1. **India's only feature of this kind is found on Baratang in the Andaman Islands. According to legend, a priest sprinkling holy water into one of these features caused it to change into its present state; that feature is El Totumo near Cartagena, Colombia, which is now used for bathing. Natural gas drilling and an earthquake at Yogyakarta may have caused a substantial increase of activity at one of these features. That feature, Sidoarjo, is located on Java and has been active (*)** nonstop since 2006. Nearly a third of the world's examples of these features are found in Gobustan along the Caspian coastline of Azerbaijan, some of which occasionally spit fire. For 10 points, name these geologic features that spew a mix of water and soil instead of lava.
ANSWER: **mud volcano**es [*or:* **mud dome**s; *prompt on:* **mud flow**s, **volcano**es]

2. **In *Space-Time Approach to Non-Relativistic Quantum Mechanics,* Feynman expresses this principle as the Chapman-Kolmogorov equation. An essential monograph on this principle is Baker and Copson's *The Mathematical Theory of [this principle].* The first Rayleigh-Sommerfeld formula is a common mathematical statement of this principle. This principle is the reason one uses the Green's function e to the j k r over r when deriving Kirchhoff's integral theorem, to which it can be seen as an approximation. It assigns an (*)** inclination, or obliquity, factor, so that waves have zero amplitude in the backwards direction. Fresnel explained diffraction by postulating that mutual interference occurs in secondary wavelets of this construction. For 10 points, name this principle which states that every point on a wave-front can be considered a source of secondary spherical wavelets.
ANSWER: **Huygens**'s principle [*or:* **Huygens**-Fresnel principle]

3. **A building of this type has an interior formed by 112 tree trunks formed into a wigwam and is entered through a steel triangular door. Another building of this type, which was built only from materials that two men could carry into the woods, is in Eureka Springs Arkansas and was designed by E. Fay Jones. Moshe Safdie covered a koi pond with a pyramidal glass roof in a concrete building of this type on Harvard's campus. SOM included seventeen parallel triangles in a building of this type commissioned by the US Air Force Academy. A cylindrical brick one was designed by (*)** Eero Saarinen for MIT. Another of these buildings has its whitewashed walls roofed with a rough concrete shell, and is located in Ronchamp. For 10 points, Zumthor's Bruder Klaus and Corbusier's Notre Dame du Haut are examples of what type of small religious building.
ANSWER: **chapel**s [prompt on "church"]

4. **The only candidate opposing this man during his first election was arrested in Prague in connection to the detonation of six car bombs in 1998. That candidate, Muhammad Salih, was a member of the Erk Party. A defector from this man's cabinet claimed that the Islamist group Akramia was actually founded by this man's government. This leader had his military enclose Babur Square and fire at hundreds of protesters during the (*)** Andijan massacre. An ambassador to this leader, Craig Murray, claimed that his government often boiled prisoners alive in the book *Murder in Samarkand.* This leader has ruled unopposed since 1990, the longest of any leader of a former Soviet republic. For 10 points, one-up Herman Cain and name this first and only President of Uzbekistan.
ANSWER: Islam **Karimov**

5. This poem rather problematically calls woman "a lesser man" because "woman's pleasure, woman's pain" are "blinder motions bounded in a shallower brain." Colum McCann's novel *Let the Great World Spin* gets its title from this poem. This poem mentions how "In the spring a young man's fancy lightly turns to thoughts of love." The speaker of this poem imagines "the nations' airy navies (*) grappling in the central blue" as part of his vision of the future, which fails to come true in this poem's sequel set "Sixty Years After." The speaker of this poem angrily recalls how his cousin Amy spurned his love. This poem's speaker is a soldier passing by the title building, which brings up memories of his youth. For 10 points, name this dramatic monologue by Alfred, Lord Tennyson.
ANSWER: "**Locksley Hall**"

6. A paper on sentences without overt subjects in this language was written under the pseudonym of Quang Phuc Dong from the South Hanoi Institute of Technology. A formal treatment of the semantics of a fragment of this language is presented in a paper often referred to by the initials "PTQ"; that paper is by Richard Montague. A pioneering book on the generative phonology of this language took binary features, rather than phonemes, to be the basic phonological unit. (*) Noam Chomsky and Morris Halle wrote that book about the "sound pattern" of this language. Experiments performed using this language include Jean Berko's wug test and William Labov's study of *r*-lessness in department stores. For 10 points, name this language which underwent the Great Vowel shift.
ANSWER: modern **English**

7. In a letter discovered in 2007, this character's creator asked Dr. Francis Kinnicutt's medical advice on behalf of a friend, before revealing the information was for writing this character. She plays the part of Joshua Reynolds' Mrs. Lloyd in a tableau vivant, a live staging of famous paintings. This character is thrilled to be invited on a European cruise, although she realizes she has only been invited to distract her friend's husband from the friend's affair with (*) Ned Silverton. After losing her job as a milliner, she finally receives her ten thousand dollar inheritance and writes checks to her bank and to Gus Treanor. Readers have long debated whether her death is an accident or a suicide, as she has trouble sleeping and overdoses on chloral. For 10 points, name this protagonist of Edith Wharton's novel *The House of Mirth*.
ANSWER: **Lily** **Bart** [*accept either name*]

8. Transportation in this city was monopolized by the CIV, which used horse-drawn carriages called fiacres. During a siege of this city, two zoo elephants named Castor and Pollux were eaten by its citizens. Wilhelm I, Alexander II, and Otto von Bismarck met in this city for the "Three Emperors Dinner." During a revolt in this city, women supposedly threw burning bottles of (*) gasoline into buildings. A teacher from this city known as the "Red Virgin" was deported to New Caledonia like many of its residents. Léon Gambetta escaped a siege of this city in a hot air balloon. Rebels in this city brought down the Vendôme Column and were crushed by Patrice MacMahon's army during the "Bloody Week." For 10 points, name this capital city where Adolphe Thiers crushed a Commune that began in 1870.
ANSWER: **Paris**

9. **An early method of performing a type of this process using an M13 phage to infect CJ236 *E. coli*, which lacks dut and ung; said method was developed by Thomas Kunkel. The sequence that determines the specificity of repressors of the 434 and P22 phages was studied using the "cassette" type of this process. Agilent's protocol for this process eliminates subcloning and rescue with the use of the *DpnI* ("d-p-n-one") restriction enzyme to chew up (*)** wild-type DNA. The major *in vitro* types of this process are "random" and "site-directed." A chemical's ability to cause this process is assessed by the Ames test. In *Drosophila*, ethyl methane sulphonate is commonly used for this process due to its guanine alkylation activity. For 10 points, identify this process in which mutations are induced in a DNA sequence.
ANSWER: **mutagenesis** [*until "mutations" is read, accept:* **inducing mutations**, obvious equivalents]

10. **Wanda Landowska's seminal 1933 LP of the *Goldberg Variations*, on harpsichord, included Bach's *Chromatic Fantasia & Fugue* and a piece named for this adjective. That Bach piece described by this adjective was a concerto for solo harpsichord that was published with the *French Overture*. The quick-slow-quick structure of overtures described by this adjective became the model for the earliest symphonies. A symphony described by this adjective ends in A minor after beginning in A major—making it the first symphony to (*)** start in a major key and end in a minor key. That symphony described by this adjective followed the Scottish symphony. For 10 points, give this adjectival form of a country that is attached to Mendelssohn's fourth symphony, which uses the Neapolitan saltarello dance in its finale.
ANSWER: **Italian**

11. **The transition monoid obtained after performing this process is the syntactic monoid. A con of Brzozowski's algorithm for this process is the potential for exponentially large intermediates. The most efficient algorithm for this process computes the coarsest congruence that saturates the set of final states, by splitting classes to refine the partition, and was developed by Hopcroft. It can be performed by first removing (*)** unreachable states and then determining the equivalence classes of the indistinguishability relation so that all the states in a class can be merged. It's guaranteed to yield a unique result due to the equivalence of deterministic finite automata and regular languages. For 10 points, name this process in which one takes a DFA and finds an equivalent DFA with the fewest number of states.
ANSWER: automata **minimization** [*or:* automata **reduction**, obvious equivalents; *in place of "automata", accept:* "state", "DFA", "deterministic finite automata", "finite automata", "finite state automata", "finite state machine"; *prompt on:* "**optimization**"]

12. **The 1985 murder of five members of this group in Quebec is known as the Lennoxville Massacre. Much of the information about this group comes from books written by Sonny Barger, who led this group in 1979 when it was the target of one of the first major RICO cases. This group took its name from a 1930 Howard Hughes film about World War I (*)** combat pilots. A swamped boat stymied this group's attempted assassination of Mick Jagger, which was planned after members of this group were criticized for killing Meredith Hunter while providing security for the Altamont Speedway Free Festival in 1969. This group, which uses the number "81" as a symbol, was the subject of the 1967 book that launched Hunter S. Thompson's career. For 10 points, name this prominent American motorcycle gang.
ANSWER: **Hells Angels**

13. **This author meets with a composer in *Caliban's Day*, a fictional play which is rehearsed by the main characters of Alan Bennett's *The Habit of Art*. He said of the stars that "for all they care, I can go to hell" in a poem in which he resolves that "if equal affection cannot be, let the more loving one be me." This author frequently collaborated with Chester Kallman. He worked on the libretti for operas like *The Bassarids, The* (*)** *Rake's Progress*, and *Paul Bunyan*. He wrote about a man who "knew folly like the back of his hand" in a poem ending "and when he cried the little children died in the streets." This author of "Epitaph on a Tyrant" wrote a poem whose speaker sits in "one of the dives on Fifty-second Street" and concludes "We must love one another or die." For 10 points, name this author of "September 1, 1939."
ANSWER: Wystan Hugh **Auden**

14. **This text was partially inspired by a practice instituted by Princess Jincheng. One realm described in this text is a state of pure light and bliss called chikha, while a second realm it describes is called chos-nyid and features apparitions of beautiful and frightening creatures. Although it was likely written in the fourteenth century, it is traditionally ascribed to Padmasambhava, who is also known as** (*) Guru Rinpoche. Carl Jung wrote an introduction for Walter Evans-Wentz's English translation of it, which avoided the literal title translation "liberation by hearing in the intermediate state." This text describes the confusion a consciousness suffers as it takes a forty-nine day journey from death to rebirth. For 10 points, name this Vajrayana Buddhist text which takes its common name from an Egyptian funerary manual.
ANSWER: *Tibetan Book of the Dead* [*or: Bardo Thodol*]

15. **In a Vincent D'Onofrio portrayal, this man says "visions are worth fighting for" in an encounter at a bar. This man chases Juliet and Pauline after Juliet calls him "the most hideous man alive" in *Heavenly Creatures*. In *The Simpsons*, he declares "now they're playing the xylophone while bowling near the airport!" This man notes "Oh what luck, there's a French fry stuck in my beard" after walking out of a frozen peas commercial on "The Critic." He was voiced twice by Maurice LaMarche, who claimed to base the voice of** (*) "the Brain" on this man as well. Angus Macfadyen portrays this man putting on the title musical in *Cradle Will Rock*, Christian McKay portrays him casting Zac Efron in a 1937 stage production of *Julius Caesar*, and Liev Schreiber plays this man opposite James Cromwell's William Randolph Hearst in *RKO 281*. For 10 points, name this director of *Citizen Kane*.
ANSWER: Orson **Welles**

16. **In the bottom left of this painting is a small gray winged demon holding a poker. Atypically for its artist, the two most important people in this work are larger than they should be given the size of the people around them. Infrared reflectography has revealed that the twelve privileges of the Virgin Mary were written on twelve ribbons in this painting. This painting includes three angels with (*)** rainbow-colored wings reading a book together on top of a roof, as well as a group of angels with olive branches and ribbons dancing in a circle below a golden opening in the sky. Unusual features of this painting include the fact that Joseph is sleeping, and the Greek inscription at the top predicting the Second Coming of Jesus. For 10 points, name this depiction of the birth of Jesus by Botticelli.
ANSWER: The *Mystical Nativity*

17. **Jean-Pierre Blangy demonstrated that this property has significant effects on AVO analysis, especially when impedance contrasts are low. This property creates "hockey sticks" of nonhyperbolic movement in the far offsets of normal moveout analysis. The relevance of this property was completely redefined by a paper about its "weak" form by Leon Thomsen, in which he introduced his namesake parameters: epsilon, delta, and gamma. The most commonly used geophysical model to account for this property is the VTI model. This property took a central role in the field of (*)** exploration geophysics after its azimuthal type was shown to induce S-wave splitting. Thomsen defines this property as "the dependence of seismic velocity upon angle". For 10 points, name this property that more generally refers to the properties of a material being directionally dependent.
ANSWER: seismic **anisotropy** [*or:* **transverse isotropy**, **TI**]
This question led me to [one of the best blogs on the Internet](#)*!*

18. **In a Vedic myth, Shiva fits Daksha with this animal's head after cutting off his human head for provoking Sati's suicide. The Flamen Dialis was forbidden to touch dogs or these animals because they were considered polluted in Roman religion. An indigenous Italian god with this animal's features was the father of King Latinus in the *Aeneid*. Priests ran around lashing women with whips made from (*)** this animal's skins during the Lupercalia, in which priests leaped around naked except for girdles made from them. In Norse mythology, Tanngrisnir and Tanngnjostr are two of these animals that Thor cleaves, cooks, and reassembles in the morning to pull his chariot. For 10 points, name this animal whose head pokes out of the back of the Chimera, and whose horns decorate the heads of fauns.
ANSWER: **goat**s

19. **This man wrote a story in which Eve refuses to send her insane husband Pierre to a clinic, and instead stays locked up in the title location with him. When the narrator of one of this author's stories is told of soldiers who run people over with trucks to save ammunition, he responds that it doesn't save gas. This author of "The Room" wrote of a man who decides to kill five people and then himself using the six bullets in his gun, inspired by (*)** Herostratus's burning of the Temple of Artemis. The protagonist of his most famous story lies to the authorities that his friend is hiding in a graveyard, but the lie turns out to be true. In that story, Ramón Gris is executed thanks to Pablo Ibbieta. For 10 points, name this author of "The Wall," whose other works include *The Flies* and *Nausea*.
ANSWER: Jean-Paul **Sartre**

20. **Usurious moneylenders called *chettiars* financed this country's economic expansion during the 19ᵗʰ century. The "Combustible Commodore" George Lambert stirred up a war with this country that upset its court of Ava. This country's national anthem, "Till The End of the World," was the fight song for its *Thakins*, one of whom organized the paramilitary Thirty Comrades. The 1885 British conquest of this country dissolved its executive council, the (*)** *hluttaw*. During World War II, the allies used this country's "road" to supply Chiang-Kai Shek's forces. For 10 points, name this Southeast Asian nation where, according to a Rudyard Kipling poem, British flotillas paddled "from Rangoon to Mandalay."
ANSWER: **Burma** [or **Myanmar**]

1. Rudolph Marcus developed this theory by eliminating "arbitrary assumptions" in a previous theory. For 10 points each:
[10] Name this theory that accounts for the rates of collisional activation and unimolecular association being energy dependent. It partitions the energy of molecules into fixed and non-fixed components, only the latter of which contribute to the reaction rate.
ANSWER: **RRKM** theory [*or:* **Rice-Ramsperger-Kassel**-Marcus theory; *prompt on:* **RRK** theory]
[10] In the limit of high pressure, RRKM theory reduces to the theory named for these states. During the course of a reaction, these states occur as local energy maxima and typically only exist for a teeny tiny amount of time.
ANSWER: **transition** states
[10] Speaking of teeny tiny amounts of time, what field of chemistry using ultra-short laser pulses was developed by Ahmed Zewail and his colleagues?
ANSWER: **femto**chemistry

2. This case arose from a law which prohibited non-Native Americans, including the white missionary who names the case, from residing on Native American lands without a license. For 10 points each:
[10] Name this 1832 case in which the Supreme Court held that states did not have criminal jurisdiction over the Native American tribes within their borders.
ANSWER: *__Worcester__ v. Georgia*
[10] When Georgia's governor at first refused to comply with the decision, this president, a hero of the Battle of New Orleans, declined to exert Federal force.
ANSWER: Andrew **Jackson**
[10] The issue of states ignoring Supreme Court decisions rose again in this unanimous 1958 decision, which arose out of Arkansas and held that states cannot choose to ignore the Court.
ANSWER: *__Cooper__ v. __Aaron__* [*accept either name*]

3. In this novel, Mr. Willoughby impregnates and then abandons the 15-year-old girl Eliza Williams. For 10 points each:
[10] Name this Jane Austen novel about the contrasting personalities of the sisters Elinor and Marianne Dashwood.
ANSWER: *__Sense and Sensibility__*
[10] Marianne wisely ends up marrying this man instead of Willoughby. In his youth, his father sent him off to the military to keep him away from the girl he was in love with.
ANSWER: Colonel **Brandon**
[10] The conniving Lucy Steele is for a long time secretly engaged to Edward Ferrars. Edward's mother disowns him when she finds out, so Lucy marries this character instead.
ANSWER: **Robert** Ferrars [*or:* **R**obert **Ferrars**; *prompt on:* "**Edward** Ferrars' **brother**"]

4. This musical's protagonist struggles to finish the sentence "I feel…" in the song "Ring of Keys," which describes an "old-school butch" delivery woman. For 10 points each:
[10] Name this musical whose protagonist comes out as lesbian after metaphorically "changing [her] major to Joan." It was a finalist for the 2014 Pulitzer Prize for Drama, one of only three musicals with that distinction.
ANSWER: *Fun Home*
[10] *Fun Home* is based on a graphic memoir by this cartoonist, whose namesake "test" for movies and other fictional works is passed if two female characters have a conversation about something besides a man.
ANSWER: Alison **Bechdel**
[10] In *Dykes to Watch Out For*, Bechdel used this movie as her original example of a fictional work that would pass the test. It is the first in a series that stars Sigourney Weaver as Ellen Ripley.
ANSWER: *Alien*

5. This violinist authored two tomes on left-hand violin technique: *Left-Hand Violin Technique* and *[this man] on Glissando*. For 10 points each:
[10] Name this Italian-American violinist who enrolled as an "entertainment specialist" during World War II and was the first violinist to record all of Paganini's 24 *Caprices*.
ANSWER: Ruggiero **Ricci**
[10] A Ricci recording of Brahms's *Violin Concerto* included 16 different cadenzas by famous violinists—including this violinist and friend of Brahms, to whom the concerto was dedicated.
ANSWER: Joseph **Joachim**
[10] The violin part in Brahms's *Double Concerto* was written for Joseph Joachim, in part as an act of reconciliation. The other solo part in the *Double Concerto* is for what stringed instrument that is played between the knees?
ANSWER: violin**cello**

6. In Brooklyn, conflict has developed from the tendency of Hassidic communities to loudly broadcast this sound every Friday night. For 10 points each:
[10] Name this sound which is broadcast throughout Israel every year at 10:00 AM on the 27th of Nisan, prompting Israelis to stop whatever they are doing and observe a two-minute moment of silence.
ANSWER: air raid **siren**
[10] In addition to the moment of silence, many Jewish communities light six candles on the 27th of Nisan to commemorate the six million Jews who died in this event.
ANSWER: **Holocaust** [*or:* ha-**Shoah**]
[10] This official memorial to the victims of the Holocaust in Jerusalem contains a Hall of Names, which displays thousands of pictures of victims.
ANSWER: **Yad Vashem**

7. A simple example of these functions is for the Poisson equation with Dirichlet boundary conditions, in which case it's the reciprocal of the absolute value of x minus x-prime. For 10 points each:
[10] Name these functions equal to the delta function when acted on by a linear differential operator and satisfying some boundary conditions. Using them and superposition makes it easier for one to solve inhomogeneous differential equations.
ANSWER: **Green**'s functions
[10] A BVP can be reduced to an integral equation named for this person with a Green's function as its kernel. A statement of his namesake "alternative" is: for a *m*-by-*n* matrix A and a *m*-by-1 column vector b, only one of the following holds: A x equals b has one, unique solution; transpose of A y equals zero has a nontrivial solution.
ANSWER: Ivar **Fredholm** [*or:* Erik Ivar **Fredholm**]
[10] Green's theorem relates this operation around the boundary of a plane region to the double integral of the plane region. This operation evaluates an integral along a curve.
ANSWER: **line** integral [*or:* **path** integral, **curvilinear** integral]

8. Name some Raphael paintings, for 10 points each.
[10] This painting sits across from *La Disputa* in the Stanza della Segnatura. It shows a bunch of Greek philosophers lounging around.
ANSWER: The **_School of Athens_** [*or:* **_Scuola di Atene_**]
[10] The Stanza della Segnatura also houses this painting, in which Apollo plays a violin and is surrounded by the Muses, nine ancient poets, and nine contemporary poets. It shares its name with a fresco by Anton Raphael Mengs.
ANSWER: The **_Parnassus_** [*or: Il* **_Parnaso_**]
[10] This Perugino-esque painting has the sun and moon flanking the letters I.N.R.I. St. Jerome kneels at the bottom of this painting, which also shows two angels collecting Jesus's blood in chalices.
ANSWER: **_Mond Crucifixion_** [*or:* **_Crocifissione Gavari_**, **_Gavari Crucifixion_**, **_Crucifixion with the Virgin, Saints and Angels_**]

9. In this novel's second book, "Pseudoreality Prevails," the protagonist becomes attracted to his cousin Ermelinda while preparing for celebrations in honor of Franz Joseph. For 10 points each:
[10] Name this modernist novel by Robert Musil about a mathematician named Ulrich.
ANSWER: The **_Man Without Qualities_** [*or: Der* **_Mann ohne Eigenschaften_**]
[10] In *The Man Without Qualities*, Ermelinda also goes by this name, which is also the name of the woman loved by the title character of Friedrich Hölderlin's *Hyperion*.
ANSWER: **Diotima**
[10] Robert Musil is from this country, which also produced Thomas Bernhard and many other German-language authors.
ANSWER: Republic of **Austria** [*or:* Republik **Österreich**]

10. This event was caused mainly by an assassination attempt that occurred at the Rua Tonelero against Carlos Lacerda. For 10 points each:
[10] Identify this 1954 event. Before it occurred, a Letter of Testament that stated "I take my first step on the road to eternity and I leave life to enter history" was read to an angry crowd.
ANSWER: the **suicide** of Getúlio **Vargas** [*or:* the **death** of Getúlio **Vargas**, obvious equivalents]
[10] The period of Getúlio Vargas's rule in Brazil was known by this two-word phrase. It also names a period in which dissidents were often sent to Tarrafal in Cape Verde, a site controlled by the PVDE and PIDE.
ANSWER: **Estado Novo** [*or:* **New State**]
[10] The Vargas era succeeded the Old Republic, which was given a nickname that paired this good with milk. Brazil is still the world's largest producer of this good, which the Dutch smuggled from Yemen and grew on Java.
ANSWER: **coffee** beans [*or:* ***Coffea***, **coffee** with milk, **café** com leite]

11. These cults were generally local and often based around tombs, as exemplified by the cult of Battus of Cyrene. For 10 points each:
[10] Name these chthonic cults that arose around the 8th century C and centered on rediscovered tombs from the Bronze Age. Plato's Academy was named for being situated on land sacred to one of these cults.
ANSWER: **hero** cults
[10] This man had a hero cult at Athens because in mythology, he bestowed a boon on Athens when he died there under the hospitality of Theseus. He was raised by Polybus and Merope.
ANSWER: **Oedipus**
[10] In Classical Greece, Sparta attributed its conquest of Arcadia to the bones of this hero, found in Tegea. He is better known for killing Aegisthus and his mother Clytemnestra.
ANSWER: **Orestes**

12. An example of these things proposed to explain the fractional quantum Hall effect is the Laughlin wavefunction for the ground state of a 2DEG. For 10 points each:
[10] Identify this term from physics that basically means an "educated guess whose validity is based on the accuracy of its predictions."
ANSWER: *ansatz*
[10] This physicist developed an *ansatz* for the spin-1/2 1D Heisenberg model, which is exact for a spin-1/2 chain. This physicist famously computed the nonrelativistic value of the Lamb shift on the train ride home from the Shelter Island Conference and was added by Gamow, *in absentia*, to a paper written by Alpher and Gamow.
ANSWER: Hans **Bethe** [*or:* Hans Albrecht **Bethe**]
[10] Another *ansatz* is the BCS *ansatz* for the ground state of this phenomenon. Materials exhibiting this phenomenon, such as YBCO, lose all electrical resistance.
ANSWER: **superconductivity** [*or:* word forms]

13. Answer the following about some things that, as of 2015, are still undeciphered, for 10 points each.
[10] One of this unidentified person's four cryptograms, published in 1969, describes man as "the most dangerous animal." However, the three other cryptograms he sent to San Francisco police have never been solved.
ANSWER: the **Zodiac** Killer
[10] Some theories claim that the Beale ciphers, which allegedly disclose the location of a hidden buried treasure in Virginia, were written by Edgar Allan Poe, due to the similarity of its circumstances to this short story about William Legrand.
ANSWER: "The **Gold-Bug**"
[10] The illustrations of this book, which may originate from the Italian Renaissance, suggest that its undeciphered text may describe medical methods. This book's Polish namesake has been accused of fabricating its entire script.
ANSWER: the **Voynich** manuscript

14. Philostratus coined the term for this movement, whose practitioners flourished during the heavily-censored age of Nero by speaking on humorous subjects, like "Which side of a woman is more pleasing?" For 10 points each:
[10] Name this movement of Greek orators in the Roman Empire, including Herodes Atticus and Philostratus. Orators considered part of this movement achieved wild popularity by performing rhetorically ingenious speeches in concert halls across the empire.
ANSWER: **Second Sophistic**
[10] The Second Sophistic represented one of these two general styles of oratory during the Roman Republic and Empire. One style was known for its reliance on flowery declamation, while the other was based on fact and logical argument.
ANSWER: **Attic** and **Asiatic** Styles
[10] This Republic-era speaker claimed to belong to the "Rhodian style," a combination of the Attic and Asiatic forms that he used to indict Verres and Catiline.
ANSWER: Marcus Tullius **Cicero**

15. This poet complained about a miscanthus plant growing near his beloved banana plant. For 10 points each:
[10] Name this haiku master who wrote *The Narrow Road to the Deep North*.
ANSWER: Matsuo **Basho** [*or*: Matsuo Chuemon **Munefusa**]
[10] On the trip described in *The Narrow Road to the Deep North*, Basho was accompanied by this friend of his. This man's diary was rediscovered in 1943, and sometimes contradicts Basho's account of the trip.
ANSWER: Kawai **Sora**
[10] Traditional haikus contain a *kigo*, which is a word associated with one of these things.
ANSWER: a **season**

16. According to Operabase.com, no opera by an American composer was among the 100 most performed over the last five years. Answer some questions about operas that got close, for 10 points each.
[10] This Leonard Bernstein operetta was the most performed American opera. Lillian Hellman wrote the words to its song "Eldorado," while Richard Wilbur of all people wrote the lyrics to its often excerpted "Glitter and Be Gay."
ANSWER: *Candide*
[10] This American is the most-performed living composer. He wrote *Einstein on the Beach*.
ANSWER: Philip **Glass**
[10] This composer of *Moby Dick* is performed more frequently than John Adams. He teamed with Terrence McNally on *Dead Man Walking*, his popular opera about a nun counseling death row inmates.
ANSWER: Jake **Heggie**

17. Name some novels that concern university English professors, for 10 points each:
[10] The title character of this 1965 John Williams novel leaves his parents' farm to become an English professor at the University of Missouri. It became a surprise bestseller across parts of Europe in the 2010s.
ANSWER: *__Stoner__*
[10] The title philosophy professor of this Saul Bellow novel has an ex-wife named Vela and a male lover named Nikki.
ANSWER: *__Ravelstein__*
[10] Charles Botkin teaches at Wordsmith College in this author's *Pale Fire*.
ANSWER: Vladimir **Nabokov**

18. People like Constantine VII and Anna Komnene, the author of the *Alexiad*, were given this title. For 10 points each:
[10] Give this title that was bestowed upon royals born in a special room of the Palace of Constantinople. It literally means "born in the purple."
ANSWER: **porphyrogenitus** [*or:* **porphyrogenita**]
[10] Another porphyrogenita, Anna, was betrothed to the ruler of Kievan Rus, Vladimir the Great. In exchange, Vladimir had to perform this action, which he celebrated by holding a mass baptism in the Dnieper River.
ANSWER: **convert**ing to **Christianity** [*or:* obvious equivalents]
[10] Before seeking Christianity, Vladimir examined Islamic members of this ethnic group living along the Volga, remarking that they only had "sorrow and a great stench." 99 out of 100 members of an army of this ethnic group were blinded at the Battle of Kleidion.
ANSWER: **Bulgarian**s [*or:* **Bulgar**s]

19. A book by Fichte was initially mistaken for one of these works. For 10 points each:
[10] Name this set of three books by a transcendental idealist philosopher, which includes ones about "pure reason," "practical reason," and "judgment."
ANSWER: Immanuel **Kant's critique**s
[10] In the *Critique of Pure Reason*, Kant refuted Anselm's ontological argument by objecting to this premise of the argument.
ANSWER: the premise that **existence is a predicate** [*or:* **existence is a property**, obvious equivalents]
[10] According to an essay by Kant, "Sapere aude," or "Dare to know," is the motto of this philosophical movement.
ANSWER: the **Enlightenment** [*or: die* ***Aufklärung***]

20. Four basic postulates describe this process, which was first proposed by Burnet. For 10 points each:
[10] Name this mechanism in which only immune cells that are specific to one antigen proliferate.
ANSWER: **clonal selection** [*prompt on:* **clonal expansion**]
[10] Clonal selection acts on these immune cells, which include B cells and T cells and also natural killer cells.
ANSWER: **lymphocyte**s
[10] This term roughly describes an uncontrolled release of molecules from immune cells like interleukins and chemokines. This term was applied to the effects of the H5N1 influenza virus.
ANSWER: **cytokine storm** [*or:* **cytokine cascade**, **hypercytokinemia**]

A helpful graphic from the article "Into the Eye of the Cytokine Storm", by Tisoncik et al.: