

## Tossups

1. **One practitioner of this activity had the real name Moo-Chee-Goo-Chee-La-Poo-Chee the Third, though he went by the nickname “the Dark One”; that practitioner of this activity was part of a group of students called “lily-livers” and trained at an academy in Yu Dao. This ability was used to change the course of a blimp during the Battle of Wulong Forest. The game of “power disc” was invented by two practitioners of this activity, a clan of whom live in the city of (\*) Zaofu. This ability’s first master discovered it by sensing the impurities in her cage after being captured by Xin Fu and Master Yu. Suyin and Lin were the daughters of that first practitioner of this activity, who was sheltered by her parents because she was blind. For 10 points, name this ability first invented by Toph Bei Fong, a sub-skill of earthbending that allows the user to manipulate certain alloys.**

ANSWER: metalbending [prompt on “bending” or “earthbending”] <EM>

2. **A scientist with this surname developed one of the first reference materials, for trace elements, by grinding 100 kilograms of kale into powder; that scientist also came up with the idea of using foam booms to contain oil spills. In the atmospheric sciences, a scientist with this surname names a quantity that is the ratio of the sensible heat flux to the latent heat flux. A dude with this surname compiled the stupendous lectures *The Evolution of the Igneous Rocks*, which revolutionized petrology. A construct named for that dude is equivalent in form to the (\*) Goldich stability series. That dude recognized the importance of fractional crystallization in magma and showed how progressively more silicic rocks are formed with decreasing temperature. For 10 points, identify this surname held by a Canadian geologist who names a reaction series.**

ANSWER: Bowen [or Norman Levi Bowen; or Ira Sprague Bowen; or Humphrey Bowen] <EM>

3. **In *Dares Phrygius*, this hero met Calchas in Delphi and protested the elevation of Palamedes to high command. In *Dictys Cretensis*, this figure’s dealings in a grove with Idaeus led to whispers that he was a traitor and he was killed while being restrained by Deiphobus. In both of those works, this hero was killed in a ploy involving a false marriage to (\*) Polyxena. In Ovid’s *Metamorphoses*, this hero strangled an enemy who turned into a swan after death; that enemy was Cynus. This hero was moved by the embassy of a ruler who came into his tent in the last book of the work in which he also refused the embassy of his charioteer Phoenix, Ajax, and Ulysses to return to battle after a dispute over Briseis. For 10 points, name this commander of the Myrmidons, a Greek hero who slew Hector in Homer’s *Iliad*.**

ANSWER: Achilles <PL>

4. **The rule of holders of this title was interrupted for eight years in the fourteenth century because most of the realm had been mortgaged to Count Gerhard III. In 1219, the holders of this title became Dukes of Estonia, after winning the Battle of Lyndanisse, where according to legend a holder of this title adopted a standard that fell from the sky. One holder of this title with the epithet “new dawn” sold Estonia to the Teutonic Order and sacked the (\*) Hanseatic League’s port of Visby to fund reunification wars; that holder was Waldemar IV. Its first historically attested holder was Gorm the Old, builder of the oldest Jelling stones. From 1380 to 1814, the holder of this title also ruled Norway. For 10 points, name this Scandinavian royal title held by many Oldenburg kings called Frederic and Christian.**

ANSWER: King of Denmark [or equivalents like Danish king; or Danish monarch and equivalents; prompt on “Denmark”] <PL>

5. **In one appearance, this character insists that a companion not tell any jokes about having to pee and offers a corpse nine obols to carry some baggage. A man sees two suns in the sky after this character convinces him to dress as a woman; this character then predicts that that man will “be carried back...in [his] mother’s arms”. This character is accused of food theft by Pandokeutria and Plathane and threatened by Aeacus, both of which are events that cause him to trade his (\*) Heracles costume to his servant Xanthias. In a less comic appearance, this character drives Agave and the rest of his followers to tear apart an impious king of Thebes. For 10 points, name this character who travels to the underworld to judge a contest between Aeschylus and Euripides in *The Frogs* and violently demonstrates his godhood to Pentheus in *The Bacchae*.**

ANSWER: Dionysus <RC>

6. A piece by this composer was called a “cosmic drama” in a lecture series by Leonard Bernstein titled for it. This composer referred to one of his pieces, in which a crescendo building up to a C-major chord is shot through with a dissonant B from the horn, as the “Black March.” The opening bars of Beethoven’s 5th symphony are quoted in each movement of a piece by this composer that calls for a 14 and 3/4–inch long block of (\*) wood to play a cluster chord. For another of his pieces, the strings and woodwinds are to each be placed separately from a trumpet soloist who plays a non-tonal phrase seven times. This composer of *The Unanswered Question* depicted Stockbridge, Putnam’s Camp, and “Saint Gaudens” in Boston Commons in an orchestral piece. For 10 points, name this composer of the “Concord” sonata and *Three Places In New England*.

ANSWER: Charles Ives <WA>

7. This novel’s protagonist is invited by Omar to join a hunting trip, during which he pulls the heart out of a bobcat. Several scenes in this novel take place in a house in the Blue Ridge Mountains, where the protagonist meets Grace Long and Susan Byrd. A character in this novel claims to have found his wife in bed, naked, sucking her ether-soaked dead father Dr. Foster’s fingers. Hospital Tommy and Railroad Tommy are part of a group of (\*) revenge killers called the Seven Days in this novel, as is Henry Porter, who hooks up with the protagonist’s sister Corinthians. Upon returning to Shalimar, the bellybutton-less Pilate is shot by Guitar Bains in this novel’s final chapter, which ends with the protagonist mid-leap, possibly having learned to fly. For 10 points, name this Toni Morrison novel about Milkman Dead, which has a biblical title.

ANSWER: Song of Solomon <RC>

8. This quantity is plotted on the X-axis against “counts” on the Y-axis in a technique used to measure this quantity developed by Kai Siegbahn. One version of this quantity is represented by a vertical line on potential energy diagrams and is dependent on geometry; that “vertical” version of this quantity is contrasted with its “adiabatic” variety. This quantity is measured by UV and X-ray PES. Strong reducing agents tend to have smaller values of this quantity. It is equal to the negative energy of the HOMO according to (\*) Koopman’s theorem. In the Bohr model, this quantity is equal to negative  $z^2$  over  $n^2$  all times 13.6 electron-volts, and it is the single-atom analog for the work function. This quantity generally increases across a period, reaching a maximum for noble gases. For 10 points, name this quantity, which is the amount of energy needed to remove an electron from a gaseous, neutral atom.

ANSWER: first ionization energy [or binding energy; or IE] <EM>

9. Walter Friedlander proposed that a woman in this painting represents Polia, a character from the comedy *Pophilius’s Dream*. A relief of an armed man about to strike a nude figure on the ground to the right of a horse is shown on the central gray object in this painting, on which a vase containing jewels has been placed. The left figure of this painting is sometimes interpreted as Laura Bagarotto receiving sensual instruction in order to be a good wife to Niccolo (\*) Aurelio, who commissioned this painting for his wedding. In this painting, a winged child reaches his hand into the water inside a gray sarcophagus as a woman with a only a red garment covering her looks on. For 10 points, name this painting that contrasts a clothed and a nude woman with each other, a work by Titian.

ANSWER: Sacred and Profane Love <WA>

10. One president of this nation set up the Warioba commission to combat corruption, while another leader of this nation trained soldiers to overthrow James Mancham in a neighboring country. Operation Vijiji was an attempt to relocate farmers to collective villages in this nation. One political party in this nation has a flag containing a hammer crossed with a hoe; that party is the Chama Cha Mapinduzi. A document published in this nation stated that the poor man does not use money as a weapon, and that “hard work” is the root of development. Ali Hassan Mwinyi succeeded one influential leader of this nation, who called for unity of his nation by using the (\*) Swahili language. That leader outlined his principles of “familyhood”, or *ujamaa*, as part of the Arusha declaration. For 10 points, name this African nation whose first president was Julius Nyerere, the union of Tanganyika and Zanzibar.

ANSWER: United Republic of Tanzania [or Jamhuri ya Muungano wa Tanzania] <EM>

11. A thinker from this country argued that countries develop largely independently through “uneven and combined development” and rejected the idea that society must develop through predetermined stages, as in the “two-stage model.” Another philosopher from this country used examples from his field research, such as burying beetles, to argue that the cooperative aspect of evolution had been under-emphasized by Social Darwinists. The author of (\*) *Mutual Aid* was from this country, as was a philosopher who cited the example of a munitions factory revolt as part of his theory arguing that keeping a certain system “in one country” would be impossible. A theorist from this country argued that a “vanguard party” would be needed to maintain the revolution in the pamphlet, *What Is To Be Done?* For 10 points, name this home country of Peter Kropotkin and Vladimir Lenin.

ANSWER: Russia [or Russian Empire; or Russian Federation; or Soviet Union; or USSR; or Union of Soviet Socialist Republics; or Rossiyskaya Imperiya; or Rossiyskaya Federatsiya; or SSSR; or Soyuz Sovetskikh Sotsialisticheskikh Respublik] <WA>

12. One participant in this conflict was pardoned from hanging after attempting to rob the mail and was named Philip Wagle. One side was organized during a meeting at the Redstone Fort, and during it, radicals called for a march on “Sodom” during a meeting at Braddock’s Field. This incident was partly triggered by William Rawle issuing sixty subpoenas. Participants in this event often called “Hurrah for Tom the Tinker!”, and the death of James McFarlane at the Battle of (\*) Brower Hill served as a rallying cry for one side. One force in this conflict was derisively called the Watermelon Army. Governor Robert Mifflin refused to get involved in this event, which was suppressed by Light-Horse Harry Lee and Alexander Hamilton. For 10 points, name this uprising against an excise tax on liquor, an early insurrection in the history of the United States.

ANSWER: Whiskey Rebellion [or Whiskey Insurrection] <EM>

13. Linne Mooney discovered that this author’s assistant Adam Pinkhurst was the subject of a poem in which this author cursed him with “the scall” because his “negligence and rape” forced this man to “rub and scrape”. The narrator of a poem by this man visits a constantly-moving wicker house and a golden palace under the guidance of an eagle he meets in a glass temple. The narrator of another of his poems falls asleep while reading Cicero’s *Somnium Scipionis*, whereupon (\*) Scipio Africanus guides him to the temple of Venus, where three tercelts plead for the hand of a formel eagle. His most famous work opens by describing the “condition”, “array”, and “degree” of the central group in the General Prologue, and includes sections narrated by Harry Bailey and a number of pilgrims. For 10 points, name this author of *The House of Fame*, *The Parliament of Fowls*, and *The Canterbury Tales*.

ANSWER: Geoffrey Chaucer <RC>

14. The PsbP protein and PsbQ protein are required for this process. This reaction turns the dye DCIP colorless. The mechanism of this process was elucidated using periodic discharges of a Joliot electrode by Bessel Kok, who proposed that the complex responsible for catalyzing it oscillated between five different S-states. Sometimes named for Robert Hill, this reaction is catalyzed by a complex that contains a single calcium and four manganese atoms in a (\*) cluster. Four products of this process are later used to reduce two molecules of plastoquinone. The complex responsible for this reaction lies on the lumen side of the thylakoid membrane, and it’s driven by the oxidizing power of P680 For 10 points, name this reaction which immediately precedes the entry of electrons into photosystem II, in which water is oxidized.

ANSWER: oxygen evolution [or water oxidation until "water" is read; or Hill reaction until "Robert Hill" is read; prompt on “photosynthesis” or “electron transport”] <EM>

15. A prisoner who committed suicide here gives his name to a set of stairs here called Gautier’s Leap. This site was built over an older building called Our Mother Underground. Crypts here include the Crypt of the Thirty Candles and St. Martin’s Crypt. Three of its seven Romanesque naves were destroyed in 1776 to build its West Terrace, where tours of this building begin. A double arcade of columns has the columns in one row centred opposite to the arch of the other, and forms the (\*) cloisters in this building’s La Merveille or “The Wonder” structure. Pilgrims called *miquelots* visit this building which, until a causeway was built, was only accessible during low tide. For 10 points, name this most visited non-Parisian French tourist attraction, a Benedictine abbey off the coast of Normandy.

ANSWER: Mont Saint Michel Abbey [or Saint Michael’s Mount] <PL>

16. Two times this quantity times surface energy density over pi gives the square of the crack length in Griffith's formula. A sudden drop in this quantity with increasing temperature is one way of measuring the glass transition temperature. One method of calculating this quantity is using the impulse excitation technique to measure the frequency of the flexure mode. Two times the moment of inertia times this quantity appears in the denominator of the expression for the deflection angle of a cantilever. Under the assumption of isotropy, this quantity is equal to quantity one plus the Poisson (\*) ratio end quantity times two times the shear modulus. Under an elastic and linear response, this quantity represents the proportionality constant in Hooke's law, and this quantity is measured as the slope of a certain curve before the yield point. For 10 points, name this quantity which is equal to the ratio of the stress to the strain on a material.

ANSWER: Young's modulus [or tensile modulus; or elastic modulus or modulus of elasticity until "elastic" is read] <EM>

17. In the Ramayana, Rama is taught to recite a hymn to a deity of this domain in order to gain strength to defeat Ravana. Priests of a deity of this domain would attempt to reach him by being tied to a stone pillar during the Raymi festival. A huge temple at Konark is dedicated to a deity of this type who is also known as Aditya. Two figures associated with this domain are shown dining on the hide of a slain bull in a (\*) cult-scene showing the aftermath of the tauroctony. A place called the "navel of the world" is where a god of this type gave a man a golden staff to plant. A black stone was used to worship a god of this type promoted by Elegabalus in the Roman Empire, where a deity of this name was known as the "unconquered." The Inca celebrated this kind of deity as the father of their founder, Manco Capac. For 10 points, name this domain presided over by Surya, Inti, and Sol Invictus.

ANSWER: the Sun [or Sol until it is read] <WA>

18. According to Plutarch, this man had a brief debate on providence with Cratippus of Pergamon after losing one battle. One structure built by this man on the Campus Martius had a temple to Venus Victrix and was Rome's first permanent theatre. This man failed to win the battle of Sucro because he didn't wait for Quintus Caecilius Metellus Pius, who he had been sent to reinforce in the (\*) Sertorian War. Lucullus lost the command against Mithridates to this man via the Manilian Law. This man stayed in Rome with his wife Julia after becoming the governor of Hispania Ulterior via a political alliance that also allowed him settle his veterans from campaigns such as his war against the Mediterranean pirates. For 10 points, name this Roman general who formed the First Triumvirate along with Crassus and Julius Caesar.

ANSWER: Pompey the Great [or Gnaeus Pompeius Magnus] <PL>

19. A chapter in one of this author's novels describes a variety of reactions to a ringing telephone before the narrator rescues Marjorie Stubbs. An essay by this author extols the virtues of books that "take a form equivalent to the universe" and "exert a peculiar influence". Another of his books contains essays about quickness, exactitude, visibility, multiplicity, and most notably lightness. In a novel by this man, a character accidentally finds himself having sex with Madame Miyagi while pursuing her daughter Makiko. This author of (\*) "Why Read the Classics?" and *Six Memos for the Next Millennium* created the fictional authors Takakumi Ikoka and Silas Flannery, as well as the Cimbrian People's Republic and Cimmeria, in a novel whose protagonist encounters Ludmilla after buying a misprinted copy of this man's new book. For 10 points, name this Italian author of *If on a winter's night a traveler*.

ANSWER: Italo Calvino <RC>

20. This disease is associated with the Taq1A polymorphism in the DRD2 gene. Patients with this disorder show a decreased volume in the left side of the pre-frontal cortex, and a hypo-responsive ventral striatum. One drug used to treat this disorder can be conjugated to lysine in a prodrug form. The symptoms of this condition overlap with hyperkinetic disorder, though comorbidities can rule that out. Sensory Processing Disorder can be misdiagnosed as this condition. About 50% of people suffering from (\*) Oppositional Defiant Disorder also have this condition. This condition occurs in combined, predominantly inattentive, and predominantly impulsive variants. For 10 points, name this psychiatric disorder which is often treated by amphetamine derivatives like Ritalin.

ANSWER: ADHD [or Attention Deficit Hyperactivity Disorder; or ADD; or Attention Deficit Disorder] <EM>

## Bonuses

1. The third example of a type of work in this collection takes the subject for its second movement fugue from the chorale *Komm, Heiliger Geist*. For 10 points each:

[10] Name this set of six works for solo violin by J.S. Bach.

ANSWER: J.S. Bach's Sonatas and Partitas for solo violin [or J.S. Bach's Six Violin Sonatas and Partitas; or Sei Solo – a violino senza Basso accompagnato]

[10] The probable inspiration for Bach's Sonatas and Partitas is Johann Paul von Westhoff's six partitas for solo violin, which make extensive use of this technique in which two notes are played simultaneously, using two strings.

ANSWER: double stop [or word forms]

[10] As this is the number of strings on a violin, it's also the maximum number of notes that can be played on different strings simultaneously, though it's ridiculously hard to do so. Common time has this many quarter-notes per measure.

ANSWER: four <CV>

2. This country's 1922-23 civil war was fought between Pro-Treaty and Anti-Treaty forces. For 10 points each:

[10] Name this country that became a "free state" in 1921. The Anti-Treaty forces believed that this country had abandoned the republican ideal of its 1916 Easter Uprising by becoming a British dominion.

ANSWER: Ireland [or Irish Free State; or Saorstat Eireann]

[10] This Irishman was a political leader of the Anti-Treaty forces. He would go on to split with Sinn Fein to found Fianna Fail and serve as Ireland's first Taoiseach. During the Second World War, he gave himself emergency powers.

ANSWER: Eamon de Valera

[10] When security measures weakened post-war, the IRA launched this 1956-62 campaign to seize Northern Ireland that included attacks by the Teeling column. When Valera returned to office in 1957, he clamped down its perpetrators.

ANSWER: Border Campaign [or Operation Harvest; prompt on "Resistance Campaign"]<PL>

3. Identify the following Edgar Allan Poe stories, for 10 points each.

[10] Rats attracted by meat and the French Army under General Lasalle, respectively, rescue a prisoner of the Spanish Inquisition from death at the hands of this story's two title objects.

ANSWER: "The Pit and the Pendulum"

[10] This story's narrator's second wife Lady Rowena dies, then returns to life and transforms into his first wife, the title character. This story also includes the poem "The Conqueror Worm".

ANSWER: "Ligeia"

[10] The narrator of this story is unable to prevent himself from confessing to committing a murder using a poisoned candle. It was adapted from an essay about a spirit that tempts people to do things entirely "because we feel that we should not".

ANSWER: "The Imp of the Perverse" <RC>

4. The "Z-" form of this molecule is unusually left-handed, unlike its "A" and "B" forms, and its concentration in nanograms per microliter is often measured by taking 50 times the A-260. For 10 points each:

[10] Name this polymer composed of adenine, guanine, cytosine, and thymine. It is usually found in the nucleus wrapped around histones to form chromatin.

ANSWER: DNA [or deoxyribonucleic acid]

[10] A common method of sequencing DNA using dideoxy chain-terminating nucleotides was developed by this British scientist, who also determined the structure of insulin using a different namesake reagent.

ANSWER: Frederick Sanger

[10] Modern high-throughput sequencing is commonly done using platforms developed by this San Diego-based company, whose products include the HiSeq and MiSeq platforms. This company acquired Solexa in 2007.

ANSWER: Illumina <EM>

5. This church affirmed its communion with the Holy See in 1182. For 10 points each:

[10] Name this Eastern Catholic church, which has its seat at Antioch.

ANSWER: Syrian **Maronite** Church of Antioch [or al-Kanisa al-Antakiyya al-Suryaniyya al-**Maruniyya**; or 'Ito Suryoito **Morunoito** d'Antiochia]

[10] Most Maronite Christians are found in this formerly Christian-majority country, the most religiously diverse country in the Middle East. The Shi'a group Hezbollah has a strong presence in this country.

ANSWER: **Lebanon**

[10] This liturgical language, a descendant of Aramaic, is the language in which the standard Peshitta bible used by many Eastern churches is written.

ANSWER: **Syriac** <WA>

6. After seeing his Russian captors use the *schoty* version of this device, Jean-Victor Poncelet reintroduced it to Western Europe. For 10 points each:

[10] Name this device that gave its name to a namesake group that opposed the efforts of algorists. The Russian schoty used horizontal wires, but East Asian versions like the Chinese suanpan used vertical ones.

ANSWER: **abacus** [or **counting frame**; prompt on foreign language equivalents such as “schoty” or “suanpan” or “soroban” or “jupan” or “supan” or “jusan” or “nepohualtintzin”]

[10] The abacists spread of these mathematical symbols to Europe. Leonardo Fibonacci argued that they were better for commerce and calculations than Roman numerals in his *Liber Abaci*.

ANSWER: Hindu-**Arabic numerals** [or Indo-**Arabic numbering** system]

[10] Algorists derived their methods from this Abbasid mathematician, who edited Ptolemy's *Geography* and wrote *The Compendious Book on Calculation by Completion and Balancing*.

ANSWER: Abu Abdallah Muhammad ibn Musa **al-Khwarizmi** [or **Algoritmi**; or **Algaurizin**; do not accept answers with “Jafar”] <PL>

7. This book argues that its title bourgeois concept first developed in Britain and that its critical features were replaced a society oriented around leisure. For 10 points each:

[10] Name this book, which argues that the critical-rational debate that formed public opinion was replaced by the welfare state and mass-society as part of a dialectic that saved the liberal constitutional order.

ANSWER: *The **Structural Transformation of the Public Sphere***

[10] In *The Structural Transformation of the Public Sphere*, Jurgen Habermas argued that coffee houses in this city were key to the development of its bourgeois culture. This city names a “Circle” of philosophers who shared a common philosophy of logical positivism.

ANSWER: **Vienna** [or **Wien**]

[10] After 9-11, Habermas collaborated with this philosopher, with whom he once feuded, on *Philosophy in a Time of Terror*. He included the anti-Foucault essay “Cogito and the History of Madness” in *Writing and Difference*.

ANSWER: Jacques **Derrida** <WA>

8. Tom DeLay's attempt to do this in 2003 was struck down by the Supreme Court in *League of United Latin American Citizens v. Perry*, though only in district 23. For 10 points each:

[10] Name this highly questionable practice of redrawing electoral districts in order to obtain an edge in elections. Its name is a portmanteau of a Massachusetts politician and an amphibian.

ANSWER: **gerrymandering** [prompt on “redistricting” or “reapportionment”]

[10] This 1962 Supreme Court case stated that redistricting is not a “political question”, allowing federal courts to rule on instances of gerrymandering. It was followed up two years later by *Reynolds v. Sims*.

ANSWER: **Baker v. Carr** [accept either underlined portion]

[10] *Wesberry v. Sanders*, which required districts to be equal in population, originated in this state. This state also originated a case which ruled that Congress didn't overstep the commerce clause in passing the 1964 Civil Rights Act.

ANSWER: **Georgia** [or **GA**; the other case is *Heart of Atlanta Motel v. US*] <EM>

9. Identify the following literature-producing countries, for 10 points each.

[10] This country is home to the author of *The Disconnected*, Oguz Atay, though you probably know it better as the birthplace of *Snow* and *My Name is Red* author Orhan Pamuk.

ANSWER: Republic of **Turkey** [or **Türkiye** Cumhuriyeti]

[10] This country has produced the Anglophone works of Zoilo Galang and F. Sionil Jose and the Spanish-language novels *Noli Me Tángere* and *El Filibusterismo*, which were written by the revolutionary Jose Rizal.

ANSWER: Republic of the **Philippines** [or Repúblika ng **Pilipinas**]

[10] *This Earth of Mankind*, like the rest of P.A. Toer's Buru Quartet, is set in this modern-day country. It is also the setting of a novel attacking the colonial Cultivation System called *Max Havelaar*.

ANSWER: Republic of **Indonesia** [or Republik **Indonesia**; prompt on "the **Dutch East Indies**"] <RC>

10. Answer some questions about a state of matter, for 10 points each.

[10] This equation models the behavior of particles that theoretically have no molecular volume and undergo perfectly elastic collisions, and states that  $P V$  equals  $n R T$ .

ANSWER: **ideal gas** law

[10] This equation expresses  $P V$  over  $R T$  as a series expansion and takes into account the Pitzer eccentricity factor and reduced temperature. Its second order truncation is the Van der Waals equation.

ANSWER: **virial** equation of state [or **Kamerlingh-Onnes** equation]

[10] This equation of state used in fluid dynamics contains eight experimentally determined coefficients and was created as an expansion and rearrangement of the Beattie-Bridgeman equation of state.

ANSWER: **Benedict-Webb-Rubin** equation of state [or **BWR**] <CW, ed.>

11. The scholar Felix Philipp Ingold is among the few who still cling to the theory that this novel was plagiarized from the work of Fyodor Krukov or others. For 10 points each:

[10] Name this novel in which Grigori Melikhov falls in love with Aksinia Astakhova, the most famous work by the author of *Virgin Soil Upturned*.

ANSWER: *And **Quiet Flows the Don*** [or ***Quietly Flows the Don***; or ***Tikhiv Don***; or *The **Quiet Don***]

[10] Mikhail Sholokhov's *And Quiet Flows the Don* is a landmark of this official Soviet literary genre, propounded by culture minister Andrei Zhdanov (ZUH-dah-nov). The first major work in this style was another author's 1906 novel *Mother*.

ANSWER: **socialist realism** [do not accept "social realism"]

[10] *Mother* was written by this author, the namesake of a Moscow amusement park, whose more famous works include the short story "Twenty-Six Men and a Girl" and the play *The Lower Depths*.

ANSWER: Maxim **Gorky** [or Alexei Maximovich **Peshkov**] <RC>

12. Answer the following about prominent uses of the double bass in jazz, for 10 points each.

[10] This composer had a bass soloist pluck eight notes in D-Dorian, followed by a 2-note band response, then pluck 9 more notes, then get another 2-note response, in the head of "So What," the first track on his album *Kind of Blue*.

ANSWER: Miles **Davis**

[10] This ill-tempered bassist attacked a segregationist governor in "Fables of Faubus," and included a "Love-Chant" on his album *Pithecanthropus Erectus*. He also released an album titled for his surname followed by *Ah Um*.

ANSWER: Charles **Mingus**

[10] The bass line to this jazz standard opens with the ascending half-steps G, A-flat, A, B-flat, then leaps up a seventh to play another A-flat and B-flat. It's the first track on the album *Head Hunters*.

ANSWER: "**Chameleon**" [by Herbie Hancock] <MJ>

13. Answer the following about models in the social sciences which can be diagrammed as triangles or pyramids, of which, sadly, none are Sternberg's triangle of love, for 10 points each.

[10] This humanistic psychologist put the "deficiency needs" of physiological satisfaction, safety, belonging, and esteem below self-actualization in his silly-ass hierarchy of needs.

ANSWER: Abraham **Maslow**

[10] Robert Gordon developed a New Keynesian "triangle" model of this phenomenon that incorporates a "built-in" component. People seeking a less volatile estimate of this phenomenon often use data on its "core" variety.

ANSWER: **inflation**

[10] Though sometimes depicted as a Trivial Pursuit piece-like pie, this schema for classifying skills important to learning is often shown as a pyramid with "creating" or "evaluating" at the top.

ANSWER: Benjamin **Bloom**'s **taxonomy** <NH, ed.>

14. When solving a system of linear ODEs, the sign of the real part of these entities determines the solution's stability. For 10 points each:

[10] Name these roots of the characteristic polynomial. For a given linear operator and a vector such that the operator on the vector equals some constant times the vector, these values are that constant multiple.

ANSWER: eigenvalue

[10] The eigenvalues can be calculated by taking this operation on A minus I times lambda. This operation for a diagonal matrix is just the product of the diagonal elements, and it appears repeatedly in Cramer's rule.

ANSWER: determinant

[10] If a given operator is Hermitian, its eigenvalues all have this property.

ANSWER: they're all real [or obvious equivalents, such as they have no imaginary part] <EM>

15. This former commander of the Ghost division authored the book *Infantry Attacks*. For 10 points each:

[10] Name this Field Marshal nicknamed the Desert Fox who committed suicide after he was discovered to be part of the 20<sup>th</sup> of July plot to assassinate Adolf Hitler.

ANSWER: Erwin Rommel

[10] Rommel won an early victory against the United States' II corps at this February 1943 battle, though the Allies managed to stop his advance. During this battle in Tunisia, the Nickforce defended the town of Thala.

ANSWER: Battle of Kasserine Pass

[10] During this battle that immediately preceded Kasserine pass, a Nazi force commanded by Hans-Jurgen von Arnim advanced through the Faïd pass during a sandstorm. It shares a site with the first Arab Spring protests in Tunisia.

ANSWER: Battle of Sidi Bouzid <EM>

16. The flux from these things can be estimated using the Sakuma-Hattori equation. For 10 points each:

[10] Name these perfect absorbers. The wavelength of the peak emission of these objects is equal to 0.002898 divided by the temperature according to Wien's displacement law.

ANSWER: blackbody

[10] The total energy radiated by a blackbody is proportional to this power of the temperature.

ANSWER: fourth power [accept four, do NOT accept "negative fourth" or "one-fourth"]

[10] When the Stefan-Boltzmann law is applied to real objects, this variable, which ranges from zero to one, multiplies one side. This value is the ratio of thermal radiation of an object to that of an ideal blackbody.

ANSWER: emissivity [prompt on e or epsilon] <EM>

17. The protagonist of this poem has a vision of the future, according to which "the kindly earth shall slumber, lapt in universal law". For 10 points each:

[10] Identify this poem in which a soldier passing by the title edifice, his childhood home, angrily reminisces about losing the love of his cousin Amy.

ANSWER: "Locksley Hall"

[10] "Locksley Hall" was written by this Victorian poet of "Ulysses" and "Tithonus", who described a ride "into the Valley of Death" in his "Charge of the Light Brigade".

ANSWER: Alfred, Lord Tennyson [or Alfred Tennyson, 1st Baron Tennyson]

[10] The title figure of this short romantic poem by Tennyson "clasps the crag with crooked hands" and "watches from his mountain walls", the latter from which "like a thunderbolt he falls".

ANSWER: "The Eagle" <RC>

18. This series' final entry shows an old man praying in a boat who is made joyous by the appearance of an angel, who gestures towards a light at the top right. For 10 points each:

[10] Name this four-part allegorical painting series which depicts a journey down a river.

ANSWER: *The Voyage of Life*

[10] This Hudson River school artist of *The Voyage of Life* also created a five-part series showing the rise and fall of a classical civilization in *The Course of Empire*.

ANSWER: Thomas Cole

[10] A pair of Thomas Cole paintings, *The Past* and *The Present*, center on one of these buildings that has become ruined over time. Cranach the Elder painted a hunt taking place with one of these in the background near Hartenfels.

ANSWER: castles [prompt on "fortresses"] <WA>



19. This object was fashioned along with Gullinbursti and Mjöltnir when Loki challenged the dwarves Brokkr and Eitri to make objects better than those of the Sons of Ivaldi. For 10 points each:

[10] Name this gold ring with the ability to multiply itself that was placed onto the funeral pyre of Baldr.

ANSWER: **Draupnir**

[10] As was custom in many Germanic societies, Baldr was placed onto one of these craft when he died. The sun god Ra makes his journey across the sky and through the underworld in one of these vehicles.

ANSWER: **ships** [or **boats**; or **barges**; or **barques**]

[10] In the Gylfaginning, this is the name of a dwarf who is kicked onto Baldr's funeral pyre by Thor, who is described as a "fight-challenger" of the men of another character with this name in the Skaldskaparmal.

ANSWER: **Litr** <WA>

20. Legislation passed to make sure that an event of this type never happen again led to John Company essentially becoming defunct. For 10 points each:

[10] Name this conflict partly caused by the unpopularity of Lord Dalhousie's Doctrine of Lapse, as well as by religiously motivated controversy over the fat used to grease bullets.

ANSWER: **Sepoy Mutiny** [or **Indian Rebellion** of 1857, **Indian Mutiny**; or anything about the **1857 Revolt** in India]

[10] This other rebellion took place in the forests of Jalpaiguri in Bengal and was triggered by the oppressive tax collection after the Bengal famine of 1770.

ANSWER: **Sannyasi** Rebellion

[10] This British joint-stock company was responsible for most of the conquest of India, and dealt with the Sannyasi and Sepoy rebellions. Originally, it had a monopoly on trade of silk, tea, cotton, and spices.

ANSWER: British **East India Company** [or **BEIC**; prompt on "John Company"] <AL/PL>