in this no-longer-existing country, which was then under Soviet control.

ANSWER: **Czechoslovakia** [or **Czekoslovensko**]

[10] The Prague Spring was crushed less violently than the 1956 anti-Soviet uprising in this country, which ended when Georgy Zhukov ordered Soviet tanks to roll into this country's capital.

ANSWER: People's Republic of **Hungary** [or **Magyar** Nepkoztarsasag]

026-09-6-03214

15. This power is granted to the federal government by the Fifth Amendment. For 10 points each:

[10] Name this power to take private property for public use with just compensation.

ANSWER: **eminent domain**

[10] This amendment applies eminent domain and the rest of the Fifth Amendment to the states via the "due process clause."

ANSWER: **Fourteenth** Amendment

[10] This 2005 Supreme Court case ruled that economic growth, such as the building of a shopping mall, qualified under the "public use" clause.

ANSWER: **Kelo** v. *City of New London* [or *City of **New London** v. Kelo*]

003-09-6-03215

16. One queen of this nation, Christina, abdicated the throne to move to Italy and practice Catholicism. For 10 points each:

[10] Name this country that is ruled by the Bernadotte family.

ANSWER: Kingdom of **Sweden** [or Konungariket **Sverige**]

[10] This king of Sweden was the father of Queen Christina. He was nicknamed “The Lion of the North” and his forces won the Battle of Luetzen, although he died there.

ANSWER: **Gustavus Adolphus** [or **Gustav Adolf**; or **Gustav II**; prompt on **Gustavus**]

[10] This man was appointed Chancellor soon after getting Gustavus Adolphus to issue a charter against royal abuses. He later served as Queen Christina’s regent.

ANSWER: Axel, Count **Oxenstierna**

027-09-6-03216

17. This author was arguably the foremost member of the Fugitives, a group of poets and scholars at Vanderbilt that included John Crowe Ransom and Allen Tate. For 10 points each:

[10] Name this author of *Understanding Poetry* and *World Enough and Time*.

ANSWER: Robert Penn **Warren**

[10] In this Warren work, Jack Burden narrates Willie Stark’s rise to power and his eventual murder by Adam, the brother of his first love Anna Stanton.

ANSWER: ***All the King’s Men***

[10] Like Warren, this New Jersey-based doctor and writer of “Smell” and “This Is Just To Say” was a Poet Laureate of the U.S. He also wrote an eight-line poem about an object “glazed with rainwater beside the white chickens,” “The Red Wheelbarrow.”

ANSWER: William Carlos **Williams**

034-09-6-03217

18. One painter from this country dipped the feet of a chicken in ink, and let it loose onto the canvas. For 10 points each:

[10] Name this country, whose painters include Takashi Murakami and Ando Hiroshige, the latter of whom was an acclaimed artist of *ukiyo-e*.

ANSWER: **Japan** [or **Nihon**-koku; or **Nippon**-koku]

[10] This other *ukiyo-e* artist created the *Thirty-Six Views of Mount Fuji*, which contains his iconic *Great Wave Off Kanagawa*.

ANSWER: Katsushika **Hokusai**

[10] Hokusai primarily worked in this medium, which Albrecht Durer used for works such as his *Rhinoceros*, *The Four Horseman of the Apocalypse*, and *Melancholia I*.

ANSWER: **woodcut** [or **woodblock** printing]

020-09-6-03218

19. This phenomenon occurs when waves are in phase, leading to the amplification of crests and troughs. For 10 points each:

[10] Name this superposition of waves, in which amplitudes double. It is distinguished from its destructive counterpart, in which amplitudes cancel.

ANSWER: **constructive interference**

[10] One type of interferometer, which creates interference in waves, is named after this scientist, who along with Edward Morely performed an experiment that partially dispelled the theory of luminiferous ether.

ANSWER: Albert Abraham **Michelson**

[10] The Michelson-Morley experiment was followed up with this one, in which its two namesakes tested out George Fitzgerald's hypothesis involving a capacitor being able to orient itself due to ether.

ANSWER: **Trouton-Noble** Experiment

033-09-6-03219

20. Brahms slept through a performance of this composer's *Sonata in B Minor*. For 10 points each:

[10] Name this Hungarian composer and virtuoso, who invented the symphonic poem form and wrote the *Mephisto Waltz* and the *Hungarian Rhapsodies*.

ANSWER: Franz **Liszt**

[10] *Mazepa* is the fourth of this set of twelve solo piano pieces by Liszt. The genre name in the title of these pieces refers to a difficult score written to help refine the performer's skill.

ANSWER: the ***Transcendental Etudes***

[10] Liszt dedicated the *Transcendental Etudes* to Carl Czerny (SIR-nee), a student of this composer of the *Appassionata* sonata and *Emperor* concerto.

ANSWER: Ludwig van **Beethoven**

036-09-6-03220

21. Toluene is a member of this class of compounds, with a methyl group in place of a hydrogen. For 10 points each:

[10] Name this class of sweet-smelling compounds, which include a set of six carbons arranged in a stable ring.

ANSWER: **aromatic** hydrocarbons

[10] This is the simplest aromatic hydrocarbon, with formula C<sub>6</sub>H<sub>6</sub>.

ANSWER: **benzene**

[10] Cyclic compounds are determined to be aromatic when they have  $4n+2$  pi electrons, where n is a non-negative integer, which is also known as this man's rule.

ANSWER: **Hückel's Rule**

051-09-6-03221

22. The protagonist of this dramatic poem loses his fiancée Parasha during a flood of the Neva River. For 10 points each:

[10] Name this poem that begins with a scene of the historical Peter the Great and concludes with the title statue of that tsar coming to life after being cursed by Evgenii.

ANSWER: "The **Bronze Horseman**" [or "**Medniy vsadnik**"]

[10] This author of the verse novel *Eugene Onegin* (yoo-JAY-nay oh-NAY-gen) wrote "The Bronze Horseman" and became the father of Russian literature before dying in a duel.

ANSWER: Alexander Sergeyevich **Pushkin**

[10] Pushkin dedicated this poem to "anonymous beauties." One of this poem's title characters is the kidnapped daughter of Prince Vladimir of Kiev; the other is the knight who tries to rescue her.

ANSWER: ***Ruslan and Ludmila***

040-09-6-03222