

Bulldog High School Academic Tournament 2021 (XXX): “I feel like ACF Regionals 2021 is a confusing subtitle for a set that’s not ACF Regionals 2021.”

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Packet 14 Tossups

1. **The two main mechanisms for this process are distinguished by the value of the RSS parameter. Either this process or volatilization prepares a substance for gravimetric analysis. Like flocculation, this process can be reversed with a volatile electrolyte that induces peptization. When centrifugation causes this process, it leaves a (*) remainder called the supernatant. A supersaturated system is held at a high concentration without triggering this process, which may begin suddenly if a seed crystal is added. Mixing sodium chloride and silver nitrate will cause silver chloride to undergo this process. For 10 points, name this process in which a solid substance comes out of solution.**

ANSWER: **precipitation** [or word forms like **precipitate**; prompt on crystallization or recrystallization or sedimentation] (SE)

2. **A pair of men in blue bandanas and white shirts race at this activity in one of several paintings of the Biglin brothers. In another painting, a black man performs this action alongside a man in a Scottish cap, while a green-shirted man in moccasins performs this action at the opposite end. That painting depicting this activity appears behind three old women in a (*) Grant Wood parody and features an anachronistic American flag. Max Schmitt performs this action on the Schuylkill River in a painting by Thomas Eakins. For 10 points, Emmanuel Leutze’s *Washington Crossing the Delaware* depicts what action, which uses oars to propel boats over icy waters?**

ANSWER: **rowing** [accept **sculling**; prompt on boating by asking “how is the boat being propelled?”; prompt on crossing the Delaware River and equivalents by asking “how?”] (SL)

3. **This author’s son depicted the actor Hendrik Höfgen’s successful Nazi collaboration in the novel *Mephisto*. This author’s treatment of a similar theme describes the creation of a Schoenberg-inspired “dodecaphony” by a composer who intentionally contracts syphilis, Adrian (*) Leverkühn. A prose epic on Frederick the Great earns another of this author’s characters the *von* surname prefix at age 50. On a trip, that character smells disinfectant in the air and collapses on his beach chair watching the object of his obsession, a beautiful Polish boy named Tadzio. Aschenbach dies of cholera at the end of, for 10 points, what German author’s *Death in Venice*?**

ANSWER: Thomas **Mann** [or Paul Thomas **Mann**] (MGS)

4. **Followers of Korah were swallowed by the earth for challenging this man. As a baby, this man was saved by an angel when he put coals in his mouth rather than a jewel, possibly explaining this man’s stutter. This man was nearly killed for not circumcising his son, but was saved by his wife (*) Zipporah. This man, who died on Mount Nebo, was prohibited from entering Canaan after striking a rock to conjure water. This man was forced to flee his homeland for killing an overseer. This man’s brother Aaron created the Golden Calf while he received the Ten Commandments on Mount Sinai. For 10 points, name this Biblical figure who led the Israelite Exodus out of Egypt.**

ANSWER: **Moses** [or **Moshe**; or **Musa**] (DS)

5. **This country's village of Karasjok** ["kah-RAH-shok"] **is home to the largest national branch of the indigenous Sámediggi** ["SAM-eh-DIG-gee"] **parliament. Located in the same county is the town of Kirkenes** ["SHEER-keh-ness"], **the northern end of this country's daily Hurtigruten** ["HOOR-tee-ROOT-en"] **shipping line. This country finances the world's single largest sovereign wealth fund with revenue from its oil industry. The (*) Troidhaugen museum is in this country's "city of seven mountains," Bergen, which was its largest city until Christiania overtook it. This country's largest island is Spitsbergen, the chief member of its Svalbard archipelago. For 10 points, name this Scandinavian country known for its fjords, whose capital is Oslo.**

ANSWER: Norway [or Kingdom of Norway; or Kongeriket Norge] (MG)

6. **Two attacks were made on Mona in this historical region, the latter by a man who later defeated Calgacus near its northern end. The buildership of a palace in this region is disputed between Governor Sallustius Lucullus and King Togidubnus. Suetonius Paulinus subdued a revolt of this region at the Battle of (*) Watling Street with the aid of his military tribune Agricola, who later became its governor. After the fall of the Roman Empire, this region's Celts likely emigrated to France. This island's Aquae Sulis were located at modern Bath. For 10 points, name this island where Boudicca's Revolt was defeated on a Roman road between Shropshire and London.**

ANSWER: Province of Britannia [accept Roman Britain; prompt on Britain by asking "in what time period?"; anti-prompt on Caledonia] (DM)

7. **This author wrote a popular protest song which exhorts the listener to "walk on alone" if "no one heeds your call." In one poem, this author wrote of a "golden" land whose air and skies "set my heart in tune." One poem by this man imagines a world "where knowledge is free" and "where the mind is without fear." Another poem written by this man and later set to song addresses a "dispenser of destiny" and ends (*) "Victory, victory, victory to thee!" The line "Thou hast made me endless, such is thy pleasure," opens a collection by this man for which W.B. Yeats wrote a preface. For 10 points, name this Bengali Nobel laureate, the author of two national anthems and *Gitanjali*.**

ANSWER: Rabindranath Tagore [or Robindronath Thakur; prompt on Gurudev] (HK)

8. **The release of the most recent game in this series was marred by the failure to deliver West-Tek branded canvas bags. In one quest in this game series, the protagonist delivers a Gwinnett beer-brewing robot to the Hotel Rexford. The first 3-D game in this series replaced morphine with Med-X to allow its sale in Australia. The primary units of currency in this game series are (*) bottle caps, and character creation in this series uses the SPECIAL system. In the first game in this series, the player seeks a water chip to save the Vault Dweller's home. For 10 points, name this post-apocalyptic RPG series currently published by Bethesda.**

ANSWER: Fallout (ZA)

9. **A speech backing this movement said that a group of people "shall be left to fall, as they are inclined by their own weight." Samuel Davies extended this movement into the South by supporting the education of slaves. Factions in this movement were divided into "Old Lights" and "New Lights." A man supporting this movement quoted the line "their foot shall slide in due time" while describing a (*) "loathsome insect" over a fire. A cross-eyed activist named George Whitefield supported this movement, as did a man who gave the sermon *Sinners in the Hands of an Angry God*. Jonathan Edwards helped lead, for 10 points, what religious revival movement in mid-18th-century America?**

ANSWER: First Great Awakening [prompt on Great Awakening; do **NOT** accept or prompt on "Second Great Awakening"] (VS)

10. In this *subfield* of a larger field, the pioneering Herbert Simon theorized bounded rationality. This subfield's prospect theory incorporates risk aversion into expected utility. Differences in organ donation rates in different countries can be explained by nudge theory, a principle of this subfield which won Richard (*) Thaler a Nobel Prize. Anchoring bias and mental accounting are important areas of study in this field. The instinctual System 1 and logical System 2 are proposed in Daniel Kahneman's *Thinking, Fast and Slow*, a popular text in this field. For 10 points, name this field of economics that uses psychological principles to explain why people make irrational economic decisions.

ANSWER: **behavioral** economics [prompt on economics before mention] (BY)

11. This country's "king of groaners" specialized in the *mbaqanga* style. In reference to this country, Bruce Springsteen and others sing that they "ain't gonna play Sun City." A male choral group from this country controversially featured in Paul Simon's *Graceland*. This country's Solomon Linda wrote a song popularized in the US by The Tokens as "The Lion Sleeps Tonight." This country's a capella styles are used by (*) Ladysmith Black Mambazo, who appear on *The Indestructible Beat of Soweto*. Musicians from this country often draw upon traditional Zulu styles. For 10 points, name this country that was protested by Artists United Against Apartheid.

ANSWER: **South Africa** [or Republic of **South Africa**; or **RSA**] (AY)

12. A divide-and-conquer algorithm acting on these objects makes clever use of parallel computation of sums and differences of partitions to run in big-O of "*n* to the log 7" time. One of these objects that generalizes the concept of an inverse is named for Moore and Penrose. The Coppersmith–Winograd and Strassen algorithms can efficiently (*) multiply large examples of these objects. Cramer's rule, which can be used to solve systems of linear equations expressed using the augmented type of these objects, is formulated in terms of ratios of two of these objects's determinants. For 10 points, name these rectangular arrays of numbers.

ANSWER: **matrices** [or **matrix**; accept **matrix** multiplication] (MG)

13. Sillerton Jackson is the source of much of this novel's gossip, and its protagonist flusters Monsieur Rivière by implying that America disdains intellectualism. This novel's protagonist chooses not to reunite with his love interest when he and his son Dallas visit Paris in a final chapter set twenty-six years later. As this novel opens, its protagonist is displeased to see (*) Mrs. Mingott allow a pariah of New York society to sit in the same opera box as his fiancée. That fiancée, May Welland, later reveals her pregnancy in order to end the protagonist's affair with her cousin. For 10 points, name this novel about Newland Archer's love for Ellen Olenska, by Edith Wharton.

ANSWER: *The **Age of Innocence*** (DS)

14. *Note to players: Description acceptable.* In a ritual devoted to performing this action, participants donned masks adorned in goat hair, turquoise, and eagle feathers. This action was performed by breaking the four magic jars belonging to one mountain-dwelling god. Boys acted like frogs in one ceremony to perform this action, and people were lowered into *cenotes*, the domain of the god Chaac, in another. (*) Tlaloc performed this action in exchange for child sacrifices. Thunderbirds beat their wings to produce sound as they perform this meteorological action. For 10 points, Southwestern indigenous peoples perform namesake "dances" to perform what action of summoning precipitation?

ANSWER: **bringing rain** [accept **rainmaking** any descriptive equivalent, like **causing rain** or **sending rain**; accept **storms** for "rain"] (HK)

15. In one equation derived by this man, the “source” terms are collected on the right-hand side into the stress–energy tensor. This man used matched pairs of indices to imply addition in his namesake summation notation. Alexander Friedmann derived a homogeneous, isotropic solution to this man’s namesake “field equations,” whose first nontrivial solution was the (*) Schwarzschild [“SVART-shild”] metric. In two 1905 papers, this man listed the implications of the laws of physics being the same in all inertial reference frames; one of those implications was his mass–energy equivalence. For 10 points, name this physicist who proposed that “ E equals mc^2 ” in his theory of special relativity.

ANSWER: Albert Einstein [accept Einstein field equations or Einstein summation notation or Einstein field equations] (MS)

16. In this war, Admiral Rodney broke the line to win the Battle of the Saintes [“sahnt”] near Dominica. In this war, Bernardo de Galvez captured Baton Rouge, Mobile, and Pensacola to take West Florida. The treaty that ended this war was initiated by Lord Rockingham and his foreign secretary Charles James Fox, who prominently supported this war’s (*) rebels. This conflict was contemporary with the last Anglo-Dutch war, leading John Adams to seek an informal alliance. This war’s decisive campaign involved French forces led by the Comtes [“cohmt”] de Grasse and Rochambeau. For 10 points, name this war whose 1783 Treaty of Paris resulted in independence for the Thirteen Colonies.

ANSWER: American Revolution [or American Revolutionary War; or War of American Independence] (DM)

17. Susan Sontag asserted that the subjects of this “photographer of freaks” were inhabitants of “the single idiot village,” America. A slightly hunched man towers over his parents in this photographer’s depiction of Eddie Carmel, *A Jewish giant at home with his parents*. This photographer depicted a boy with one of the straps from his shorts hanging off his shoulder in a (*) park. This photographer’s image of children in matching white collars and black dresses is echoed in *The Shining*. *Identical Twins*, *Roselle*, *New Jersey* was taken by, for 10 points, what photographer, who also captured *Child with Toy Hand Grenade in Central Park*?

ANSWER: Diane Arbus (AY)

18. Systemic forms of this condition are characterized by high levels of C-reactive protein and interleukin-6, and SIRS is a systemic form of this process closely associated with both sepsis and “cytokine storm.” The N-F-kappa-B pathway is activated by TNF-alpha to initiate this process. Recognition of PAMPs and DAMPs by toll-like receptors initiates this process via signalling for mast cells to release granules containing (*) histamine. Non-steroidal drugs like ibuprofen and aspirin counter this process. For 10 points, the suffix “-itis” denotes what immune response to damage or infection that results in heat, swelling, redness, and pain?

ANSWER: inflammation [or word forms like inflammatory response; prompt on allergic reactions or clear equivalents; prompt on infection before mention; prompt on hypersensitivity; prompt on anything involving an immune response before mention; prompt on sepsis, septic shock, or shock before mention of “sepsis”] (HK)

19. Rustum el-Sadi guides a character with this name to live among the Romani, who think her god is Nature. That character with this name becomes infatuated with the Russian princess Sasha during the Great Frost of 1608. Another character with this name battles the African king Agramante after Astolfo recovers his wits from the moon. With help from critic Nick Greene, one character with this name completes their magnum opus, (*) *The Oak Tree*, hundreds of years after transforming into a woman. For 10 points, give this name shared by a gender-bending Virginia Woolf title character and a Frankish knight called *Furioso* in a work by Ludovico Ariosto.

ANSWER: Orlando [accept Orlando Furioso; prompt on Roland] (MGS)

20. The article “Dual Power” was written in this year, referencing tensions between social democrats of the “Temporary Committee” and urban workers. John Reed recorded events of this year in *Ten Days that Shook the World*. “Order No. 1,” issued in March of this year, undermined officers on the Galician front and contributed to the collapse of Alexander (*) Kerensky’s Provisional Government. The April Theses were written in this year by a leader who returned from exile in a sealed train. For 10 points, name this year in which failures in World War I led to Nicholas II being overthrown and Vladimir Lenin’s Bolsheviks taking control of Russia.
ANSWER: **1917** [prompt on ‘17] (DM)

Tiebreaker

Gregory of Nazianus resigned from one of these events in Constantinople that refused admission to the *Pneumatomachi* [“noo-mah-TAH-mah-kai”]. Jacques de Molay was burned at the stake after one of these events in Vienne [“vee-IN”] disbanded his Knights Templar. A set of four of these events at one site included a “Great” one in 1215. The claims of Eutyches [“YOU-tih-kees”], who spoke at the “Robber (*) Synod,” were rejected by one of these events in Chalcedon. The Tridentine rite was codified at one of these events in Trent, which was convened by Pope Paul III and began the Counter-Reformation. For 10 points, name these official worldwide gatherings to settle Church doctrine, the most recent of which was Vatican II [“two”].
ANSWER: ecumenical **councils** [accept general **councils**; prompt on synods before “Synod” is read] (DM)

Packet 14 Bonuses

1. Encolpius is less than impressed by this character's zodiac-themed platter and pastry eggs containing live chicks.

For 10 points each:

[10] Name this former slave from Petronius' *Satyricon* whose vulgar feast ends with the fire brigade knocking down his door.

ANSWER: **Trimalchio** [or Gaius Pompeius **Trimalchio** Maecenatianus]

[10] In Apuleius' *Metamorphoses*, Lucius gets transformed into this animal by Photis and escapes a group of thieves when Tlepolemus gets them drunk at a banquet.

ANSWER: **ass** [or **asinus**; accept **donkey**; accept *The Golden Ass*]

[10] This master of Old Comedy invented Greek's longest word, at 173 letters, for a fictional dish in his play *Assemblywomen*. Spartans and Athenians enjoy a banquet together after making peace at the end of his *Lysistrata*.

ANSWER: **Aristophanes** (DS)

2. *Pencil and paper ready.* You are a fertilizer chemist trying to react six moles of H₂ ["H-2"] with one mole of N₂ ["N-2"]. For 10 points each:

[10] If you were trying to create ammonia, which has the chemical formula NH₃ ["N-H-3"], the nitrogen gas would be what type of reagent, because it is completely used up in the reaction?

ANSWER: **limiting** reagent [or **limiting** reactant]

[10] Limiting-reagent analysis is useful when the constant describing this state is very large. In this state, reactant concentrations do not change with time, as forward and reverse reactions are balanced.

ANSWER: chemical **equilibrium** [accept **equilibrium** constant]

[10] For the reaction of six moles of hydrogen gas with one mole of nitrogen gas, what is the number of moles of ammonia produced? You have 15 seconds.

ANSWER: **two** moles (MP)

3. This artist superimposed a square onto another, larger square in his painting *White on White*. For 10 points each:

[10] Identify this Russian artist and founder of Suprematism. He debuted his *Black Square*, a canvas painted completely black, at the 0,10 ["zero-ten"] Exhibition.

ANSWER: Kazimir (Severinovich) **Malevich**

[10] Wassily Kandinsky also often used geometric shapes, as in his *Squares with Concentric Circles*, in his works in this non-representational style. Jackson Pollock painted in a form of expressionism named for this type of art.

ANSWER: **abstract** [accept **abstract** expressionism]

[10] This 20th century Dutch art movement applied abstraction in its simple geometric motifs and primary colors. One of this movement's founding members, Theo van Doesburg, split with another over the use of diagonal lines.

ANSWER: **De Stijl** ["duh-stale"] [or **The Style** or **Neoplasticism**] (SL)

4. Six members of this group have resigned following catastrophic blackouts, ostensibly due to their status as out-of-state residents. For 10 points each:

[10] Identify this governing board that was widely blamed for the failure of Texas's electrical grid in a major winter storm in February.

ANSWER: **ERCOT** [accept **Electricity Reliability Council of Texas**]

[10] ERCOT was heavily criticized by this Texas governor for its "lack of preparedness" leading up to February's storm.

ANSWER: Greg **Abbott** [or Gregory Wayne **Abbott**]

[10] This other Texas politician drew swift calls for his resignation as reports emerged that had taken his family on vacation to Cancún to escape the weather, instead of remaining in Texas to coordinate emergency responses.

ANSWER: Ted **Cruz** [or Rafael Edward **Cruz**] (DR)

5. The Truman administration allowed John Cutler to infect hundreds of Guatemalans with this disease, killing at least 83 people. For 10 points each:

[10] Name this disease. Another horrific study of this disease was conducted on 399 uninformed sharecroppers by the United States Public Health Service in a city in Alabama.

ANSWER: **syphilis**

[10] In a huge ethical breach, researchers left Tuskegee study participants without access to this drug, the standard care for syphilis, until 1972. Alexander Fleming discovered this drug, the world's first antibiotic, in 1928.

ANSWER: **penicillin**

[10] After the study became public knowledge, Congress held a series of hearings that culminated in this 1979 report. It lays out respect for persons, beneficence, and justice as ethical principles for human research.

ANSWER: **Belmont** Report (HK)

6. This text asks the "Lord of [all] the worlds" to "guide us to the straight path." For 10 points each:

[10] Name this text whose first line is simply "In the name of God, Most Gracious and Most Merciful." This chapter is followed by one that contains a verse about a throne. A description is fine.

ANSWER: Surah al-**Fatiha** [accept the **Opening**; accept the **Opener**; accept the **first surah** in the Qur'an or equivalent answers]

[10] Following the *takbir*, Muslims read Surah al-Fatiha to begin every *rak'ah* of this practice, which is performed five times a day facing the direction of Mecca.

ANSWER: **prayer** [or **salat**; or **salah**; or **namaz**]

[10] *Original language term required.* Like prayer, the *adhan*, or call to prayer, opens with this phrase known as the *takbir*. This phrase translating to "God is Great" is a common joyful utterance among Muslims.

ANSWER: **allahu akbar** (HK)

7. In a work titled for this concept "of Influence," Harold Bloom explored how new poets experience the title condition due to their relationship with the poets that came before them. For 10 points each:

[10] Name this condition. A 1947 poem titled "The Age of [this condition]" features the speakers Quant, Malin, Rosetta, and Emble, and is set in a bar within an increasingly industrialized New York City.

ANSWER: **anxiety** [accept "The Age of **Anxiety**" or *The Anxiety of Influence*]

[10] The speaker of this poem by the author of "The Age of Anxiety" also sits in "one of the dives / On Fifty-second Street / Uncertain and afraid" near the end of a "low dishonest decade."

ANSWER: "**September 1, 1939**"

[10] This English-born poet wrote "The Age of Anxiety" and "September 1, 1939."

ANSWER: W. H. **Auden** [or Wystan Hugh **Auden**] (MGS)

8. *Mythbusters* tested the plausibility of several scenes from this show, including one in which the protagonist throws fulminated mercury against the floor to cause an explosion. For 10 points each:

[10] Name this AMC program featuring a high-school chemistry teacher who must sell crystal meth to pay for his lung cancer treatment and support his family.

ANSWER: **Breaking Bad**

[10] One of *Breaking Bad*'s many shady characters is this crooked lawyer whose namesake spinoff series also airs on AMC. This character is played by Bob Odenkirk.

ANSWER: **Saul Goodman** [or **James** Morgan **McGill**; or **Jimmy McGill**; accept any underlined name; accept *Better Call Saul*]

[10] A character featured in both *Breaking Bad* and *Better Call Saul* is Gustavo Fring, a chicken restaurant magnate by day and meth kingpin by night. Gus is played by this actor who also plays Moff Gideon in *The Mandalorian*.

ANSWER: Giancarlo **Esposito** [or Giancarlo Giuseppe Alessandro **Esposito**] (ZA)

9. This blood vessel is formed by the confluence of the superior mesenteric and splenic veins. For 10 points each:

[10] Name this vein that carries deoxygenated blood to the capillary beds of a certain organ's sinusoids.

Hypertension of this vessel can cause fluid buildup in the peritoneal cavity.

ANSWER: hepatic **portal vein** [prompt on **portal system**]

[10] Cirrhosis ["sir-OH-sis"] of the liver resulting from abuse of this substance is a common cause of portal hypertension. This substance's metabolite acetaldehyde ["acet-AL-dehyde"] may contribute to its damaging effects on the liver.

ANSWER: **alcohol** [or **ethanol**; or ethyl **alcohol**; accept **alcoholic** liver disease or **alcohol** abuse]

[10] While cirrhosis is a hepatic cause of portal hypertension, obstruction of the inferior one of these major vessels is one possible post-hepatic cause. These large veins empty deoxygenated blood into the heart's right atrium.

ANSWER: **venae cavae** [or **vena cava**; accept inferior **vena cava** or superior **vena cava**] (HK)

10. This man led forces from Brazzaville after making the Appeal of 18 June from exile in London. For 10 points each:

[10] Name this man who led the forces of Free France during World War Two, later serving as president of France from 1959-1969.

ANSWER: Charles **de Gaulle** [or Charles André Joseph Marie **de Gaulle**]

[10] De Gaulle vetoed British entry into this regional organization that sought to integrate policies regarding trade of its member nations. He was also at the center of this organization's empty chair crisis of 1965.

ANSWER: **European Economic Community** [or **EEC**; accept **European Community** or **European Common Market**; do **NOT** accept or prompt on "European Union" or "EU" or "European Coal and Steel Community" or "ECSC"]

[10] De Gaulle also made waves within this organization when he pulled France's troops out of this organization in 1967. This organization is named for a 1949 agreement signed by its founders.

ANSWER: **NATO** [or **North Atlantic Treaty Organization**] (ZA)

11. Answer the following about Greeks who were hated by other Greeks during the Trojan War. For 10 points each:

[10] At the start of the war, this hero forced Odysseus to reveal that his insanity was a ploy to avoid leaving. In return, Odysseus planted gold and a forged Trojan letter under the tent of this inventor of dice to have him executed.

ANSWER: **Palamedes**

[10] Agamemnon takes Briseis from this hero, sparking a feud in which this hero refuses to fight until Patroclus is killed. This hero dies after being shot in the heel by Paris.

ANSWER: **Achilles**

[10] After killing a leader of this group, Achilles is provoked by Thersites' "unbridled tongue" and corpse desecration to kill him too. Achilles mourns upon seeing the face of that queen of this group.

ANSWER: **Amazons** [accept **Amazones**] (DM)

12. This E-flat major symphony's third movement was the first time a symphony required three horn parts. For 10 points each:

[10] Name this symphony, which shifts from an opening arpeggiated E-flat major chord via a descending "D, C-sharp." It began its composer's "middle period," and features a second movement C minor funeral march.

ANSWER: **Beethoven** Symphony No. **3** in E-flat major [accept *Eroica* Symphony or **Beethoven** Opus **55**]

[10] The last movement of *Eroica* contains these musical works derived from his ballet *The Creatures of Prometheus*. Mozart composed twelve of these works using the tune of "Twinkle Twinkle Little Star."

ANSWER: theme and **variations**

[10] Beethoven originally dedicated *Eroica* to this leader, but changed that dedication "to the memory of a great man" after this man crowned himself Emperor of the French.

ANSWER: **Napoleon Bonaparte** [accept either underlined name] (DM)

13. Prior to 1996, only one woman had been awarded the Gold Medal of the Royal Astronomical Society—in 1828. For 10 points each:

[10] Name that German astronomer, whose extensive discoveries of astronomical objects made her the first woman to earn a salary as a scientist. She often collaborated with her brother, who discovered infrared radiation.

ANSWER: Caroline (Lucretia) **Herschel** (Her brother was William Herschel.)

[10] 2,500 nebulae and clusters discovered by Herschel were included in a "New General" one of these lists, the source of stellar NGC identifiers. A much shorter one of these lists was published by Charles Messier.

ANSWER: astronomical **catalogue** [or star **catalogue**; accept *New General Catalogue* or Messier **catalogue**]

[10] Herschel's catalogue also included many of these objects, whose gassy tail extends behind their frozen nucleus. Herschel observed a periodic one of them named for Johann Encke in 1795.

ANSWER: **comets** (DR)

14. Answer the following about the ancient long-distance trading kingdom of Dilmun, for 10 points each.

[10] Dilmun was based on this island. The Qarmatians, another group based on this island, once stole the Black Stone from Mecca and held it for ransom.

ANSWER: **Bahrain**

[10] Dilmun is first mentioned in trade catalogs of this civilization named for the southern region of Mesopotamia. This earliest known civilization in the world developed cuneiform and was succeeded by the Akkadians.

ANSWER: **Sumerian**

[10] A Sumerian text named for Eridu depicts Dilmun as this event's location. Some scholars have hence linked the Pishon, one of four rivers mentioned in the Bible's account of this event, to a dried riverbed in Arabia near Dilmun.

ANSWER: **creation** of the world [accept equivalent descriptions] (DM)

15. Martha Nussbaum argued that Alcibiades' speech in this work is a refutation of Diotima's dispassionate *scala amoris*. For 10 points each:

[10] Name this dialogue. In one of the speeches delivered at its title event, Aristophanes explains that there were once three sexes, because humans used to have double bodies before Zeus split them in half.

ANSWER: **Symposium** [or **Sympousion**]

[10] Aristophanes's speech aims to explain the origin of this emotion, the main subject of Plato's *Symposium*. Pausanias's speech compares types of this emotion governed by "common" and "heavenly" Aphrodite.

ANSWER: **love** [or **eros**]

[10] This other Platonic dialogue also focuses on love. The title young man recounts Lysias's speech about seduction in this dialogue, in which Socrates compares the soul to a chariot pulled by two horses.

ANSWER: **Phaedrus** (DS)

16. A character in this novel attempts to burn a manuscript, only for it to be returned with the reprimand “Manuscripts don’t burn.” For 10 points each:

[10] Name this novel in which Professor Woland tells Berlioz that Jesus must have existed since he himself saw Jesus’s sentencing. That’s probably true, since Woland is the devil in disguise.

ANSWER: *The **Master and Margarita*** [or ***Master i Margarita***]

[10] In addition to *The Master and Margarita*, Mikhail Bulgakov also wrote this satirical novella, in which a transplanted pituitary gland transforms the stray Sharik into a human.

ANSWER: ***Heart of a Dog*** [or ***Sobachye syerdtseye***; accept any articles before “Heart” and “Dog,” e.g. ***The Heart of the Dog***]

[10] A third Bulgakov satire is titled for “The Fatal [*these things*].” In it, a mixup during a poultry shortage combined with an experimental growth ray leads to massive snakes and ostriches emerging from *these things*.

ANSWER: *The Fatal **Eggs*** [or *Rokovyye **yaytsa***] (DS)

17. In an opera set in this city, Musetta sings her namesake waltz, “Quando me’n vo,” to seduce her occasional boyfriend Marcello at the Café Momus. For 10 points each:

[10] Name this city. Mimi falls in love with Rodolfo in this city’s Latin Quarter in *La Bohème*.

ANSWER: **Paris**

[10] In this operetta, the Pontevedrin ambassador in Paris schemes to keep Hanna Glawari’s wealth from falling into French hands by pushing Danilo Danilovich to marry her. This Franz Lehár operetta closes with a joyous waltz.

ANSWER: *The **Merry Widow*** [accept *Die **lustige Witwe***]

[10] Nuns sing the “Salve Regina” en route to the guillotine in Paris in this composer’s *Dialogues of the Carmelites*. This man premiered his Flute Sonata with Jean-Pierre Rampal at the Strasbourg Festival.

ANSWER: Francis **Poulenc** [or Francis Jean Marcel **Poulenc**] (MG)

18. These devices are classified as either PNP or NPN depending on the ordering of their doped layers. For 10 points each:

[10] Name these devices whose mobile charge carriers include both electrons and holes. They have three terminals called the emitter, base, and collector.

ANSWER: **bipolar junction transistors** [or **BJTs**; prompt on transistors]

[10] Most transistors are made of silicon-based examples of these materials. They have conductivity between that of conductors and insulators, which can be altered by the addition of impurities called dopants.

ANSWER: **semiconductors**

[10] BJTs were preceded by point-contact transistors, which were invented in the 1940s by John Bardeen and Walter Brattain at this New Jersey facility named for the inventor of the telephone.

ANSWER: **Bell Labs** [or **Bell Telephone Laboratories**] (DM)

19. President Sténio Vincent successfully ended this country's US occupation but struggled to resolve border disputes with its eastern neighbor. For 10 points each:

[10] Name this country. Thousands of its people living near or across its border with the Dominican Republic were killed in the 1937 Parsley massacre after being unable to pronounce the Spanish word "perejil" with a trilled "r."

ANSWER: **Haiti** [or Republic of **Haiti**; or République d'**Haïti**; or Repiblik d **Ayiti**]

[10] This Dominican dictator ordered the massacre on the pretext of protecting the Haitian-Dominican border. He had Columbia professor Jesús Galíndez abducted in New York City as part of a brazen regime of state terrorism.

ANSWER: Rafael **Trujillo** [or Rafael Leónidas **Trujillo** Molina; accept El **Jefe** or The **Chief**]

[10] The International Day for the Elimination of Violence against Women commemorates the assassination of these dissident sisters known as the "Butterflies," which helped trigger Trujillo's own assassination six months later.

ANSWER: **Mirabal** sisters (Of the four sisters, Patria, Minerva and María Teresa were assassinated; the less politically active Dedé was not.) (DS)

20. When this author was fired from her theater critic job over lunch, she reportedly ordered the most expensive dessert on the menu before leaving. For 10 points each:

[10] Name this member of the Algonquin Round Table who called Ziegfeld's Follies "an Orgy of Scenic Patriotism" in magazine editorials. This "Constant Reader" wrote about Hazel Morse's alcoholism in "Big Blonde."

ANSWER: Dorothy **Parker**

[10] Parker was fired from this magazine after criticizing impresarios like Ziegfeld one too many times. This magazine's name also appears in a John Bunyan work and the title of a William Makepeace Thackeray novel.

ANSWER: **Vanity Fair**

[10] In this Dorothy Parker poem, the speaker contemplates several methods of suicide but considers that "Acids stain you" and "Gas smells awful" before concluding "You might as well live."

ANSWER: "**Resumé**" (MGS)

Tiebreaker

Luxembourg is one of the smallest and richest countries in Europe. For 10 points each:

[10] Luxembourg's head of state has this title, once also the title of rulers of Lithuania and Finland.

ANSWER: **Grand Duke** [accept **Grand Duchess**]

[10] Luxembourg's fortress was termed "[this place] of the North" for its impregnability, only being breached once in its history. This place's "Rock" controls a namesake strait and was the northern "Pillar of Hercules" in antiquity.

ANSWER: **Gibraltar**

[10] Luxembourg's namesake House ruled the Kingdom of Bohemia until Sigismund died without an heir; possession of Bohemia then went to this house that also ruled Austria from the 1200s until the end of World War I.

ANSWER: House of **Habsburg** [or House of **Hapsburg**] (DM)