QQBC Packet 2

1. **At this battle, 225 soldiers were sniped by Vasily Zaitsev [vah-SEE-lee ZYTE-seff], who was profiled in Enemy at the Gates. During this battle, Friedrich Paulus's troops were surrounded in Operation Uranus, a maneuver planned by Georgy Zhukov [ZHOO-koff]. Defenders rallied behind the slogan “There is no land beyond the (\*)** Volga!” in this five month-long battle. For 10 points—name this World War II battle that halted the German invasion of Russia.  
answer: Battle of Stalingrad  
<HIST, EURO>

5. If a polynomial's degree is this number, it is called quartic [“QUART”-ik]. For 10 points each—  
  
 A. Give this number. It is also the highest degree for which a single-variable polynomial can always be solved in terms of radicals.  
  
 answer: 4 (accept fourth-degree or degree four)  
  
 B. According to the Stefan-Boltzmann [STEH-fahn BOLTS-min] law, the amount of energy a black body releases is proportional to the fourth power of this quantity, and its maximum wavelength is inversely proportional to it.  
  
 answer: (absolute) temperature  
  
 C. This measure of the “tailedness” or “peakedness” of a probability distribution is the fourth moment about the mean divided by sigma to the fourth power.  
  
 answer: kurtosis [kur-TOH-siss]  
  
 <SCI, OTHER>

2. **In a 1955 farce by this playwright, a ”hay, feed, and provision store” owner named Horace Vandergelder plans to find a wife with the help of Dolly Gallagher Levi. This author of The Matchmaker also wrote a play in which the maid Sabina claims that she inspired George (\*)** Antrobus to invent the alphabet. For 10 points—what author of The Skin of Our Teeth depicted George's romance with his next-door neighbor Emily in Our Town?  
  
 answer: Thornton (Niven) Wilder  
  
 <LIT, AMER>

6. For 10 points each—name these authors who compared the American abolitionist John Brown to a meteor:  
  
   
  
 Brown was called “the meteor of the war” in “The Portent,” a poem by this author who wrote about a sailor's execution in Billy Budd.  
  
 Herman Melville  
  
 1859 is said to be the “Year of meteors! Brooding year” when Brown “mounted the scaffold” in a poem that appears in this author's collection Leaves of Grass.  
  
 Walt(er) Whitman  
  
 This Transcendentalist author of The Maine Woods wrote in his diary that Brown was “meteor-like, flashing through the darkness in which we live.”  
  
 Henry David Thoreau [thoh-ROH]  
  
 <LIT, AMER>

3. **This man, who was deemed the “greatest living soldier” by the Duke of Wellington, was mocked for writing a letter in which he alluded to eating “a hasty plate of soup.” This man, who won the Battle of Chippewa in the War of 1812, was criticized for executing members of the St. (\*)** Patrick's Battalion after the Battle of Chapultepec. For 10 points—what general created the Anaconda Plan and was nicknamed “Old Fuss and Feathers”?  
  
 answer: Winfield Scott  
  
 <HIST, AMER>

1. For 10 points each—answer the following about the American philosopher John Rawls:  
  
 A. His major work offers a “theory of” this concept; one of his essays presents this concept “as fairness.”  
  
 answer: justice (accept A Theory of Justice or Justice as Fairness)  
  
 B. Rawls spent most of his academic career as a philosophy professor at this Ivy League university; earlier philosophy professors at this school included George Santayana.  
  
 answer: Harvard University  
  
 C. Rawls's view of justice was criticized by this libertarian thinker in his Anarchy, State, and Utopia. This man, who also taught at Harvard, wrote such books as Philosophical Explanations.  
  
 answer: Robert Nozick  
  
 <RMPSS, PHIL>

4. **A “school” of composition named for this city employed a style described as prima prattica [PREE-mah PRAH-tee-kah]. An orchestral work portraying ”Harvest in October” and ”Circuses” is named for this city, whose namesake school was led by Giovanni Pierluigi da Palestrina [joh-VAH-nee P'YAIR-loo-EE-jee duh pah-less-TREE-nuh]. Another work about this city depicts an army marching past (\*)** trees of the Appian Way. Ottorino Respighi [OHT-toh-REE-noh reh-SPEE-gee] portrayed the ”festivals” and ”pines” of—for 10 points—what Italian city?  
  
 answer: Rome (or Roma; accept Roman School or Roman Festivals or The Pines of Rome or Feste Romane or Il Pini di Roma)  
  
 <FA, AUDIO>

1. During Roman times, this river's delta was guarded by the Moesian Limes [MEE-see-ahn LEE-“mace”], a series of fortifications sometimes called Trajan's [TRAY-jin's] Wall. For 10 points each—  
  
 A. Name this river that formed most of the Roman Empire's border throughout Central Europe. Today, this river flows through the European capitals of Budapest and Vienna.  
  
 answer: Danube (River) (or Donau or Dunaj(a) or Dunav or Dunai or Dunarea)  
  
 B. Rome's main possession north of the Danube was this historical region conquered by Trajan in the 2nd century. This region's territory includes much of modern-day Romania.  
  
 answer: Dacia [“DAY-she-uh”]  
  
 C. Much of modern-day Romania is covered by this mountain range, which ran through the center of Dacia.  
  
 answer: Carpathian [kar-PAY-thee-in] Mountains (or Carpathians)  
  
 <GEO, GEO>

5. **This man was advised by Polydamas to hold off an attack on enemy ships after an eagle dropped a red serpent among this man's troops. In one account, this man's infant son was thrown off a city wall by Neoptolemus [nee-ahp-TAH-luh-muss]. This father of Astyanax [ast-EE-an-ax] was chased around the walls of his city three times by his killer, who then (\*)** dragged his body through the dirt. For 10 points—name this Trojan prince who was slain by Achilles [uh-“KILL”-eez].  
  
 answer: Hector  
  
 <LIT, OTHER>

4. A servant in this novel named Cacambo [kuh-KAHM-boh] describes the “admirable government” that Jesuit priests have established in Paraguay. For 10 points each—  
  
 A. Name this novel, whose title character is shocked to find that the Jesuit commandant is the son of a Westphalian baron.  
  
 answer: Candide(; or, Optimism) [kan-DEED] (or Candide, ou l'Optimisme)  
  
 B. Candide and the baron's son were both educated by this idealistic ”doctor,” who contracts syphilis [SIH-fuh-liss] from the maid Paquette [pah-KET].  
  
 answer: Doctor (or Professor) Pangloss  
  
 C. At the end of the novel, Candide suggests that he and Pangloss should “cultivate” this type of area.  
  
 answer: gardens (or jardins; accept let us cultivate our garden or il faut cultiver notre jardin)  
  
 <LIT, EURO>

6. **The unit vector along this line is conventionally symbolized by a j, and distance along it is called the ordinate. Logarithmic functions have half of this line as an asymptote [“ASS-imp-tote”]. In polar coordinates, the equation theta equals pi over 2 gives this line, while in Cartesian coordinates its equation is (\*)** x = 0. Even functions like y = x squared are symmetric when reflected over—for 10 points—what line, the vertical axis?  
  
 answer: y-axis (accept x = 0 before “x = 0”; accept vertical axis before “vertical”)  
  
 <SCI, OTHER>

0. Allen Dulles was the first civilian director of this agency, whose subsequent leaders included Robert Gates and William Casey. For 10 points each—  
  
   
  
 Name this American spy agency headquartered in Langley, Virginia.  
  
 CIA or Central Intelligence Agency  
  
 This member of the CIA was captured after his U-2 plane was shot down over the Soviet Union in 1960.  
  
 (Francis) Gary Powers  
  
 A year after the incident involving Powers, the CIA sponsored a group known as Brigade 2506 in this failed invasion of Cuba.  
  
 Bay of Pigs invasion (or Playa Girón or Bahía de Cochinos)  
  
 <HIST, AMER>

7. **In this war a Scottish army led by John Stewart, Earl of Buchan [BUH-kun] was decimated at the Battle of Verneuil [vur-NOY]. The Jacquerie [zhah-kuh-REE] revolt occurred during a phase of this war ended by the Treaty of Brétigny [bray-teen-YEE]. The ascension of Philip VI [“the sixth”] of Valois [val-WAH] led to the start of this war, during which (\*)** longbowmen helped Henry V [“the fifth”] win the Battle of Agincourt [AH-zhin-koor] in 1415. For 10 points—name this war between England and France that lasted over a century.  
  
 answer: Hundred Years' War (accept Lancastrian War before “Jacquerie”)  
  
 <HIST, EURO>

4. This author's novel Picture This considers various subjects related to Rembrandt's painting Aristotle Contemplating the Bust of Homer. For 10 points each—  
  
 A. Name this novelist who wrote about Chaplain Tappman's reunion with a former World War II comrade in Closing Time.  
  
 answer: Joseph Heller  
  
 B. Closing Time is a sequel to this Heller novel, in which the title regulation obliges airmen to continue flying missions.  
  
 answer: Catch-22  
  
 C. Chaplain Tappman uses the Freedom of Information Act to locate this protagonist of Closing Time and Catch-22, who experienced “love at first sight” when he met the chaplain.  
  
 answer: John Yossarian (accept either underlined portion)  
  
 <LIT, AMER>

8. **In the multivariable version of this rule, a derivative equals the sum of products of derivatives. This rule is used to find the derivative of a function with respect to a different variable than the one used to write it. (\*)** Implicit differentiation relies on this rule, which can be written as ”dy/dt [“D-Y-D-T”] equals dy/dx times dx/dt.” For 10 points—name this rule used to differentiate a composition of functions like f of g of x.  
  
 answer: chain rule  
  
 <SCI, OTHER>

1. The Patriarch Filaret held much of the power during the first two decades of this man's reign. For 10 points each—  
  
 A. Name this Russian ruler succeeded by his son, Alexis I, in 1645.  
  
 answer: Michael I of Russia (or Michael I; accept Mikhail in place of “Michael”; accept, but DO NOT OTHERWISE REVEAL, Michael (Fyodorovich) Romanov; prompt on “Romanov”)  
  
 B. Michael was the first ruler of this Russian dynasty; it held power from 1613 until the Russian Revolution in 1917.  
  
 answer: Romanov dynasty (or Romanovs or House of Romanov)  
  
 C. This was the Patriarch Filaret's familial relationship to Michael Romanov.  
  
 answer: father (accept father-son or paternal; accept similar answers that indicate Filaret was Michael's father)  
  
 <HIST, EURO>

9. **One of these objects allows the player to stay up all night to listen to the stories of Anju's Grandmother. The player can transform into a warrior who shoots sword beams by using the “Fierce Deity's” one of these. A villain who inhabits one of these objects tries to destroy (\*)** Termina [tur-“ME”-nuh] by bringing down the Moon. Majora [MUH-jor-uh] from the Legend of Zelda series resides in—for 10 points—what kind of object that conceals one's face?  
  
 answer: mask (accept All-Night Mask or Fierce Deity's Mask or Majora's Mask)  
  
 <TRASH, POP CULT>

1. The characters in this musical attend the Jellicle Ball. For 10 points each—  
  
 A. Name this Andrew Lloyd Webber musical featuring Old Deuteronomy, who has lived many lives.  
  
 answer: Cats  
  
 B. In Cats, Grizabella sings this song in which she laments “I remember / a time I knew what happiness was.”  
  
 answer: Memory  
  
 C. Cats is based on this poet's Old Possum's Book of Practical Cats. He also wrote The Waste Land and The Hollow Men.  
  
 answer: T(homas) S(tearns) Eliot  
  
 <FA, OTHER>

10. **The Westermarck effect is thought to explain why humans do not often engage in this practice, which can be considered to be the most extreme form of endogamy [en-DAH-guh-mee]. A section on “The Horror of” this behavior in Sigmund Freud's [froyd's] Totem and Taboo claims that it and patricide are the two universal taboos. The (\*)** Oedipus [ED-uh-puss] complex is an alleged desire to engage in—for 10 points—what practice of sexual contact between close relatives?  
  
 answer: incest (accept forms such as incestuous behavior)  
  
 <RMPSS, SOC SCI>

8. In October 2015 Metrojet Flight 9268 broke up in midair shortly after taking off on a flight to St. Petersburg. For 10 points each—  
  
 A. The jet departed Sharm el-Sheikh, a resort town at the south tip of this country's Sinai peninsula.  
  
 answer: Egypt (or Arab Republic of Egypt or Gumhuriyat Misr al-Arabiyah)  
  
 B. This president of Egypt, who orchestrated the 2013 coup that toppled Mohammed Morsi, claimed Egypt's airports were “safe and secure” after many countries suspended flights to Sharm el-Sheikh.  
  
 answer: Abdel Fattah el-Sisi  
  
 C. A loud noise recorded on this device led to speculation that a bomb brought down the plane. Along with a flight data recorder, it is one of a plane's ”black boxes.”  
  
 answer: cockpit voice recorder or CVR (prompt on partial answer)  
  
 <CE, CE>

11. **The use of gillnets to catch totoaba [“toe”-TWAH-bah] fish near this river's mouth has decimated the rare vaquita [vah-KEE-tah] porpoise. On this river, the historic Lee's Ferry river crossing lies downstream from the Glen Canyon Dam. Runoff from this river accidentally created the Salton Sea. Lake (\*)** Powell and Lake Mead lie on this river, which features the Hoover Dam. For 10 points—name this American river that formed the Grand Canyon.  
  
 answer: Colorado River  
  
 <GEO, GEO>

7. For 10 points each—answer the following about speechwriters for Richard Nixon:  
  
 A. William Safire was the long-time author of the “On Grammar” column for the Sunday magazine of this New York newspaper, whose motto is “All the news that's fit to print.”  
  
 answer: The New York Times (or NYT)  
  
 B. In the 2000 election this far-right politician known for his anti-Semitism received over 3,000 votes in the heavily Jewish Palm Beach County due to a controversial ”butterfly ballot.”  
  
 answer: Pat(rick Joseph) Buchanan  
  
 C. This economist went on to create both the creationist film Expelled and a game show on which contestants could “win” his “money.”  
  
 answer: Ben Stein (or Benjamin (Jeremy) Stein; accept Win Ben Stein's Money)  
  
 <HIST, AMER>

12. **This poem describes an “old gas light” that produces a “pale dull pallor.” The central figure of this poem sits on a rickety stool as his foot goes “thump, thump, thump” on the floor. This poem's speaker hears the words “I can't be satisfied” and “I ain't happy no mo'” while watching ”ebony hands” move on “each (\*)** ivory key” of a piano. A Harlem singer performs the title “syncopated tune” in—for 10 points—what poem by Langston Hughes?  
  
 answer: The Weary Blues  
  
 <LIT, AMER>

8. For 10 points each—answer the following about subatomic particles:  
  
 A. These subatomic particles orbit the much larger nucleus in atoms. The Millikan oil drop experiment measured the charge of these particles.  
  
 answer: electrons  
  
 B. Unlike fermions [“FAIR”-mee-ahnz], which obey the Pauli [PAW-lee] exclusion principle, two or more of these particles may occupy the same quantum state. One example of these particles was discovered at CERN [surn] in 2012.  
  
 answer: bosons [BOH-zahnz] (accept Higgs bosons)  
  
 C. These bosons are hypothesized to mediate the strong nuclear force, holding together the quarks within protons and neutrons.  
  
 answer: gluons [GLOO-ahnz]  
  
<SCI, PHYS>

13. **This trigonometric function has no inflection points, but it does have an asymptote [AA-simp-“tote”] at x = pi over 2. Its square is both the derivative of the tangent function, and, according to a Pythagorean identity, equal to 1 plus the (\*)** tangent squared. In a right triangle, this function of an acute angle is the ratio of the hypotenuse to the adjacent side. For 10 points—name this function, the reciprocal of the cosine function.  
  
 answer: secant function (accept secant theta and similar answers that mention a variable)  
  
 <SCI, OTHER>

4. During the 1890s, the United Mine Workers advocated for a shorter working day. For 10 points each—  
  
 A. The union supported a working day of this many hours, which was also the focus of the first May Day Parade in 1886.  
  
 answer: 8 (accept eight hours or eight hour day)  
  
 B. In 1902 this president intervened in the Pennsylvania anthracite coal strike called by the UMW. It was the first time a president personally intervened in a labor dispute.  
  
 answer: Theodore Roosevelt (or Teddy Roosevelt or TR; prompt on “Roosevelt”)  
  
 C. In 1919 over 400,000 members of the union went on strike despite the opposition of this attorney general, whose namesake “raids” took place during the “Red Scare.”  
  
 answer: A(lexander) Mitchell Palmer (accept Palmer Raids)  
  
 <HIST, AMER>

14. **In one novella by this author, a stage show ends in violence after an Italian waiter kisses the hypnotist Cipolla [chee-POH-luh]. This author of Mario and the Magician also wrote a novel in which the “Frau Director” of the Berghof sells a thermometer to the protagonist, whose elevated temperature causes concerns of (\*)** tuberculosis [too-burk-yoo-LOH-siss]. For 10 points—what German author depicted Hans Castorp's time at a Swiss sanatorium in The Magic Mountain?  
  
 answer: (Paul) Thomas Mann [TOH-mahss MAHN]  
  
 <LIT, EURO>

6. In January 2016 Texas governor Greg Abbott proposed nine of these things and called for states to demand a convention to enact them. For 10 points each—  
  
 A. Name these things, of which only 27 have ever been ratified.  
  
 answer: amendments to the U.S. Constitution or U.S. Constitutional amendments (prompt on “amendment(s)”)  
  
 B. Abbott's nine proposed amendments included one to “allow a two-thirds majority of the States to override” this body's decisions.  
  
 answer: Supreme Court of the United States (accept equivalents such as U.S. Supreme Court; accept SCOTUS)  
  
 C. That proposal, and another requiring the votes of seven justices to “invalidate a democratically enacted law,” were widely perceived as backlash against this 2015 case that legalized same-sex marriage.  
  
 answer: Obergefell v. Hodges  
  
 <MISC., MISC.>

15. **In 2013 in this state Reverend William Barber began a series of “Moral Monday” protests against this state's governor, who signed the repeal of its Racial Justice Act. This state's former House Speaker, Thom [“Tom”] Tillis, joined Richard Burr in the U.S. Senate after defeating Democrat (\*)** Kay Hagan in a 2014 election fought partly on Governor Pat McCrory's record. For 10 points—name this Atlantic coast state governed from Raleigh.  
  
 answer: North Carolina  
  
 <CE, CE>

1. This body's name was proposed by a British schoolgirl named Venetia Burney. For 10 points each—  
  
 A. Name this object that used to be considered a planet but is now called a dwarf planet.  
  
 answer: (134340) Pluto  
  
 B. The prominent heart-shaped region photographed by New Horizons has been named in honor of this astronomer who discovered Pluto in 1930.  
  
 answer: Clyde (William) Tombaugh  
  
 C. This organization determined the reclassification of Pluto as a dwarf planet. This group of professional astronomers is abbreviated the IAU.  
  
 answer: International Astronomical Union (or Union astronomique internationale; prompt on “UAI”)  
  
 <SCI, OTHER>

16. **In this city, tensions were raised when the HMS Romney seized the smuggling ship Liberty and began impressing local sailors into the Royal Navy. After George Washington moved cannons captured from Fort Ticonderoga to this city's Dorchester Heights, the British evacuated it in 1776. In 1774 its (\*)** port was closed down by the Intolerable Acts. The Sons of Liberty destroyed cargo in—for 10 points—what city's “Tea Party”?  
  
 answer: Boston, Massachusetts (accept Boston Tea Party after “Tea Party”)  
  
 <HIST, AMER>

7. For 10 points each—name these 19th-century novels that describe the Battle of Waterloo:  
  
 A. Fabrizio [fah-BREED-zee-oh] del Dongo wanders on to the battlefield of Waterloo at the beginning of this novel by Stendhal [stawn-DAHL].  
  
 answer: The Charterhouse of Parma (or La Chartreuse de Parme)  
  
 B. 19 chapters of this Victor Hugo novel are devoted to Waterloo, where Thénardier [tay-nard-YAY] has a chance meeting with Colonel Pontmercy [“pawn-mare-SEE”].  
  
 answer: Les Misérables [lay mee-zay-RAHB] (or The Miserable Ones or The Wretched Poor; do not accept or prompt on “Les Miz”)  
  
 C. George Osborne dies at Waterloo after propositioning Becky Sharp in this novel by William Makepeace Thackeray.  
  
 answer: Vanity Fair (or Vanity Fair: A Novel without a Hero)  
  
 <LIT, EURO>

17. **In about 20 percent of people, this organ contains a benign cyst known as a Rathke's [RATH-kee's] cyst. Conditions that result from overactivity of this organ include Cushing's syndrome and acromegaly [AK-roh-MEG-uh-lee]. This part of the brain is connected to the hypothalamus [“hi”-poh-THAL-ah-muss] via a portal system. Its numerous cell types include the (\*)** gonadotropes [goh-NAD-oh-trohpz] that release FSH [“F-S-H”] and LH [“L-H”] to regulate sexual development. For 10 points—name this so-called “master gland.”  
  
 answer: (anterior) pituitary [pih-TOO-ih-tair-ee] gland (or hypophyseal gland or hypophysis cerebri; accept adenohypophysis; prompt on “brain” before “hypothalamus”)  
  
 <SCI, BIO>

0. Paul Hermann Müller won a 1948 Nobel Prize for discovering this substance's insecticidal qualities. For 10 points each—  
  
   
  
 Identify this pesticide, known by a three-letter abbreviation, which was criticized by Rachel Carson in her book Silent Spring.  
  
 DDT (or dichlorodiphenyltrichloroethane)  
  
 One bird threatened by DDT was this common raptor, the fastest member of the animal kingdom.  
  
 peregrine falcon [PEH-ruh-grin] (accept duck hawk; prompt on “falcon”; accept Falco peregrinus)  
  
 Müller carried out his work in this European country that is home to the headquarters of IUPAC [“EYE-you-pack”] and the World Health Organization.  
  
 Switzerland (or Swiss Confederation or Schweiz or Schweizerische Eidgenossenschaft or Confederation Suisse or Confederazione Svizzera or Confederaziun Svizra)  
  
 <SCI, OTHER>

18. **In 2015 one of these objects named Lovejoy was revealed to spew sugar and ethyl alcohol. One named Catalina, on a hyperbolic trajectory, was visible via binoculars in January 2016. In 2014 one of these objects named 67P [“67-P”] was revealed to have water ice on its surface by the lander Philae [“feel-eye”], part of the (\*)** Rosetta mission of the European Space Agency. For 10 points—name these objects whose tails point away from the Sun.  
  
 answer: comets  
  
 <CE, CE>

3. This song was covered by Alien Ant Farm, and is about a man who “left bloodstains on the carpet.” For 10 points each—  
  
 Name this song whose singer asks “Annie are you OK? Would you tell us that you're OK?” because she's been hit and struck by the title person.  
  
 Smooth Criminal  
  
 This original performer of “Smooth Criminal” sang “Wanna Be Startin Something” as the opening track to his album Thriller.  
  
 Michael Jackson  
  
 “Smooth Criminal” was released on this follow-up album to Thriller that included the single “Dirty Diana” and was titled for a song where Jackson announced “Your butt is mine.”  
  
 Bad  
  
 <TRASH, POP CULT>

19. **An early version of this law was put forth by Ibn Sahl in his 10th-century work On the Burning Instruments. Fermat's [fair-MAH'Z] principle implies this law because going further in the faster medium reduces the total time. This law predicts the (\*)** critical angle for total internal reflection, and it involves sines of angles of travel. The bending of waves entering a new medium is described by—for 10 points—what law of refraction?  
  
 answer: Snell's law (of refraction) (or Snell-Descartes or Snellius's law; prompt on ”(law of) refraction”)  
  
 <SCI, PHYS>

4. For 10 points each—answer the following about American political machines:  
  
 A. A so-called “regency” named after this state capital was opposed by Thurlow Weed. It came to an end in the 1830s after William Marcy lost a gubernatorial race.  
  
 answer: Albany (accept Albany Regency)  
  
 B. This leading member of the Albany Regency succeeded Andrew Jackson as president. The Panic of 1837 took place during his administration.  
  
 answer: Martin Van Buren  
  
 C. Fernando Wood and “Boss” Tweed were leaders of this political machine that controlled New York City throughout much of the 19th century.  
  
 answer: Tammany Hall (accept Society of St. Tammany or Sons of St. Tammany or Columbian Order or Tammany Society; prompt on “Tammany”)  
  
 <HIST, AMER>