

Early Fall Tournament 2018: I guess Brexit really does mean Brexit

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Tossups

1. **The genus *Macropis* conducts a “specialist” form of this process known as oligolecty. This phenomenon forms the links between nodes in a highly modular, nested variety of bipartite ecological network. The namesake “syndromes” of this phenomenon refer to the various physical traits that enable this process to occur through anemophily, hydrophily, or zoophily. The best-known examples of pairwise (*) coevolution occur between the species that conduct, and those that benefit from, this process. The largest ecological consequence of colony collapse disorder is the “decline” of the best-known animals known to perform this process, which typically involves traveling from a stamen in one organism to the pistil of another. For 10 points, name this transfer of grains from the male to the female parts of plants.**

ANSWER: **pollination** [or descriptive answers indicating the **transfer of pollen**; do not accept or prompt on “fertilization” or “plant fertilization”]

<AG, Biology>

2. **Frederick Lugard laid out the British principles of indirect rule in this modern-day country, where he served as High Commissioner for its northern part. In this modern-day country, King Jaja worked his way out of slavery to rule the state of Opobo, which sold palm oil directly to Britain. Herbert Macaulay founded this country’s first political party and is known as the father of nationalism in it. Usman dan Fodio led a jihad that established the (*) Sokoto Caliphate in the northern part of this country. In the 1930s, this country’s Youth Movement fought for its independence under leaders such as Nnamdi Azikiwe, who would become its first post-independence president. Tensions between the Igbo, Yoruba, and Hausa peoples led to Biafra breaking away from this country. For 10 points, name this African country where the British ruled from Lagos.**

ANSWER: **Nigeria**

<TR, World History>

3. **Smaller wooden versions of these objects were given the name *kavakava*, meaning “ribs.” The British Museum exhibits one of these objects stolen from Orongo by the crew of the HMS *Topaze*. All of these objects were displaced within the 150 years after Jacob Roggeveen (“YAH-kop RO-guh-vain”) became the first Westerner to discover them. These objects were constructed from material mined from the crater of Rano Raraku. Worship of these objects, which were sometimes topped by a red (*) hat-like *pukao*, gave way to a so-called “birdman cult.” These objects were displayed on platforms called *ahu* and were made from tuff, a rock made of compressed volcanic ash. For 10 points, name these humanoid monoliths venerated by the Rapa Nui people of Easter Island.**

ANSWER: **moai** [accept **Easter Island statues** or **Eastern Island heads** until “Easter Island” is read]

<KS, Geography>

4. The trio of this symphony's minuet begins with a final cadence in which the winds hold a G7 chord for one measure and then play a C major chord. The main theme of this symphony's fourth movement may have come from Fux's ("fooks's") *Gradus ad Parnassum*. This symphony, which has no clarinet parts, opens with a short unison C for the full orchestra, followed by two repetitions of a quick, drumroll-like gesture from G back up to C. This symphony's last movement opens with the (*) whole notes [read slowly] "C–D–F–E." This symphony was the last of three that its composer wrote in the summer of 1788. This symphony, which closes with a five-theme fugato, came after its composer's "Great G minor" symphony. For 10 points, name this last symphony by Wolfgang Amadeus Mozart, nicknamed for a Roman god.

ANSWER: "**Jupiter**" Symphony [or Symphony No. **41** in C major; or K. **551**]

<AWD, Music>

5. In the introduction to this poem, the author writes that it is set in a land with "ten miles of fertile ground" that were "inclosed within a wall." In a psychoanalytic reading of this poem, Robert Graves suggests that the author wrote this poem as a "serene refuge" to separate himself from a "woman wailing for her demon-lover." This poem's speaker asks "Could I revive within me / Her symphony and song?" after having a vision of an (*) "Abyssinian maid" and the dulcimer that "she played." This poem, which describes a "sunless sea" and measureless "caverns," is incomplete due to the "Person from Porlock." It begins with the title character in a "stately pleasure-dome" in Xanadu. For 10 points, name this poem titled for an Emperor of China by Samuel Taylor Coleridge.

ANSWER: **Kubla Khan**

<IJ, Poetry>

6. Koloman Moser co-founded a workshop in this city with an architect who designed a building for a Belgian industrialist; that building's interior features paintings by an artist based in this city. The artistic magazine *Ver Sacrum* was published in this city. An art movement based in this city included an artist who painted many portraits of his muse, Wally Neuzil ("VAH-lee NOY-zeel"). Philosophy, medicine, and (*) jurisprudence were depicted in a set of three ceiling paintings for a university in this city, which were almost certainly destroyed in 1945. An artist who painted friezes for the Palais Stoclet in Brussels also painted the *Beethoven Frieze* for a building in this city, which is currently home to that artist's gold leaf-adorned *Portrait of Adele Bloch-Bauer I*. For 10 points, Egon Schiele ("AY-gon SHEE-luh") and Gustav Klimt were part of what city's "secession"?

ANSWER: **Vienna** [or **Wien**; accept **Vienna** Secession or **Wiener** Secession]

<WN, Painting>

7. Sears magnate Julius Rosenwald created a fund that supported the growth of several of these institutions, some of which were classified as "Part B" by a 1965 act. One of these institutions was founded by a man known as the "Christian General" who had earlier lost his arm at Seven Pines and led Union forces at Cemetery Hill during the Battle of Gettysburg. A (*) botanist working at one of these places wrote a popular bulletin illustrating 105 ways to prepare peanuts. Several institutions of this type were funded by a Second Morrill Act, including one in Tuskegee, Alabama. For 10 points, name these institutions, examples of which include Howard University, some of which were founded to educate freedmen in the postbellum South.

ANSWER: Historically **Black Colleges** and Universities [or **HBCUs**; prompt on colleges or universities]

<DM, American History>

8. In the third book of the *Argonautica*, this figure gets cheated by Eros in a game of knucklebones. Homer wrote that this figure's father, the namesake of the kingdom of Troy, was given a gift of horses that could run across water from the gods. An ancient red-figure vase currently held in the Louvre contains a notable depiction of this figure rolling a hoop and carrying a symbolic (*) cockerel. The term for the younger figure in a pederastic relationship was taken from this figure's Latin name. This figure's beauty enticed Zeus into capturing him in the form of an eagle, after which he replaced Hebe on Olympus. For 10 points, name this prince who served as cupbearer to the gods, the namesake of the largest Jovian moon.

ANSWER: Ganymedes [or Catamitus]

<DM, Mythology>

9. This element is a necessary cofactor for carboxylation and decarboxylation of biotin carboxyl carrier protein. Two different types of electrons are observed at the Fermi level in this element's diboride, which acts as a low-temperature superconductor. This metallic element is used to reductively couple two molecules of acetone to form pinacol. This element's citrate is used as a powerful (*) laxative prior to colonoscopies. A class of compounds that contain this element and a halogen atom can react with ketones to give tertiary alcohols, and those compounds have similar reactivity to alkyl-lithium compounds. This element is bound in chlorophyll's porphyrin ring. Grignard ("green-YARR") reagents contain, for 10 points, what second-lightest alkaline earth metal?

ANSWER: magnesium [or Mg]

<EM, Chemistry>

10. The speaker of a prose piece by this author gets in trouble for emptying the water tank on a train and filling it with salt water in order to take the title object home. This author examined his country's national identity in an essay about one of its subcultures "and other extremes"; that essay is the first chapter of a book whose other chapters include "The Conquest and (*) Colonialism." This author of "My Life with the Wave" wrote a poem that both begins and ends with a passage about a "willow of crystal, a poplar of water," whose cyclical, 584-line structure was inspired by the Aztec calendar. For 10 points, name this Nobel-winning Mexican author of "Sunstone" and *The Labyrinth of Solitude*.

ANSWER: Octavio Paz (Lozano)

<WN, Misc Literature>

11. An interlude after this operatic character's death includes a segment in which a recurring set of two thundering C minor chords in the brass and timpani bookend a run of 32nd notes in the strings. A ten-note offstage "horn call" associated with this character is considered one of the most difficult horn solos in the operatic repertoire. This character is revealed to be "he who knows no fear," though he eventually learns fear when he first meets his lover. This character continually visits a smith named (*) Mime ("MEE-muh") who is unable to repair his weapon. This character is able to understand a woodbird's song after drinking the blood of a foe whom he slayed using the sword Nothung. An opera named after this hero culminates with him braving a ring of fire to rescue a valkyrie. For 10 points, name this lover of Brünnhilde who titles the third opera of Wagner's Ring Cycle.

ANSWER: Siegfried [do not accept or prompt on "Sigurd"]

<BN, Other Arts - Opera>

12. Pitassi et al. established that lower-bound runtimes of the Frege (“FRAY-guh”) proofs of this result have runtime depths of big-omega of $\log \log n$. This result is used on the states of a deterministic finite automaton to show that a string should be repeatedly injectable into any set of strings in a regular language, a result known as the pumping lemma. A formal statement of this result is “no injective function has a codomain smaller than its domain.” In the (*) hand-shaking problem, this result is used to show that there is more than one person who shakes the same number of hands. This principle was first identified by Dirichlet, and it is often named for him. For 10 points, name this rather intuitive mathematical result stating that if there are n boxes, and more than n of the namesake animal, then at least one box must contain two or more animals.

ANSWER: pigeonhole principle [accept Dirichlet principle]

<IJ, Other Science - Mathematics>

13. In one novel by this author, a soldier shoots a little girl who tells him “yum-yum” because he is tempted by her offer. In the opening chapter of that novel by this author, a brother and sister watch a fight between two horses that rose up on their hind legs “like men.” One of this author’s protagonists rescues his sister Ycidra and brings her back to their hometown of Lotus, Georgia. This creator of (*) Frank Money wrote a novel in which Robert Smith crafts blue silk wings to fly off the roof of Mercy Hospital before the birth of the protagonist, who travels to Shalimar to learn more about the history of his family. This author of *Home* created a protagonist nicknamed “Milkman” for an earlier novel. For 10 points, name this Nobel Prize-winning American author of *Song of Solomon* and *Beloved*.

ANSWER: Toni Morrison [or Chloe Ardelia Wofford]

<RR, Long Fiction>

14. A historian of this empire headed the philosophy department of its leading university after it was refounded and that historian wrote a set of biographical works called the *Chronographia*. A historian from this empire described a plague that killed 10,000 people per day in its capital and made the unlikely claim that his patron was a demon who murdered 1 trillion Libyans. Another historian of this empire described the death of an emperor in the Battle of Pliska and was later sainted due to his opposition to (*) iconoclasm; that man was Theophanes the Confessor. A woman from this empire wrote a history of her father’s reign called the *Alexiad*. For 10 points, name this empire whose historians included Anna Comnena and Procopius, who wrote a *Secret History* of the reign of Justinian.

ANSWER: Byzantine Empire [or Greek Empire; or Eastern Roman Empire; do not accept or prompt on “Roman Empire”] (The first historian mentioned is Michael Psellos.)

<TR, Other History>

15. It’s not divination, but a form of this practice performed with cremated ancestor bones by the Yanomamo was documented by the founder of cultural materialism. A book by Marvin Harris pairs people who engage in one form of this practice with “Kings.” A book titled after a certain type of person who performs this activity discusses how the relative efficiency of C-4 plants has led to corn’s widespread use in this practice. In traditional Chinese medicine, (*) placentas are often prepared for this practice. Claude Lévi-Strauss’s *Mythologiques* contains essays on preparing things for this practice. The Fore people of New Guinea developed kuru as a result of this practice, which transmitted prions from dead tribe members. For 10 points, name this practice, which when performed on humans is called cannibalism.

ANSWER: eating [or cannibalism before mention; or eating people] (The book is *The Omnivore’s Dilemma*.)

<RR, Social Science - Anthropology>

16. **One mathematical treatment of this phenomenon expresses the solution as e to the ikr over $4\pi r$, all times a double integral of the electric field. That formula describing this phenomenon is equivalent to taking the Fourier transform of a rectangular function, whose solution is proportional to a sinc (“sink”) function. The geometric shadow is the solution for the hypothetical case where this phenomenon does not exist. The formula (*) $1.22 \text{ times } \lambda \text{ divided by } D$ gives the angular resolution of this phenomenon according to the Rayleigh criterion. This phenomenon produces maxima when “two $d \sin \theta$ ” is an integer multiple of wavelength by the Bragg criterion. X-ray crystallography relies on light’s ability to undergo, for 10 points, what phenomenon in which a light wave bends when encountering a slit or other obstacle?**

ANSWER: **diffraction** [prompt on interference]

<BB, Physics>

17. **A stalkerish contemporary fan of this novelist, Alexander Main, collected aphorisms from this author’s works in a book called *Wise, Witty, and Tender Sayings*. Main’s admiration of this writer is recounted in a Rebecca Mead book inspired by one of this author’s novels, titled *My Life in [that novel]*. Virginia Woolf called a book by this author “one of the few English novels written for (*) grown-up people.” In that novel, the idea that doctors shouldn’t dispense medicines themselves earns Tertius Lydgate disapproval in the title town in the Midlands. In that novel by this author, the desire to help with research for the project *The Key to All Mythologies* inspires Dorothea Brooke to marry the elderly Edward Casaubon. For 10 points, name this author of *Middlemarch*.**

ANSWER: George **Eliot** [or Mary Ann **Evans**]

<WN, Long Fiction>

18. **This policy was the focus of the “Paasikivi line” and later expanded by Urho Kekkonen. Extensive media coverage of the “Whiskey on the Rocks” incident threatened this policy in another country. Iron exports from Narvik violated this policy, which had officially been in place since 1812. The concept of “Finlandization” challenges the idea that Finland *de facto* maintained this policy during the (*) Cold War. This policy officially ended in Sweden in 1995, when they joined the European Union. A 1948 treaty between Finland and the USSR mandated this policy for Finland, since it prohibited Finland from serving as a staging ground for Western troops. For 10 points, name this policy maintained by Sweden during World War I and II, defined as not taking sides in a conflict.**

ANSWER: **neutrality** [or Scandinavian neutrality; accept Finnish **neutrality** before “Whiskey”; accept **Finlandization** before “Narvik”]

<RR, European History>

19. **A 1993 book named for this adjective includes a story that begins by telling its end: “the Sun is going to explode.” Those “fables” of this type were created by a philosopher who argued that this movement caused the sublime to be reborn, and that this movement can be defined as incredulity towards concepts that explain all of history, which that philosopher termed “metanarratives.” Fredric Jameson wrote that this movement is characterized by pastiche, (*) parody, and ironic works of art. Jean-François Lyotard characterized it as disillusionment of the view that science, or knowledge, is progress in a book about the “condition” of this movement. For 10 points, name this intellectual movement, a response to its predecessor, modernity.**

ANSWER: **postmodernism**

<IJ, Philosophy>

20. A Christian denomination predominantly active in this country was founded by a man who was inspired by a vision of God to change his name to Aaron and is notable for its gender-segregated church services. This country is home to the “Light of the World” church and a popular folk saint known as the “Lady of Death.” Religious tourists to this country can visit several of its monasteries while traveling on the Route of the (*) Volcano. Besides the United States, this is the country with the most Mormon temples in the world. After an event that took place in this country, a holy image was implanted on the cloak of Saint Juan Diego. For 10 points, name this Central American country, home to a Basilica that commemorates the appearance of the Virgin of Guadalupe.
ANSWER: **Mexico** [accept the **United Mexican States**]
<DM, Religion>

Bonuses

1. Upon realizing that he has been tricked by a group including the clown Feste, this character promises “I’ll be revenged on the whole pack of you.” For 10 points each:

[10] Name this unpleasant steward who is tricked into wearing cross garters and smiling constantly after Maria writes a letter indicating that Olivia is in love with him.

ANSWER: **Malvolio**

[10] Malvolio appears in this Shakespeare play, whose main plot involves the romances of the cross-dressing Viola (“VYE-uh-luh”) and her twin Sebastian.

ANSWER: ***Twelfth Night, Or What You Will***

[10] Sir Toby Belch asks Malvolio, “Dost thou think, because thou art virtuous, there shall be no more” of these two things. These goods also title a Somerset Maugham novel narrated by William Ashenden.

ANSWER: **cake**s AND **ale** [accept in either order; accept ***Cakes and Ale***, or *The Skeleton in the Cupboard*]
<TR, Drama>

2. An extremely sensitive one of these devices that uses multiple Josephson junctions is known as a SQUID. For 10 points each:

[10] Name these general devices, some of which employ the nuclear Overhauser effect. They are often used to detect materials like pyrrhotite (“PEER-uh-tite”).

ANSWER: **magnetometers**

[10] Inside Earth, a weak magnetic field is generated. This theory proposes that the geomagnetic field is generated by a liquid metal outer core that constantly convects and rotates due to Coriolis forces.

ANSWER: ge**odynamo** theory

[10] The geomagnetic field’s strength was first measured by this polymath in 1832. In the cgs unit named after him, its value is usually between around 0.25 and 0.65.

ANSWER: Carl Friedrich **Gauss**

<DM, Other Science - Earth Science>

3. The second edition of a work about this figure includes extra chapters refuting the works of “challengers” and “deniers” such as Arthur Drews. For 10 points each:

[10] Name this man, the subject of a book that criticized over 100 years of German-language scholarship for basing analysis of this man’s personality on contemporary beliefs.

ANSWER: **Jesus** [or Jesus **Christ**; or the historical **Jesus**]

[10] *The Quest of the Historical Jesus* was written by this Nobel Peace Prize laureate who founded a hospital in present-day Gabon under his guiding philosophy of “Reverence for Life.”

ANSWER: Albert **Schweitzer**

[10] Schweitzer’s other major theological work discusses the “mysticism” of this Apostle. He is credited as the author of fourteen different epistles in the New Testament, including those addressed to the Corinthians.

ANSWER: Saint **Paul** the Apostle [or **Saul** of Tarsus]

<DM, Religion>

4. Answer the following about the phrase “history of the present,” for 10 points each.

[10] This thinker coined the term “history of the present” to describe an examination of present-day conditions using a historical lens. He is better known for writing a *History of Sexuality* and *Discipline and Punish*.

ANSWER: Michel **Foucault**

[10] Books covering these events often take the form of “histories of the present,” such as Timothy Crouse’s 1972 book *Boys on the Bus*, or Theodore H. White’s six accounts of these events.

ANSWER: presidential **campaigns** [prompt on elections or presidential elections]

[10] Timothy Garton Ash, who titled his essay collection about the 1990s in Europe *History of the Present*, also wrote *The Magic Lantern*, which tracked the overthrow of four Communist governments in this year.

ANSWER: **1989**

<RR, Other Academic>

5. Like his father, this politician served as Keeper of the Great Seal of England and he was aided by his patron the Earl of Essex. For 10 points each:

[10] Name this man who served as Lord Chancellor of England until his enemy Edward Coke brought him down in 1621 through corruption charges.

ANSWER: Francis **Bacon**, 1st Viscount **St Alban** [accept either underlined answer]

[10] Bacon’s first political work was addressed to this English queen who reigned for most of the second half of the 16th century.

ANSWER: **Elizabeth I** [prompt on Elizabeth]

[10] Bacon’s uncle was this chief advisor to Elizabeth, who is frequently regarded as a model for Polonius in *Hamlet* and whose distant descendant the Marquess of Salisbury served as prime minister three times in the late 19th and early 20th century.

ANSWER: William **Cecil**, 1st Baron **Burghley** [accept either underlined answer; accept Lord **Burghley**]

<TR, Other History>

6. This poet wrote in “Afterimages” that they “inherited Jackson, Mississippi. / For my majority it gave me Emmett Till / his 15 years puffed out like bruises.” For 10 points each:

[10] Name this poet who coined the term “biomythography” to describe her autobiographical work *Zami: A New Spelling of My Name*.

ANSWER: Audre **Lorde**

[10] This poet wrote of Emmett Till that his “eyes were a sea conch in which the head battle of your fifteen year old blood sparkled.” The author from Martinique was an exponent of *négritude* and wrote *Notebook of a Return to My Native Land*.

ANSWER: Aimé **Césaire**

[10] This author’s lines “Till was hung yesterday / for murder and rape with trimmings” refer not to Emmett Till, but to Till’s father Louis. This Imagist poet shared a prison cell in Italy with Louis Till, which inspired the previous segment of his *Cantos*.

ANSWER: Ezra **Pound**

<JG, Poetry>

7. The appendix to a book titled after this concept recommends that a good scholar not split work from life and that they should keep a file of notes combining personal and professional experiences. For 10 points each:

[10] Name this concept that was developed in response to structural functionalism and originally defined as a “vivid awareness of the relationship between experience and the wider society.”

ANSWER: the **sociological imagination**

[10] This sociologist originated the idea of the sociological imagination and coined the term “New Left.” He studied the connections between military, political, and commercial interests in *The Power Elite*.

ANSWER: C. Wright **Mills** [or Charles Wright **Mills**]

[10] Mills based his book *Listen, Yankee!* on interviews he conducted in this country in 1960, shortly after a coup here. The highlight of his interviews in this country was a three-day-long visit with Fidel Castro.

ANSWER: **Cuba**

<RR, Social Science - Sociology>

8. Examples of these structures made out of silver have enhanced anti-microbial activity compared to the bulk metal. For 10 points each:

[10] Name these very small particles with radii on the order of 10-to-the-negative-9th meters.

ANSWER: **nanoparticles**

[10] Nanoparticles of this metal are often used in fluorescence spectroscopy owing to their optical characteristics. Alpha particles bounced off a “foil” made of this element in the Geiger–Marsden experiment.

ANSWER: **gold**

[10] Turkevich’s method for making gold nanoparticles reduces gold chlorides using this triprotic acid. Copper sulfate, sodium carbonate, and this acid’s sodium salt make up Benedict’s reagent.

ANSWER: **citric acid** [or **citrate**]

<EM, Chemistry>

9. This man’s forces sacked the city of Guanajuato, but he was later captured and gave a speech titled “To All the World” before his execution. For 10 points each:

[10] Name this priest whose Grito de Dolores is considered the beginning of the struggle for Mexican independence.

ANSWER: Miguel **Hidalgo** y Costilla

[10] Hidalgo and his successor José María Morelos fought for Mexican independence from this country.

ANSWER: **Spain** [or **España**]

[10] This Afro-Mestizo second president of Mexico abolished slavery and attempted to make liberal reforms during his short time in power. He was overthrown in a right-wing coup and executed in 1831.

ANSWER: Vicente (Ramón) **Guerrero** Saldaña

<TR, World History>

10. Xenophon's argument that this concept is present in nature has been used to suggest that he promoted a form of intelligent design. For 10 points each:

[10] Give this Greek word that was introduced by the philosopher Anaxagoras. It is often translated as "mind," and is distinguished from the matter that comprises nature.

ANSWER: **nous** ("noose")

[10] *Nous* appears in the theories of Parmenides, the founder of this Greek school of thought that rejected sense experience. Another of its members, Zeno, denied the possibility of motion.

ANSWER: **Eleatic** school [accept school of **Elea**]

[10] To demonstrate the possibility of motion, Zeno proposed a set of these situations, such as one involving an arrow in motion.

ANSWER: **paradoxes** [or Zeno's **paradoxes**]

<IJ, Philosophy>

11. August von Haxthausen's writings about rural Russian society described the existence of these institutions, which were previously largely unknown to the aristocracy. For 10 points each:

[10] Give the Russian term for collectively-owned peasant communes that redistributed farmland to their residents.

ANSWER: **obshchina** [or **mir**]

[10] Haxthausen's writings influenced the 1861 abolition of serfdom by this tsar, who was later assassinated by the People's Will.

ANSWER: **Alexander II** [prompt on **Alexander**]

[10] The 1882 preface of this work's Russian version discussed whether the obshchina could pass directly into common ownership. This work inspired a political movement followed by leaders such as Mao and Stalin.

ANSWER: *The **Communist Manifesto*** [or ***Manifesto of the Communist Party***; accept **communism**]

<TR, European History>

12. These mythical creatures were usually depicted on Greek vases with human legs and feet, but in Roman versions they had goat horns and legs. For 10 points each:

[10] Identify these male woodland spirits similar to Roman fauns. Protogenes was renowned for painting them "resting."

ANSWER: **satyrs**

[10] Protogenes' contemporary and more famous rival was this Ionian, the court painter of Philip II of Macedon. None of his works survived, but one of them depicted Calumny as described by the satirist Lucian.

ANSWER: **Apelles**

[10] A mural depicting Venus Anadyomene that is believed to be based on Apelles' work was found in this city. The well-preserved House of the Faun was discovered in this city.

ANSWER: **Pompeii**

<AWD, Painting>

13. The possible trajectories of a dynamical system can be plotted in phase space. For 10 points each:

[10] The axes (“AX-eez”) of a phase portrait are typically position and this quantity, the Fourier transform of position. In special relativity, this quantity is grouped with energy into a four-vector.

ANSWER: linear **momentum**

[10] In general, plotting the motion of a simple harmonic oscillator in phase space gives this shape. Kepler’s first law states that planetary orbits take this shape, with the Sun at one of the focal points.

ANSWER: **ellipse**

[10] This statement says that for an ensemble of identical states in the same phase space, such as a system of gas particles, the density of states is constant along every trajectory in the phase space.

ANSWER: **Liouville**’s (“lyoo-VEEL’s”) theorem

<BB, Physics>

14. A fictitious translator from this country supposedly wrote a romance translated by William Marshal, and begins with Conrad, the son of Manfred, being crushed by a gigantic helmet. For 10 points each:

[10] Name this modern-day country that is the setting of several novels by Ann Radcliffe, including one in which Emily St. Aubert is kidnapped and sent to a castle in this country.

ANSWER: **Italy**

[10] William Marshal translated this novel by Horace Walpole, which ends with Theodore being made lord of the title fortification.

ANSWER: *The **Castle of Otranto***

[10] *The Castle of Otranto* is considered to be the first novel of this genre, characterized by castles and supernatural characters. Seven “horrid” novels in this genre play into the plot of Jane Austen’s *Northanger Abbey*.

ANSWER: **Gothic** literature [or **Gothic** novel]

<IJ, Other Fiction>

15. A theory named after this concept’s “syntax” incorporates the notion of the isovist (“EYE-so-vist”). For 10 points each:

[10] Name this first title concept of a seminal work of architectural theory by Sigfried Giedion (“ZEEG-freed GHEE-dee-on”). A Gaston Bachelard (“bosh-LARR”) book that takes a phenomenological approach to architecture is named for the “poetics” of this concept.

ANSWER: **space** (The Sigfried Giedion book is *Space, Time & Architecture*.)

[10] The concept of space was central to the educational methodology of Vkhutemas (“f’koot-yih-MOSS”), an art school founded in this country. Tatlin’s Tower was designed, but never built, in this country.

ANSWER: **Soviet Union** [or **USSR** or **Union of Soviet Socialist Republics**; prompt on **Russia**]

[10] This adjective describes the space around and between objects in art, such as the arrow formed by the space between the “E” and “x” in the FedEx logo.

ANSWER: **negative** space

<WN, Other Arts - Architecture>

16. A famous image of this man is surrounded by text on all four borders, including such phrases as “Born to command” and “Had I been consulted.” For 10 points each:

[10] Name this man who, in a cartoon by an unknown artist, is shown holding a scepter and stepping on a piece of paper marked “Internal Improvements.”

ANSWER: Andrew **Jackson** [accept *King Andrew the First*]

[10] The *King Andrew* cartoon criticizes Jackson’s abuse of the presidential veto, which he used to block the construction of the Maysville Road in this state, the home of the creator of the “American System.”

ANSWER: Commonwealth of **Kentucky**

[10] Cartoonists often punned on Jackson’s last name by depicting him as one of these animals. Jackson’s Democrats co-opted the image, and this animal is still used to represent the Democratic Party to this day.

ANSWER: **donkey** [or jackass]

<DM, American History>

17. After sleeping with his companion in this place’s gardens, the protagonist and his companion are thrown into a dungeon for several days in this building. For 10 points each:

[10] Name this fortification from which the protagonist escapes by using a key called Promise on all of its locked doors. It is inhabited by a pair of married giants named Despair and Diffidence.

ANSWER: **Doubting Castle**

[10] The protagonist and Hopeful get trapped in Doubting Castle in this allegory by 17th-century author John Bunyan, which is often considered to be the first English novel.

ANSWER: *The **Pilgrim’s Progress***

[10] This man is the protagonist of *Pilgrim’s Progress*. His faithful companion, Faithful, is killed at Vanity Fair.

ANSWER: **Christian**

<IJ, Long Fiction>

18. In pemphigus vulgaris, these junctions are targeted by autoreactive antibodies, causing skin blistering. For 10 points each:

[10] Name these junctions between cells that rely on cadherins. These junctions dissipate mechanical stress by distributing it between cells, and they use proteins such as plakoglobin and plakophilin to connect intermediate filaments in adjacent cells.

ANSWER: **desmosome** [or **macula adherens**]

[10] In skin, desmosomes mediate contact to this intermediate filament protein, which is also found in hair and nails. This fibrous protein contains many disulfide bonds, whose arrangement causes hair to be curly or straight.

ANSWER: **keratin**

[10] This other class of cell adhesion molecules mediates attachment to the extracellular matrix and consist of an alpha and beta subunit. One of them called Gp-2-b-3-a is found on platelets.

ANSWER: **integrin**

<Eric M, Biology>

19. This conductor was the first to record all nine of Gustav Mahler's symphonies. For 10 points each:

[10] Name this conductor who gave many Young People's Concerts while music director of the New York Philharmonic during the 1960s. He composed *West Side Story*.

ANSWER: Leonard **Bernstein**

[10] Bernstein studied with Serge Koussevitzky, who led this American orchestra for 25 years. Bernstein later taught at Tanglewood, which is the summer home of this orchestra that was once led by Seiji Ozawa.

ANSWER: **Boston** Symphony Orchestra [or **BSO**]

[10] Bernstein mentored this conductor, who was his artistic co-director for the first Pacific Music Festival in Japan. This director of the San Francisco Symphony was inspired by Bernstein's Young People's Concerts to create the series *Keeping Score*.

ANSWER: Michael **Tilson-Thomas** [accept **MTT**]

<AWD, Music>

20. This character was falsely accused of attempting to ravish Stheneboea ("stheh-neh-BOY-ah"), the wife of King Proetus ("pro-EE-tuss") of Tiryns ("TEER-inz"), so he was sent to Lycia, where King Iobates ("eye-AH-buh-teez") assigned him a supposedly-impossible task. For 10 points each:

[10] Name this Greek hero who, with the help of Pegasus, slew the Chimera.

ANSWER: **Bellerophon** [or **Bellerophontes**]

[10] After Bellerophon's unexpected victory, Iobates assigned him a number of other quests, including a raid on this tribe of female warriors who made their capital at Themiscyra ("theh-miss-KY-rah").

ANSWER: **Amazons**

[10] In the *Iliad*, Bellerophon's story is related to Diomedes by a soldier with this name who is Bellerophon's grandson. Ovid described a fisherman with this name who became a sea god after consuming a magical herb.

ANSWER: **Glaucus**

<RC, Mythology>