1. During this battle, the “twin villages” of Krinkelt [kreen-kelt] and Rocherath [ROHK-uh-raht] were defended by the 2nd Infantry Division on the approaches to Elsenborn Ridge. At the crisis of this battle, (*) Anthony McAuliffe [mik-AW-lif] gave the commander of the 47th Panzer Corps the short message “nuts!” and refused to surrender Bastogne [bass-TAWN]. For 10 points—name this battle that started on December 16, 1944, in which the Germans tried to split Allied lines.

answer: Battle of the Bulge (or Battle of the Ardennes or the Ardennes Counteroffensive)

2. The unusual molar teeth of leopard seals enable this behavior, which, in sponges, relies on cells called choanocytes [koh-"AN-oh-sites"]. A siphon allows bivalves such as clams and oysters to perform this behavior. Lamellae [lah-MEL-ay] in the flamingo beak allow the birds to perform this behavior to consume brine shrimp. (*) Baleen [BAY-leen] whales feed on krill via—for 10 points—what behavior in which an animal captures food floating in water?

answer: filter feeding (or suspension feeding; accept sieve feeding or sieving; prompt on “feeding” or “eating”)

3. In Frida Kahlo’s [FREE-dah KAH-loh'] painting Henry Ford Hospital, a torso, a fetus and one of these animals float above Kahlo’s bedridden body. Many species of these animals stab one another with a “love dart” during mating. (*) Ryan Reynolds voiced one of these animals whose DNA gets mixed with nitrous oxide in the 2013 film Turbo. For 10 points—name these slow, shelled gastropods [GASS-truh-"pods"] served in restaurants as escargot [ess-"car"-GOH].

answer: snails (prompt on “gastropod(s)” or “Gastropoda”)

4. In this book, a man tries to reduce seasickness via the “chain links strategy” of tying boats together. An editor added this book’s opening line explaining “the empire long divided must unite.” This novel depicts the Battle of (*) Red Cliffs. The “oath of the peach garden” commits Liu Bei [loo bay] to remain loyal to the Han [hahn] dynasty in this novel. Wei [way], Shu [shoo], and Wu [woo] contend for dominance in—for 10 points—what classic Chinese novel?

answer: Romance of the Three Kingdoms (or Sanguozhi)

5. This country nationalized a nickel deposit at Moa [MOH-ah] Bay after demanding that Western gas companies process cheap Soviet crude oil. In 1970 this country’s planned “ten-million-ton harvest” failed. This country hosted Eldridge Cleaver, (*) Assata Shakur [ah-SAH-tah "shah-CORE"], and other Black Panthers during the 1970s, when it was a haven for American fugitives and hijackers. For 10 points—name this country where Soviet missiles were placed in 1962.

answer: Cuba (or Republic of Cuba or República de Cuba)
6. In Denmark this equation is called the Bjerrum [BYAIR-un] equation, since its logarithmic ["log-uh-rhythmic"] form was derived using Bjerrum's work on mass action. This equation can be used to find the isoelectric ["eye-so-electric"] point of an amino acid [pause] or the concentration of (*) bicarbonate ["by-carbon-ate"] in the blood. The concentration of the conjugate ["CON-jug-it"] base is divided by that of the corresponding weak acid in—for 10 points—what equation used to find the pH of a buffer solution?
answer: Henderson-Hasselbalch [HAH-sul-bahk] equation

7. One of this song's performers dedicated it to Vail Cerullo [seh-ROO-loh], a Berklee College student who died in a motorcycle crash. Its refrain asks "how can we not talk about family when family is all we got?" This song plays as Brian shares a final drive with (*) Dominic Toretto [DAH-muh-nik tor-ET-oh], portrayed by Vin Diesel [DEE-zul], in The Fate of the Furious. For 10 points—name this Wiz Khalifa [kuh-LEE-fuh] and Charlie Puth [pooth] song written as an elegy [EL-uh-jee] for the actor Paul Walker.
answer: See You Again

8. This goddess and her husband deposed the snake-like Ophon [OH-fee-aht] and Eurynome [yuh-RIN-oh-mee], Hesiod [HESS-ee-ahd] claims that this goddess fled to the Cretan [KREE-tin] city of Lyttos [LIT-ohss] to give birth. This goddess and her mother Gaea ["GUY-uh"] are often equated with the Phrygian [FRU-ee-un] mother goddess (*) Cybele [SIB-uh-lee]. This Titaness hid one of her sons in a cave on Mount Ida ["EYE-duh"] after tricking her husband into swallowing a stone. For 10 points—name this wife of Cronos [KROH-nohss] and mother of Zeus.
answer: Rhea [RAY-uh]

9. In 1931 James Rolph resigned from this office to assume a state governorship. The first American-African to hold this office, Willie Brown, was succeeded by his mentee [men-TEE], Gavin Newsom [GAV-in NOO-sum]. Mark Farrell currently holds this office. George (*) Moscone [mahss-KOH-nay] had this job in 1978 when he was shot by Dan White, who also killed Harvey Milk. Dianne Feinstein ["fine-styn"] once held—for 10 points—what elected position in a northern California city?
answer: mayor(s) of San Francisco (accept any reasonable answer containing both underlined portions; prompt on "mayor" before "Willie")

10. In the Book of Judges, Gideon’s [GID-ee-unz] followers shout about one of these objects “of the Lord and of Gideon.” The Book of Kells changes the word for these objects to the word for "joy" when Jesus says "I came not to bring peace, but" one of these items. During his arrest, Jesus healed a servant whose (*) ear had been lopped off by Peter with—for 10 points—what type of weapon that Isaiah ["eye-ZAY-uh"] declared shall be beaten into plowshares?
answer: swords (do not accept or prompt on similar terms)

11. Some Sri Lankans [shree LAHNK-unz] perform this activity while sitting on single-poled stilts. People illegally use squirt bottles of sodium cyanide for this activity in the Philippines. Traditionally, Irrawaddy [EER-uh-WAH-doo] dolphins were trained to aid in this activity. Tokyo’s Tsukiji [soo-kee-jee] market sells products of this activity. (*) Aquaculture [AH-kwuh-"culture"] in hatcheries may someday bring an end to—for 10 points—what economic activity carried out with nets and hooks?
answer: fishing (accept any reasonable answer containing fishy; accept angling before “cyanide”)

12. This rock forms the Coconino [koh-koh-NEE-noh] and Tapeats [tuh-PEEZT] layers of the Grand Canyon. Paleocurrents [PAY-lee-oh-"currents"] can be tracked by planar [PLAY-nur] cross-bedding in this rock, like that at Zion Canyon. This rock's "arkose" [AR-kohss] variety contains more than 25 percent feldspar. Compression-driven (*) metamorphism [met-uh-MOR-fih-zum] of this rock in orogenic [OR-oh-JEH-nik] belts can form quartzite ["QUART-sight.”]. For 10 points—name this sedimentary rock that forms out of a namesake granular [GRAN-yoo-lur] material found on beaches.
answer: sandstone (accept Coconino Sandstone or Tapeats Sandstone; do not accept or prompt on “sand”)

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13. **This novel’s protagonist claims that Tennyson was “only a rhymester,” and is beaten by three boys for asserting that Byron was “the greatest poet.” At the end of this novel, the protagonist leaves home to forge the “uncreated conscience” of his race. **This (*) 1916 novel was the first published book to portray the conflicted Irish Catholic Stephen Dedalus [DED-uh-luss]. For 10 points—name this semi-autobiographical novel by James Joyce.

answer: A Portrait of the Artist as a Young Man

14. **The British Freedom of Information Act became law during this leader’s premiership. This leader struck the so-called Granita [graht-nee-tah] Pact in 1994 with the man who would succeed him. **The (*) Good Friday Agreement advanced during the Northern Ireland peace process during this man’s second year as prime minister. Gordon Brown succeeded—for 10 points—what “New Labour” leader who, with George W. Bush, initiated the War in Iraq?

answer: Tony Blair (or Anthony Charles Lynton Blair)

15. **This country’s music inspired Le Bananier [leh bahn-yah-n-yay] by one of its natives, Louis Moreau Gottschalk [loo-EE moh-ROH “GOT”-shawk]. Another composer from this country called for a piano’s strings to be scraped in his The Banshee [pause] and was named Henry Cowell. While living in this country, a composer wrote a symphony whose (*) Largo second movement has an English horn solo. For 10 points—what country inspired Antonín Dvorák’s [dvor-ahk’s] “New World” symphony?

answer: United States of America or U.S.A. (accept any underlined portion)

16. **This U.S. state is the site of the National Toy Hall of Fame, as well as the George Eastman Museum. Monastic architecture is evoked by the design of a medieval art museum in this state called the Cloisters [kloy-sturz]. Other art museums in this state include the (*) Frick Collection and an institution with one long spiral ramp of exhibits, the Guggenheim [goo-gun-hym]. For 10 points—what state contains the U.S.’s largest art museum, the Met?

answer: New York (State)

17. **Planck’s constant is about 4.14 times 10 to the ~15 times this unit times seconds.** Particle masses are often reported as powers of 10 times this unit over c squared; for instance, the proton has a mass of about 938 million times this unit over c squared. The (*) binding energy of ground-state hydrogen is 13.6 of this unit. A joule [jewel] is roughly 10 to the 19 of—for 10 points—what unit of energy symbolized eV [E-V]?

answer: electronvolt(s) (accept eV before “eV”; do not accept or prompt on “volt(s)”)

18. **This type of disaster leads to the discovery that Joanna Burden was murdered in William Faulkner’s Light in August. A poem about this type of disaster laments “there lay that store I counted best” before stating “the world no longer let me love / my (*) hope and treasure lies above.” Anne Bradstreet’s house was destroyed by—for 10 points—what phenomenon that Guy Montag uses to destroy books in Ray Bradbury’s Fahrenheit 451 (“four-fifty-one”)?

answer: fires (accept house fires; accept any reasonable answer mentioning fire or flames or burning or a conflagration; accept Verses Upon the Burning of Our House)

19. **Before an invasion by Argos [AR-gohss], this king led a group of mercenaries who plundered the tombs at Aegae [ee-g-EE]. This king died in battle against Antigonus II [an-TIG-uh-niss “the second”] of Macedon [MASS-th-lon] after an old woman threw a tile at him. After this leader of the Molossians [muh-LOH-see-unz] bested Publius Decius Mus [POOB-lee-us DEH-see-us “moose”], he supposedly remarked that (*) “one more such victory” would undo him. For 10 points—the name of what king of Epirus [ih-“PIE”-rus] inspired a term meaning a very costly victory?

answer: Pyrrhus [PEER-us] (of Epirus) (prompt on “Pyrrhic (victory)”)

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20. **This planet shrinks about two centimeters per year due to the Kelvin-Helmholtz mechanism.** The “Greek” and “Trojan” camps are at this planet’s L4 [“L-four”] and L5 Lagrange [l uh-GRAHNZH] points, respectively. This planet’s tidal interactions make one of its moons the most (*) volcanically active body in the solar system. This planet’s gravity tore apart comet Shoemaker-Levy 9 [SHOO-mah-kur LEV-ee “nine”]. For 10 points—name this planet orbited by Io [“EYE-oh”] and the other Galilean [gal-ih-LAY-un] moons.

**answer:** Jupiter

21. **The third edition of this book re-ordered a discussion of the Crucifixion alleging that Barabbas [buh-RAB-uss] was intended as the new Jewish king.** This book was partly inspired by a J. M. W. Turner painting of a scene from the (*) Aeneid [uh-NEE-id]. It describes the priests of Diana at Nemi [NAY-mee], who won their positions by killing predecessors in ritual combat. “A Study in Magic and Religion” is the subtitle of—for 10 points—what book by James Frazer [FRAY-zur]?

**answer:** The Golden Bough: A Study in Magic and Religion (accept The Golden Bough: A Study in Comparative Religion)

22. **It is said that Isa [EE-sah] will descend at this time on the Day of Judgment to defeat Dajjal [duh-JAHL].** In English, the 89th and 113th surahs [SOO-rahs] of the Qur’an [kuh-RAHN] are usually named after this time of day. A prayer recited at this time has two obligatory rak’ats [RAHK-ats]. The (*) salat [sah-HOOR] meal is eaten before this time of day, which is when the fajr [FEJ-ur] prayer is recited. For 10 points—name this time of day at which fasting begins during Ramadan [RAH-muh-dahn].

**answer:** dawn (accept daybreak or sunrise or morning; accept al-falaq or Surat al-Falaq; accept al-fajr or Surat al-Fajr before “fajr”; prompt on descriptive answers like “the beginning of the day”)

23. **In January 2018 a member of this legislature was suspended from Twitter for a tweet about “barbaric, gang-raping hordes.”** In October 2017 Norbert Lammert ended a twelve-year tenure as president of this body. The right-wing AFD [“A-F-D”] party gained 94 seats in this body’s 2017 elections. The (*) Christian Democratic Union holds a majority in—for 10 points—what body that meets in the Reichstag [RYK-shtahg], and is the parliament of Germany?

**answer:** Bundestag [boon-des-TAHG] (prompt on descriptive answers such as “German parliament” before “parliament”)

24. **A matrix’s rank is this property of its column space.** This property of a vector space is the cardinality [“car-dih-NAL-ih-tee] of a basis for it. If a manifold with a value of n for this property has a boundary, this property for the boundary is n minus 1. Spaces for which this property is (*) 3 can be described using cylindrical [suh-LIN-drih-kul] or spherical coordinates. For 10 points—name this property that has a value of 1 for a line and 2 for a plane.

**answer:** dimensions (or number of dimensions or dimensionality)
1. Near the end of World War II this woman traveled with George Patton’s army and recorded the liberation of Buchenwald [BOO-ken-vahlt] concentration camp. For 10 points each—
   A. Name this photojournalist whose picture of the Fort Peck Dam was the first cover of Life magazine.
      answer: Margaret Bourke-White (do not accept or prompt on “Bourke” or “White”)
   B. Bourke-White married this author of Tobacco Road. They collaborated on a photo-essay about Southern poverty titled You Have Seen Their Faces.
      answer: Erskine [UR-skin] (Preston) Caldwell
   C. Bourke-White photographed this world leader on the day of his assassination at Birla House in New Delhi.
      answer: Mahatma Gandhi (or Mohandas K[aramchand] Gandhi)

2. For 10 points each—answer the following about the computer scientist Ron Rivest [rh-VEST]:
   A. He is the ‘R’ in “RSA,” this kind of cryptosystem [krip-toh-“system”] that allows anybody to encrypt a message so that only the intended recipient can decrypt it.
      answer: public-key cryptography (accept asymmetric(al) cryptography; do not accept or prompt on “public (cryptography)”) [“RSA” stands for “Rivest-Shamir-Adelman.”]
   B. He is also the ‘R’ in the CLRS, a massive textbook serving as an “Introduction to” these procedures that are guaranteed to solve a given problem.
      answer: algorithms [AL-guh-“rhythms”] (accept Introduction to Algorithms; do not accept or prompt on “programs” or other putative synonyms)
   C. Ron Rivest helped develop MD5 [“M-D-five”], which is this type of one-way function that turns a potentially complex object into an integer or short string.
      answer: hash function (or one-way hash(ing) function; accept any reasonable answer containing hashing; prompt on “(message) digest”)

3. The Nebra [NEB-ruh] sky disc is a bronze artifact depicting the sun, the moon, and the Pleiades [PLEE-uh-deez]. For 10 points each—
   A. Like the first Neanderthal [nee-AN-dur-tahl] specimens, it was found in this country.
      answer: Germany (or Federal Republic of Germany or Bundesrepublik Deutschland)
   B. The “Lion-Man” figurine, found in Hohlenstein-Stadel [“HOLE-en-shteen SHTAH-del], is a shamanistic [shah-muh-NISS-tik] sculpture made from the ivory of this species of “woolly” Ice Age mammal.
      answer: woolly mammoths (or Mammuthus primigenius; do not accept or prompt on “mastodon(s)”)
   C. The oldest depiction of the human form is the Venus of Hohle Fels [HOH-luh felz], unearthed in 2008, which is similar in style to the limestone “Venus” figurine found near this Austrian village in 1908.
      answer: Willendorf [VIIL-en-dorf] (accept Venus of Willendorf)
4. For 10 points each—name these TV shows with characters named Verna:
A. A woman named Verna was Jenna Maroney’s [muh-ROH-nee] deadbeat mother on this NBC sitcom.
answer: 30 Rock
B. Another deadbeat named Virna was the stepmother of Shawn Hunter, Cory Matthews’s best friend on this ’90s sitcom. It inspired a Disney Channel sequel that was cancelled in 2017.
answer: Boy Meets World [The sequel was titled Girl Meets World.]
C. The second season of this ABC show featured a cancer-stricken Supreme Court justice named Verna Thornton, who mentored Olivia Pope.
answer: Scandal

5. For 10 points each—answer the following about the U.S. presidential election of 1892:
A. Because this Democrat won, he became the 24th president—after also having been the 22nd president.
answer: (Stephen) Grover Cleveland
B. This Illinois politician was Cleveland’s running mate. His grandson of the same name made two unsuccessful runs for the presidency in the 1950s.
answer: Adlai ["AD-lie"] Stevenson (or Adlai Ewing Stevenson I)
C. This Populist from Iowa won several western states in 1892. In 1880 he had run as the candidate of the Greenback Party.
answer: James (Baird) Weaver

6. For 10 points each—answer the following about artistic depictions of the poet Guillaume Apollinaire [gee-YOHM uh-poh-lee-NAIR]:
A. Apollinaire is depicted as a jester in this Spanish artist’s Family of Saltimbancus [sawt-am-BAWNK], which he painted around the same time as Boy with a Pipe.
answer: Pablo Picasso (or Pablo (Diego José Francisco de Paula Juan Nepomuceno María de los Remedios Cipriano de la Santísima Trinidad) Ruiz y Picasso)
B. A Marc Chagall [shuh-GAHL] painting depicts Apollinaire as this biblical character, who sits under an apple tree in Peter Paul Rubens’s The Fall of Man.
answer: Adam [The Chagall painting is titled Homage to Apollinaire, or Adam and Eve.]
C. A marble bust wearing sunglasses appears in this artist’s Portrait of Guillaume Apollinaire. His paintings often depicted marble statues in the streets of Turin [TOOR-in].
answer: Giorgio de Chirico [JOR-gehh KEER-koh] (prompt on “Chirico”)

7. A British ambassador becomes aware of a gun-running scheme in this author’s novel Mountolive [”mount-olive”]. For 10 points each—
A. Name this author of a “quartet” of novels set in Egypt.
answer: Lawrence (George) Durrell
B. Durrell’s “quartet” is named after this Egyptian city. In ancient times, its lighthouse was a wonder of the world.
answer: Alexandria (or Eskendereyyah or Eskendria; accept The Alexandria Quartet or Lighthouse of Alexandria or Pharo of Alexandria)
C. A subplot of the Alexandria Quartet concerns brothers who belong to this church, the largest Christian denomination in Egypt.
answer: Coptic Church (or Coptic Orthodox Church of Alexandria or al-Kanisah al-Qibtiyyah al-Urthoeduksiyyah; accept Copts or Coptic or Qibt or Aqbat; prompt on “Oriental Orthodox”; do not accept or prompt on “Orthodox” or “Eastern Orthodox”)
8. Several “bag models” attempt to describe the confinement of these particles. For 10 points each—
A. Name these particles that cannot exist in isolation below the Hagedorn [HAG-uh-dorn] temperature, approximately 2 trillion kelvins.
answer: quarks
B. This form of charge, possessed by quarks and gluons [GLOO-ahnz], explains the strong force in QCD.
answer: color charge [QCD is quantum chromodynamics.]
C. This is the net color charge of any free particle.
answer: zero (accept none or no color charge or uncharged or neutral)

9. This English word is a corruption of a title given to Mughal [MOH-gul] governors. For 10 points each—
A. Give this word that described employees of the British East India Company who amassed great wealth, often illicitly.
answer: nabob(s) [NAY-bob'] [“Nabob” is a corruption of “nawab.”]
B. This vice president under Richard Nixon delivered a speech written by William Safire [SAF-’ire] that decried “nattering nabobs of negativism.”
answer: Spiro (Theodore) Agnew [AG-noo]
C. Siraj ud-Daulah [see-RAHJ ood DOW-luh], the nawab [nah-WAHB] of this region, infamously held British prisoners in the “Black Hole of Calcutta.”
answer: Bengal (or Bangla or Bôngô; accept nawab of Bengal or nawab of Bengal and Orissa)

10. For 10 points each—name these techniques in competitive swimming:
A. In this type of event swimmers are allowed wide latitude in their choice of strokes. Oddly, this term is used interchangeably with “front crawl,” which is the most common stroke used during this event.
answer: freestyle (prompt on “free”)
B. This stroke emerged through a loophole in the rules of breaststroke. It is the only stroke that requires a dolphin kick while the arms make a “keyhole” shape underwater.
answer: butterfly (prompt on “fly”)  
C. During freestyle and backstroke races, swimmers reverse direction by performing this action, which involves rolling forward underwater and pushing off a wall.
answer: flip turn(ing) (or tumble turn(ing); prompt on “flip(ing)” or “turn(ing)” or “tumble” or “tumbling” or “somersault”; do not accept or prompt on “tumble” or variants thereon)

11. For 10 points each—answer the following about the chemistry of Tide Pods:
A. The main ingredients in Tide Pods are anionic [AN-’eye-on-’ik] and non-ionic detergents, which act as surfactants and thus lower this property of water.
answer: surface tension
B. Tide Pods also contain a polymer [PAH-lih-mur] comprising numerous “primary” and “secondary” examples of these functional groups, which occur at the N-termini [’N term-in-eye] of proteins.
answer: amines [Am-eenz]
C. Suppose 100 people, each weighing 100 kilograms, each eat 100 Tide Pods. If 50 of them die, then this quantity equals 1 Tide Pod per kilogram.
answer: LD_{50} (or median lethal dose; prompt on “LD” or “lethal dose”)
12. The opening lines of this poem are adapted from a sermon delivered in 1622 by Lancelot Andrewes [“Andrews”]. For 10 points each—
   A. Name this poem that describes the “sore-footed” camels who transport the title figures to Bethlehem [BETH-luh-hem].
      answer: Journey of the Magi [MAY-ji]
   B. This poet wrote “Journey of the Magi.”
      answer: T. S. Eliot (or Thomas Stearns Eliot)
   C. “Journey of the Magi” ends with the speaker stating that he “should be glad” of another of these phenomena. In a Randall Jarrell [JAIR-uh] poem, this title phenomenon occurs to a “Ball Turret Gunner.”
      answer: death(s) (or dying or he dies; accept passing away or passes away or other synonyms; accept The Death of the Ball Turret Gunner)

13. The “Buy American, Hire American” executive order directed federal agencies to propose reforms regarding the approval of these visas. For 10 points each—
   A. Name this type of visa that allows foreign workers to be employed in “specialty occupations” by U.S. employers.
      answer: H-1B [“h-one-B”] visa(s)
   B. The H-1B visa is a dual-intent visa, meaning holders can also apply for a permanent residency card, which has this colorful nickname.
      answer: green card
   C. H-1B visas are administered by U.S. Citizenship and Immigration Services, part of this Cabinet department that John Kelly led before he became the presidential chief of staff.
      answer: Department of Homeland Security (or DHS)

14. Flavius Aëtius [FLAY-vee-us] chose to avoid storming a fortified line of wagons at this battle. For 10 points each—
   A. Name this battle fought in AD 451 against the Huns in what is now northeast France.
      answer: Battle of Châlons [shah-LOHN] (or Battle of the Catalaunian Plains or Battle of the Catalaunian Fields or Battle of Maurica or Battle of the Campus Mauriacus)
   B. This leader of the Huns withdrew from Gaul after the Battle of Châlons.
      answer: Attila [uh-TIL-uh] the Hun
   C. This Germanic people fought alongside the Romans at Châlons under their king Theodoric [thee-AH-duh-rik], who died in the battle. They were later driven into Spain, which they ruled until the 8th century.
      answer: Visigoths [VIH-zih-“goths”] (or Visigothi, Wisigothi, Vesi, Visi, Wesi, or Wisi; prompt on “Goths”)

15. For 10 points each—name these disputed regions in Asia:
   A. Both India and Pakistan claim this mountainous northern region. An Indian state is named “Jammu [JAH-moo] and” this region.
      answer: Kashmir [“CASH-mere”] (accept Kashmir Valley or Jammu and Kashmir)
   B. Mount Hermon [HUR-mun] is just northeast of this plateau [plat-TOH] region that has been disputed between Israel and Syria since the Six-Day War.
      answer: Golan [gonh-LAHN] Heights (or Ramat HaGolan or Hadbatu ‘I-Jawlan)
   C. The largest date palm forest in the world is along the course of this river near the disputed Iran-Iraq border. The confluence of the Tigris [“TIE-griss] and Euphrates [yoo-FRAY-teez] forms this river.
      answer: Shatt al-Arab [“shot” ahl-ah-RAHB] (or River of the Arabs or Arvund Rud or Swift River)
16. For 10 points each—answer the following about Icarus (\textit{IK-uh-russ}): 
A. This Flemish artist is traditionally credited as the painter of \textit{Landscape with the Fall of Icarus}, though the surviving version is believed to be a copy. 
answer: Pieter \textbf{Bruegel} \textit{(BROO-gui or BROO-hul)} the Elder (or Peter Brueghel the Elder; accept Peasant Bruegel) 
B. W. H. Auden \textit{(AW-den)} noted “how everything turns away / quite leisurely from the disaster” of Icarus’s fall in this poem that begins “about suffering they were never wrong, / the old Masters.” 
answer: \textbf{Musée des Beaux Arts} \textit{(moo-ZAY day boh ZAR)} 
C. The goddess Palutena \textit{[\textquote{pah}^-oo-TAY-nuh]} aids this winged, angel-like protagonist in the \textit{Kid Icarus} series of video games. 
answer: \textbf{Pit} (accept \textit{Pitto})

17. This orphan sells her horses and carriage at a huge profit to a man fleeing Brussels during the Battle of Waterloo. For 10 points each—
A. Name this character who happily accepts gifts from the Marquis of Steyne \textit{[mar^-KEE 'of' styne]}, despite being married to Rawdon Crawley. 
answer: \textbf{Becky Sharp} (or \textbf{Rebecca Sharp}; accept any underlined portion; accept \textbf{Becky Crawley} or \textbf{Rebecca Crawley}; prompt on “Crawley”) 
B. Becky Sharp is the antihero of this English satirist’s novel \textit{Vanity Fair}. 
answer: William Makepeace \textbf{Thackeray} 
C. This man buys Becky’s carriage. He dies in suspicious circumstances after signing a portion of his life insurance over to Becky. 
answer: \textbf{Joseph Sedley} (or \textbf{Jos}; prompt on “Sedley”)

18. The Ryan White CARE \textit{[care]} Act established programs for people living with this disease. For 10 points each—
A. Name this sexually transmitted disease that killed hundreds of thousands of Americans in the 1980s and ’90s. 
answer: \textbf{AIDS} (or \textbf{acquired immune deficiency syndrome} or \textbf{acquired immunodeficiency syndrome} or \textbf{HIV/AIDS}; prompt on “HIV” or “human immunodeficiency virus”) 
B. This 1987 book by Randy Shilts documents the early history of AIDS. HBO made it into a film. 
answer: \textbf{And the Band Played On} 
C. \textbf{And the Band Played On} used this term to refer to flight attendant Gaëtan Dugas \textit{[gay-TAHN doo-GAH]}, based on the mistaken belief that he was responsible for introducing HIV \textit{[H-I-V]} to the U.S. 
answer: \textbf{Patient Zero} (prompt on partial answers)

19. Pencil and paper ready. For 10 points each—answer these questions about flipping a fair coin: 
A. If the coin is flipped 6 times, what is the probability that, during the entire sequence of 6 flips, \textit{neither} “heads” nor “tails” appears twice in a row? 
answer: 1/32 or 0.03125 or 3.125\% or 1 in 32 [Regardless of the outcome of the first flip, each of the next 5 flips must follow 1 specific pattern out of 2\(^6\) = 32 total possible patterns.] 
B. If the first 2 flips are both “heads,” what is the probability that the next 2 flips will also result in 2 “heads”? 
answer: 1/4 or 0.25 or 25\% or 1 in 4 [Since there is a \textit{1/2} chance of getting “heads” on any given flip, the probability of getting 2 “heads” in a row is \((1/2) \times (1/2) = 1/4\); the outcome of earlier flips has no bearing on the outcome of later flips.] 
C. If a player wins 1 dollar every time she flips “heads,” but \textit{loses} 10 cents every time she flips “tails,” what is her expected profit from each flip? You have 10 seconds. 
answer: 45 cents or \$0.45 (or 9/20 dollars) [Any sequence of 2 flips has an expected value of 1 “head” and 1 “tail,” and thus an expected profit of \$1 – $0.10 = $0.90, which is $0.90 = $0.45 or 45 cents per flip.]

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20. For 10 points each—answer the following about Native Americans in literature:

A. Chingachgook [chun-GAHCH-guk] turns out to be the title character of this James Fenimore Cooper novel, in which Natty Bumppo rescues Colonel Munro’s daughters.
answer: The Last of the Mohicans: A Narrative of 1757

B. Chief Bromden narrates this novel set in a mental hospital. It depicts Randle McMurphy’s efforts to undermine Nurse Ratched.
answer: One Flew Over the Cuckoo’s Nest

C. Tony Hillerman’s novel The Blessing Way introduced Joe Leaphorn, a lieutenant in this nation’s Tribal Police.
answer: Navajo [NAV-uh-hoh] (Nation) (or Naabehó Bináhásdzó or Diné)

21. Ujamaa [oo-JAH-muh] is a Swahili [swah-HEE-lee] word that translates as “familyhood.” For 10 points each—

A. While leading this country, Julius Nyerere [nyeh-REH-reh] used the concept of ujamaa as the basis for domestic policies that included compulsory schooling.
answer: Tanzania [tan-zuh-NEE-uh] (or United Republic of Tanzania or Jamhuri ya Muungano wa Tanzania)

B. Nyerere promoted ujamaa in this “declaration.” It begins with the TANU [’TAN’-oo] creed, and describes Nyerere’s belief in African Socialism.
answer: Arusha [uh-ROO-shuh] Declaration

C. Ujamaa is one of the seven principles commemorated during this seven-day celebration of African heritage.
answer: Kwanzaa (KWAHN-zuh)

22. In November 2017 Ratko Mladic [RAHT-kohm LAH-’ditch’], a perpetrator of the Srebrenica [sreh-ben-EET-sah] massacre, was found guilty of crimes against humanity. For 10 points each—

A. The trial occurred at the International Criminal Court in this city.
answer: The Hague [hayg] (or Den Haag [hahg] or ’s-Gravenhage)

B. A year earlier, this first president of the Republika Srpska [SERP-skuh] was sentenced to 40 years in prison for genocide, in part for ordering the Srebrenica massacre.
answer: Radovan Karadžić [RAH-doh-vahn ’CAR’-ah-jeech]

C. In 2006 this first president of Serbia died of a heart attack while on trial for war crimes.
answer: Slobodan Milošević [sloh-BOH-dahn mee-LOH-sheh-vitch]

23. A play opens with this couple discussing the recent death of Bobby Watson, whose family members are all named Bobby Watson. For 10 points each—

A. Name this couple whom the Martins visit. It is later revealed that this couple’s maid, Mary, is the lover of the Fire Chief, who also comes to their house.
answer: (the) Smiths (accept Smith family or Mr. and Mrs. Smith)

B. The Smiths and the Martins appear in this author’s play The Bald Soprano.
answer: Eugène Ionesco [oo-ZHEN ee-oh-NESS-koh] (or Eugen Ionescu)

C. In Ionesco’s satire of this tragedy by William Shakespeare, the title character conspires with Banco to kill Archduke Duncan.
answer: Macbeth (or The Tragedy of Macbeth) [Ionesco’s play is titled Macbett.]
24. Foam cells in atherosclerotic plaque [ATH-uh-uh-skluh-RAH-lk PLAK] are the result of these cells absorbing lipid [LIP-id] particles. For 10 points each—

A. Name these cells that develop from monocytes [*mono-sites*]. Microglia [*micro-GLEE-uh*] and Langerhans [*LONG*-ur-hahnz] cells are specific types of them.

   answer: macrophages [MAK-roh-fay] (prompt on “phagocytes” or “white blood cells”)

B. This is the term for the small intracellular [*intra-cellular*] compartments that form when a portion of cell membrane, and its content, are pinched off during endocytosis [*END-oh-uh-site-OH-siss*].

   answer: vesicles [VEH-sih-kul] (prompt on “vacuole(s)"

C. Vesicles can have their contents degraded in this organelle [*organ-EL*], whose acidic interior contains hydrolytic [*hide*-roh-LIT-ik] enzymes that digest biomolecules [*bio-molecules*].

   answer: lysosomes [*LICE-oh-sohmez*]