

COLLABORATIVE ACADEMIC SPRING TOURNAMENT 2019

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PACKET 11 TOSSUPS

1. **In the Golden Legend, the Queen of Sheba passes over a bridge that would eventually be repurposed for use in this event. St. Helena destroyed a temple to Venus built on the site of this event, during which a veil was split from top to bottom. An object supposedly used in connection with this event was photographed by Secondo Pia. The (*) victim of this event may have been wrapped in the Shroud of Turin, which includes bloodstains corresponding to wounds inflicted by a crown of thorns. For 10 points, name this event in which a certain religious figure was executed by being nailed to a cross.**

ANSWER: **crucifixion** of Jesus Christ [prompt on death of Jesus; prompt on burial of Jesus] <JA>

2. **In this novel, the peasant Higg regains the use of his legs after a salve was made for him for free by a nurse. Since a monarch in this novel refused to marry Alicia, he is attacked by the "Blue Knight." The antagonist of this novel knocks Athelstane unconscious while escaping from the Torquilstone Castle. That man, who dies of a heart attack during a climactic duel, is Sir (*) Brian Bois-Guilbert. The Jewish nurse Rebecca tends the wounds of this novel's title character after the Ashby tournament. The title character of this novel accompanies Richard the Lionheart on a crusade and marries Lady Rowena. For 10 points, name this novel by Sir Walter Scott.**

ANSWER: ***Ivanhoe*** <JA>

3. **This leader sent scientists in his country to research facilities that were nicknamed *sharashkas*. Jews in this man's country were targeted in the Night of the Murdered Poets and the Doctor's Plot. This man began show trials as part of the purges of his country's government following the assassination of Sergey Kirov. Despite his government's signing of the (*) Molotov-Ribbentrop Pact, this man's country was invaded by Nazi Germany in 1941 as part of Operation Barbarossa. This man allegedly ordered Ramon Mercader to kill his old rival Leon Trotsky with an ice pick. For 10 points, name this dictator of the Soviet Union during World War II, who succeeded Vladimir Lenin.**

ANSWER: Joseph **Stalin** [or Iosif Vissarionovich **Stalin**; or Iosib **Dzhugashvili**] <GP>

4. **These cells take on a teardrop-shaped appearance in myelofibrosis ("MY-eh-low-fie-BRO-sis"). Antibodies that bind to these cells are detected using the Coombs test. One disease in which these cells are malformed causes painful chest crises. These cells develop from reticulocytes ("reh-TIC-yoo-low-sites") and are broken down in the spleen after about 120 days. During development, they expel their (*) nuclei and form a biconcave shape. A glutamic acid to valine ("VAY-leen") mutation in a protein found in these cells causes sickle-cell anemia. For 10 points, name these cells loaded with hemoglobin that carry oxygen.**

ANSWER: **red blood cells** [or **RBC**; or **erythrocytes**]

5. **One character with this profession visits the Sufi Shiekh Ali al-Junaydi after failing to kill his former mentor Rauf Ilwan, one of the title “dogs” of a Naguib Mahfouz (“nah-GHEEB mah-FOOZ”) novel. In a different work, this occupation is held by Khwajah Hasan, who finds his compatriots dead after they are scalded with hot oil by Morgiana. In that story, a (*) woodcutter hides in a bush and overhears the password to a cave where men with this profession hide their treasure. For 10 points, Ali Baba discovers a den of forty characters with what criminal occupation, also held by Fagin’s gang of pickpockets in *Oliver Twist*?**

ANSWER: **thievery** [accept word forms such as **thief**; accept answers referencing **robbery** or **burglary** or **stealing**] <JA>

6. **This architect died before completing his Martin Luther King Jr. Memorial Library in Washington D.C. This architect created a three-story villa with a translucent onyx wall for Fritz and Grete Tugendhat which also contains his Brno Chairs. This architect designed a house in Plano, Illinois with floor-to-ceiling glass windows that rests on stilts. This last director of the (*) Bauhaus collaborated with Philip Johnson on a building that allows for three window blind positions located on Park Avenue. For 10 points, name this International Style German architect of the Farnsworth House and the Seagram Building who is famous for the aphorism “less is more.”**

ANSWER: Ludwig **Mies** Van der Rohe (“mees van der roh”) [prompt on **Van der Rohe**] <NS>

7. **During one part of this war, the territorial governor Charles Bent was scalped and killed. As a result of disobeying presidential orders during negotiations, Nicholas Trist was fired after this war. The Mormon Battalion fought during this war, where six teenagers were among the defenders who died at (*) Chapultepec Castle. Slavery would have been banned in the lands gained from this war by the Wilmot Proviso. Winfield Scott and Zachary Taylor led American troops in this war, which was ended by the Treaty of Guadalupe Hidalgo. For 10 points, name this war between the United States and its southern neighbour.**

ANSWER: **Mexican-American** War [Accept **Mexican** War] <GP>

8. **Although they play on English clubs, this country’s national soccer team has included Shkodran Mustafi and Leroy Sané. Angelique Kerber plays tennis for this country, as did a player married to Andre Agassi who achieved a Grand Slam and Olympic gold in 1988. After failing to qualify for the 2018 FIFA World Cup, a man from this country was fired as head coach of the (*) U.S. national soccer team. Miroslav Klose (“KLOS-uh”) made a goal allowing this team to win the 2014 World Cup. A power forward from this country has played 21 seasons with the Dallas Mavericks. For 10 points, name this home country of Dirk Nowitzki (“noh-VITZ-kee”) and FC Bayern Munich.**

ANSWER: **Germany** <WG>

9. **The difference in this quantity for two reactions is proportional to their differences in enthalpies according to the Evans-Polanyi principle. E is raised to the quantity “negative this quantity over RT” to calculate the rate constant in the Arrhenius (“uh-REE-nee-us”) equation. On a reaction coordinate, this quantity can be visualized as the difference between the (*) maximum point and the curve’s value for the reactants. Catalysts lower this quantity. For ten points, name this amount of energy which must be supplied to a system for a reaction to occur, often symbolized “E sub a”.**

ANSWER: **activation** energy [or **E_a** (“E sub a”) before mention, or **activation** enthalpy, prompt on **E**] <AG>

10. Vladimir Nabokov analyzed the meaning of this story's use of the word *Ungeziefer* in its opening sentence. The protagonist of this story clings to a picture of a woman in furs after furniture is moved out of his room. Near the end of this story, a group of lodgers are chased away by a character attracted to the (*) violin playing of his sister Grete. That character is permanently hurt after his father throws apples at him. After waking up from "uneasy dreams," a traveling salesman in this story discovers he is a "monstrous vermin." For 10 points, name this story by Franz Kafka about Gregor Samsa, who turns into a bug.

ANSWER: *The Metamorphosis* [or *Die Verwandlung*] <WG>

11. After this man's forces captured Smyrna from the Knights Hospitallers, this man declared himself a 'ghazi', or "warrior of Islam." This man won the Battles of the Kondurcha River and Terek River against the Golden Horde. This man's tomb is at the Gur-e-Amir, and after defeating the Tughlaq Dynasty, he sacked (*) Delhi. Before he could lead a campaign to restore the Yuan Dynasty in China, this man died in 1405. This man notoriously built pyramids out of human skulls, and he ruled from the city of Samarkand. For 10 points, name this Turco-Mongol conqueror of the 14th century.

ANSWER: Timur the Lame [or Tamerlane; or Timur-e-Leng] <GP>

12. In one operetta by this composer, the Marquis de Lavarre fights a Spanish army alone after marrying the title character. A wooden statue of Tecumseh is the dedicatee of his piece "Who's Who in Navy Blue?" Another work by this composer serves as the credits music in *Monty Python's Flying Circus*. This composer's magnum opus contains a piccolo obbligato in its trio section, and he commissioned J.W. Pepper to create a namesake (*) brass instrument that wraps around the performer's body. His works for military band include "The Liberty Bell" and "The Stars and Stripes Forever". For 10 points, name this American "March King".

ANSWER: John Philip Sousa <JA>

13. The zeroth component of a generalized form of this quantity equals ct . Two values for this vector quantity can be added by dividing their sum by one plus their product over a constant squared. The square of this quantity appears over c squared in the definition of the Lorentz ("loh-RENTZ") gamma factor. Two inertial reference frames (*) differ by a constant value of this vector quantity. The change in this quantity multiplies mass to give impulse; that change is also equal to the product of average acceleration and time. Lowercase v symbolizes, for ten points, what vector quantity representing displacement over time?

ANSWER: velocity [do NOT accept "speed"]

14. A prank by Jonathan Swift inspired this person to publish a false obituary for his rival Titan Leeds. Father Abraham advises a group before an auction in his essay "The Way to Wealth." As an apprentice, this author wrote many letters attributed to a middle-aged widow. This man is often erroneously cited as the creator of (*) Daylight Saving Time. Silence Dogood was a pseudonym of this man, who wrote "Three can keep a secret, if two of them are dead" and "A penny saved is a penny earned" in a yearly publication. For 10 points, name this Founding Father and inventor who wrote *Poor Richard's Almanack*.

ANSWER: Benjamin Franklin <WG>

15. The "Domesday wiches" ("witches") refer to towns where the production of this commodity was important to Cheshire ("CHEH-sure"). Philip IV established a permanent tax on this substance in France called the *gabelle*. A common myth claims Roman soldiers were paid in this commodity instead of money. After the Third Punic War, this substance was supposedly spread on the (*) ground of Carthage. In the Sahara Desert, this commodity was traded for gold. A British tax on this substance was the subject of a march led by Mahatma Gandhi. For 10 points, name this mineral which was incredibly valuable due to its ability to preserve food.

ANSWER: salt [or NaCl] <WG>

16. ***P* forms are mapped to *P+1* forms by one form of this operation. One form of this operation is applied twice to yield the elements of the Hessian (“HEH-shin”). Rolle's (“role’s”) theorem gives a condition under which this operation must yield 0 somewhere on an interval. Finding extrema involves finding (*) critical points where this operation on a function equals 0. This operation, which can be computed using the product or chain rules, is the opposite of integration according to the fundamental theorem of calculus. For 10 points, name this operation that gives the instantaneous rate of change of a function.**

ANSWER: taking the derivative [or differentiation; accept exterior derivatives or partial derivatives] <VS>

17. **One character in this play recalls being “sort of-- thrilled” after her husband used her slipper to smash light bulbs on their wedding night. Another character in this play kisses a young man who sells newspapers for *The Evening Star*. A former English teacher in this play is fired for having an affair with a student. Mitch plays poker in this play while his former love interest is taken to a mental asylum as she claims “I have always (*) depended on the kindness of strangers.” Near the end of this play, Stella Kowalski refuses to believe her husband Stanley raped Blanche Dubois (“doo-BWAH”). For 10 points, name this Tennessee Williams play titled for a metaphorical vehicle.**

ANSWER: *A Streetcar Named Desire* <WG>

18. **A Claude Levi-Strauss work titled for the “Way of” these objects analyzes how social status influenced the design of these objects among tribes of the Pacific Northwest. One of these artifacts discovered at KV62 is inscribed with chapter 151 of the Book of the Dead on its backside. Heinrich Schliemann (“SHLEE-mahn”) discovered a gold one of these artifacts at Mycenae (“my-SEE-nee”) that he claimed belonged to the mythical king (*) Agamemnon. A gold uraeus (“yoo-REE-us”) headdress and lapis lazuli (“LAP-is LAH-zoo-lee”) beads are among the components of one of these artifacts that Howard Carter removed from the Tomb of Tutankhamun. For 10 points, name this artifact used to cover the face of deceased people.**

ANSWER: funerary masks [or death masks; prompt on sarcophagus or coffin; do not accept or prompt on “mummy”] <JA>

19. **The Incan god Supay rules over one of these locations. Quetzalcoatl (“KETZ-ul-CO-ah-tull”) created the humans of the fifth world using objects retrieved from one of these locations. The Jaguar House, Dark House and Bat House are found in a third one of these locations, where Hunahpu's (“hoo-NUH-poo”) head was used in the (*) ballgame between the lords of this location and the Hero Twins. Uku Pacha (“OO-koo PAH-chuh”), Mictlan (“MEEKT-lahn”) and Xibalba (“shee-BALL-buh”) are examples of these locations. The dog-headed Xolotl (“show-LOT-ull”) leads souls to these locations. For 10 points, name these locations in Mesoamerican mythology where deceased people go.**

ANSWER: underworlds [or lands of the dead] <GC>

20. **The Histadrut Bridge crosses over this country's most polluted body of water, the Kishon River, whose drainage basin includes much of the Jezreel Valley. Eilat, this nation's southernmost city, lies on the Gulf of Aqaba (“AHK-uh-bah”). This country contains the Roman temples of Mount Hermon and (*) Masada. This country's Baha'i Gardens are located near Mount Carmel, marked by a stone statue of the Prophet Elijah. The Negev Desert spans much of the South of this country, bordered by Lebanon to the north and Jordan to the east. For 10 points, identify this country, where the Western Wall is a Jewish holy site in the capital of Jerusalem.**

ANSWER: Israel [or State of Israel; accept Medinat Yisrael] <NS>

PACKET 11 BONUSSES

1. Answer the falling about the conditions of free falling, for 10 points each:

[10] A system in free fall is only subject to the effects of this fundamental force and no others. This force causes objects on Earth to accelerate downwards at a speed of 9.81 m/s.

ANSWER: **gravity**

[10] An object in free fall could be represented by a box with a single downward force vector on one of these illustrations. These diagrams display the forces on an object as arrows emanating outward from a single point.

ANSWER: **free body** diagrams [or **FBD**]

[10] Placing one of these devices in free fall causes its reading to immediately drop to zero. These devices use the piezoelectric effect to produce voltage from mechanical stress, and are used in smartphones to determine orientation.

ANSWER: **accelerometers** <JA>

2. The Emcee sings “Leave your troubles outside” in the opening number of this musical, “Willkommen.” For 10 points each:

[10] Name this Kander and Ebb musical about Sally Bowles, who performs at the Kit Kat Club.

ANSWER: ***Cabaret***

[10] In *Cabaret*, many workers at the Kit Kat Club worry about the rise of this political party. The von Trapps flee from the rule of this party in *The Sound of Music*.

ANSWER: **Nazi** Party

[10] This real-life cabaret in Paris was the subject of many posters by the diminutive artist Henri de Toulouse-Lautrec.

ANSWER: **Moulin Rouge** (“mool-AN ROOJ”) <WG>

3. Thomas Nagel (“NAY-gul”) divided this concept into resultant, circumstantial, constitutive and causal forms. For 10 points each:

[10] Identify this concept discussed by Bernard Williams in which an agent can be blamed for an action whose outcome they did not have control over.

ANSWER: **moral luck**

[10] In this subfield of philosophy, luck refers to ways in which a person can accidentally have a true belief, such as through a lucky guess. This field’s Gettier (“GHET-ee-yur”) problem challenges whether its central concept is equivalent to “justified true belief”.

ANSWER: **epistemology** [prompt on but do NOT otherwise reveal **knowledge**]

[10] Epistemology is the study of this concept, which is often contrasted with ignorance. Skepticism is a philosophical attitude that doubts whether this concept can be “true” or “certain”.

ANSWER: **knowledge** <GC>

4. Mr. Soaphead gives a young girl this trait after she poisons a dog named Bob. For 10 points each:

[10] Name this trait. Claudia MacTeer dismembers a doll with this trait that resembles Shirley Temple, paralleling Cholly’s daughter’s destructive desire for this trait.

ANSWER: *The **Bluest Eye*** [accept any answer mentioning **blue eyes**; prompt on a partial answer]

[10] This novel by the author of *The Bluest Eye* chronicles the title ghost child’s arrival at 124 Bluestone Road, the home of former slave Sethe (“seth-uh”) and her daughter Denver.

ANSWER: ***Beloved***

[10] This author of *The Bluest Eye* and *Beloved* became the first African American to win the Nobel Prize for Literature in 1993. Her most recent book, *The Origin of Others*, grapples with the American concept of race.

ANSWER: Toni **Morrison** [or Chloe Anthony **Wofford**]

5. This molecule's triplet ground state has all of its electrons paired, unlike its singlet state which is much more reactive. For 10 points each:

[10] Name this flammable gas which makes up about 21% of the atmosphere. Humans exchange it for carbon dioxide.

ANSWER: **O₂** [or diatomic **oxygen** or **oxygen gas**]

[10] Understanding the singlet and triplet states of oxygen requires using these constructs, which in one formulation are linear combinations of atomic orbitals. These constructs can be bonding, nonbonding, or antibonding.

ANSWER: **molecular orbitals** [or **MO**; prompt on partial answer]

[10] Antibonding molecular orbitals are usually designated by a greek letter followed by this symbol. This symbol can also be used to designate an excited state for a nucleus.

ANSWER: **star** [or **asterisk**]

6. This period was preceded by the Bakumatsu. For 10 points each:

[10] Name this period that took began after the fall of the Tokugawa Shogunate. The objectives of this period were laid out in the Charter Oath.

ANSWER: **Meiji Restoration** [accept **Meiji Era** or **Meiji Period**]

[10] The Meiji period saw the Seikanron debate over whether or not to take this military action. Toyotomi Hideyoshi had earlier attempted and failed in this military action during the Imjin War.

ANSWER: **invading Korea** [accept anything regarding a **military expedition against Korea**]

[10] In 1879, the Meiji government officially annexed this chain of islands ruled by the king Sho Tai. This island chain, which includes Okinawa, was captured by the United States during World War II and occupied until 1972.

ANSWER: **Ryukyu Islands** <GP>

7. Over 40% of Denmark's energy generation comes from this source. For 10 points each:

[10] Name this form of renewable energy used to generate mechanical energy through turbines mounted on poles.

ANSWER: **wind energy** [or **wind power**; accept anything with the word **wind**]

[10] Wind turbine construction is often opposed by people described by this 5-letter acronym, which refers to homeowners' attitudes toward development on or near their property.

ANSWER: **NIMBY** [or **Not in My Backyard**]

[10] Sites such as Rance in France and the Scheldt Barrier in the Netherlands have helped pioneer this form of energy in which buoys or bridges are used to turn turbines, which generate electricity from its namesake phenomenon.

ANSWER: **tidal power** (prompt on **hydroelectricity**) <WG>

8. An author with this last name wrote about the characters Arun and Uma in the story "Fasting, Feasting." For 10 points each:

[10] Identify this shared surname of author Anita and her daughter Kiran ("KEE-ran"), who wrote *The Inheritance of Loss*.

ANSWER: **Desai** [accept Anita **Desai** or Kiran **Desai**]

[10] Anita Desai wrote the introduction to a novel by this author centering on Saleem, a character with a large nose and telepathic powers. He also wrote a novel in which a plane containing Gibreel Farishta and Saladin Chamcha explodes over the English Channel.

ANSWER: Salman **Rushdie**

[10] Both the Desai family and Salman Rushdie are from this country. Rabindranath Tagore ("ruh-BEEN-druh-naht tuh-GOHR") wrote the Jana Gana Mana in Bengali as this country's national anthem.

ANSWER: **India** [or Republic of **India**; or **Bharat** Ganrajya] <NS>

9. This man was shot in Laurel, Maryland by Arthur Bremer while campaigning. For 10 points each:

[10] Name this man who said “segregation now, segregation tomorrow, and segregation forever.” As a governor, this man made the “Stand in the Schoolhouse Door” to stop the integration of his state’s flagship university.

ANSWER: George **Wallace** [or George Corley **Wallace**, Jr.]

[10] Wallace was shot during this election year. Despite losing the popular vote to Hubert Humphrey in the Democratic primaries, George McGovern was the Democratic nominee in this election year.

ANSWER: **1972** [prompt on ‘72]

[10] Wallace previously served as the governor of this state. Bull Connor used police dogs and fire hoses on student protestors in this state’s city of Birmingham.

ANSWER: **Alabama** <GP>

10. Seventeen beach-lined “fronds” make up this city’s Palm Jumeirah, a luxurious housing project that juts into the Persian Gulf. For 10 points each:

[10] Name this city in the United Arab Emirates that also contains the Burj Khalifa, the tallest building in the world.

ANSWER: **Dubai**

[10] Palm Jumeirah is built on top of a system of these man-made structures. Another Dubai development project features 300 of these structures named for their resemblance to “The World”.

ANSWER: artificial **islands** [accept equivalents]

[10] This sail-shaped “7-star hotel”, where amenities include gold-plated iPads for all of its guests, was built on another artificial island. This hotel’s helipad was converted into a tennis court for a 2005 exhibition match that took place 700 feet above the ground.

ANSWER: **Burj Al Arab** <JA>

11. This mountain range is depicted in a work that shows two natives kneeling in front of a cross on a dirt path next to a waterfall. For 10 points each:

[10] Identify this mountain range painted in a work by Frederick Church. Church also depicted a smoldering mountain in this range next to a setting sun in his *Cotopaxi*.

ANSWER: **Andes** Mountains

[10] Church’s *Cotopaxi*, a Luminist work, was a painting from an art movement named after this New York river’s “School.” Asher Durand, a member of that art movement, also depicted the nearby Catskill Mountains in his *Kindred Spirits*.

ANSWER: **Hudson** River

[10] This founder of the Hudson River School painted an allegorical work representing Yggdrasil titled *Titan’s Goblet*. He glorified pastoral scenes in his *Course of Empire* series and illustrated a curving river in his *The Oxbow*.

ANSWER: Thomas **Cole** <NS>

12. This hormone is coordinated to zinc in vesicles, and during its maturation the C-peptide is cleaved off. For 10 points each:

[10] Name this peptide hormone which is opposed by glucagon, and promotes uptake of glucose.

ANSWER: **insulin**

[10] Insulin release is suppressed by the binding of this hormone to beta adrenergic receptors. This hormone is produced by chromaffin cells in its namesake gland, and induces the “flight or fight response”.

ANSWER: **epinephrine** [accept **adrenaline**; do NOT accept or prompt on “norepinephrine”]

[10] An epipen is used to stop anaphylactic shock due to an allergic reaction. Anaphylaxis occurs due to the release of this compound from mast cells, and its receptors are blocked by diphenhydramine, or Benadryl.

ANSWER: **histamine** <AG>

13. This character claims he is attempting “to seek one who fled from me” when asked why he is traveling in the Arctic. For 10 points each:

[10] Name this character, who dies of pneumonia after being rescued by the ship captain Robert Walton.

ANSWER: **Victor** Frankenstein [or Victor **Frankenstein**]

[10] The title amateur scientist creates a monster in this author’s novel *Frankenstein*. This woman had the idea for *Frankenstein* during a ghost story contest at the Villa Diodati.

ANSWER: Mary **Shelley** [or Mary Wollstonecraft **Godwin**]

[10] The monster kills Victor Frankenstein’s new bride, who has this first name. Another literary character with this first name marries Mr. Darcy, despite being snubbed by him at an earlier ball.

ANSWER: **Elizabeth** [or **Elizabeth** Lavenza; or **Elizabeth** Bennet; or **Eliza**; or **Lizzy**] <WG>

14. For 10 points each, answer the following about some mythological figures who made unexpected discoveries in pools of water.

[10] This creature found and ate nine hazelnuts after swimming into the Well of Wisdom. Finn MacCool burnt his thumb while cooking this fish, causing him to gain all the wisdom in the world.

ANSWER: **Salmon** of **Knowledge** [or **bradán feasa**; prompt on **salmon**]

[10] This figure, the first man in the Maori myth system, used his reflection in a pond as a model to form his wife Marikoriko. He lends his name to a type of humanoid wooden statue that has become popular among many Polynesian cultures.

ANSWER: **Tiki**

[10] This Greek youth also happened upon his reflection in a pool of water but ended up falling in love with it. He now lends his name to a term for self-obsession.

ANSWER: **Narcissus**

15. At the end of a 1985 film, one member of this group pumps his fist in the air as the Simple Minds song “Don’t You (Forget About Me)” plays in the background. For 10 points each:

[10] Name this title group in a John Hughes movie made up of a “brain,” “athlete,” “basket case,” “princess,” and a “criminal” who have Saturday detention together.

ANSWER: The **Breakfast Club**

[10] Parts of *The Breakfast Club* were filmed in the same Illinois high school as a Hughes film titled for this character played by Matthew Broderick. He hangs out with Cameron and Sloane on his title “Day Off” from school.

ANSWER: **Ferris Bueller** (accept either underlined name)

[10] Hughes also directed this 1987 film starring John Candy as a shower curtain ring salesman who helps a marketing executive played by Steve Martin get back home to his family for Thanksgiving.

ANSWER: **Planes, Trains, and Automobiles** <WG>

16. The Nazi minister of this thing was Joseph Goebbels (“YOH-sef GER-buls”). For 10 points each:

[10] Name this kind of information, which is spread in order to manipulate people into supporting a cause.

ANSWER: **propaganda**

[10] This director depicted a rally at Nuremberg in the pro-Nazi propaganda film *Triumph of the Will*.

ANSWER: Leni **Riefenstahl** (“ree-fun-shtahl”) [or Helene Bertha Amalie **Riefenstahl**]

[10] Riefenstahl directed a pioneering film documenting one of these events in 1936 in Berlin. Throughout much of the movie, she tracks an American participant in one of these events, Jesse Owens.

ANSWER: Summer **Olympics** [or the 1936 Summer **Olympics**; or the Berlin Summer **Olympics**] <WG>

17. This opera contains the Skočná and furiant dances and features a character who wears a bear costume as comic relief in its third act. For 10 points each:

[10] Identify this Bedřich Smetana (“BE-drich shme-TA-na”) opera in which Kecal tries to prevent Marenka from marrying Micha’s son Jenik.

ANSWER: The **Bartered Bride**

[10] *The Bartered Bride* was written in this language, as was *The Cunning Little Vixen* by Leoš Janáček (“lay-OH-sh YA-na-check”). Smetana’s opera *The Brandenburgers in Bohemia* was also written in this language.

ANSWER: Czech

[10] This other Czech composer wrote an opera in which a water nymph transforms into a monster in his *Rusalka*. His orchestral works include his Ninth Symphony, “From the New World,” which quotes African spirituals.

ANSWER: Antonín Dvořák [it’s pronounced (“de-VOR-zhak”) but accept clear knowledge equivalents] <NS>

18. A set of ten works in this form were printed on a card with each line on a separate strip which could be rearranged in a hundred thousand billion ways. For 10 points each:

[10] Name this type of poem that was featured in a book by Raymond Queneau. Petrarch also names a type of these poems that were collected in his *Il Canzoniere*.

ANSWER: sonnets

[10] Raymond Queneau was an author from the Oulipo movement, which was centered in this country. Georges Perec, a founding member of Oulipo, was also from this European country, the home of Marcel Proust.

ANSWER: France [or French Republic; or République française]

[10] Perec’s novel *A Void* follows a group of individuals looking for a missing companion named Anton Vowl. *A Void* notably avoids this letter entirely, as does Ernest Vincent Wright’s book *Gadsby*.

ANSWER: E <NS>

19. This mathematician, created a proof by contradiction where assuming a largest prime p allows the construction of a larger prime by multiplying all primes less than p and adding one. For 10 points each:

[10] Name this mathematician, geometer, and author of the *Elements*, who also names an algorithm to find the greatest common divisor of its two inputs.

ANSWER: Euclid (“YOO-klid”) of Alexandria [accept the Euclidean algorithm or Euclid's algorithm] (The proof is of the infinitude of primes)

[10] The Euclidean algorithm has its worst case runtime when the inputs are consecutive examples of these numbers. Each of these numbers is equal to the sum of the previous two in the sequence, and they begin 1, 1, 2, 3, 5.

ANSWER: Fibonacci (“fih-boh-NAW-chee”) numbers

[10] The Euclidean algorithm can be used to solve some of these equations, the subject of Hilbert's 10th problem. These equations only permit integer solutions.

ANSWER: Diophantine (“DYE-oh-FAN-teen”) equations <VS>

20. The former owner of this newspaper, Katherine Graham, hired the editor Ben Bradlee. For 10 points each:

[10] Name this newspaper which employed Bob Woodward and Carl Bernstein, who initially reported on the Watergate break-in.

ANSWER: The **Washington Post** [prompt on WaPo]

[10] The fallout from Watergate led to the resignation of this U.S. president.

ANSWER: Richard Nixon [or Richard Milhous Nixon]

[10] Woodward and Bernstein helped connect the Watergate burglars to this organization headed by John Mitchell. This committee set aside campaign funds in order to conduct illegal activities against the Democrats.

ANSWER: CREEP [or the Committee to Re-Elect the President; or the Committee for the Re-Election of the President; do NOT accept or prompt on the “Plumbers”] <WG>