QQBC Packet 20

1.  **In this novel, a grave near Brocklebridge Church finally gets a gravestone marked “Resurgam” fifteen years after the protagonist’s friend dies at Lowood School. This novel’s protagonist is locked up as a child by Sarah Reed and comforts her future husband after Grace Poole’s charge, (\*)** Bertha Mason, burns down Thornfield Hall. For ten points, name this Charlotte Bronte novel in which the title woman marries Mr Rochester.  
  
ANSWER: Jane Eyre  
  
<LIT, BRIT>

For ten points each, answer the following about heat given off during a chemical reaction.  
  
[10] This term describes any device that measures heat change during a reaction; examples include a “bomb” type. They generally involve a thermometer in a container of water, such that the heat given off by the reaction heats the water.  
  
ANSWER: (bomb) calorimeter  
  
[10] The thermometer measures the change in this quantity, given in units of degrees Celsius.  
  
ANSWER: temperature  
  
[10] In an exothermic reaction, heat is released from the system; assuming constant pressure, this quantity for the system decreases as a result. This quantity is the measurement of the heat content of the system.  
  
ANSWER: enthalpy (accept H)  
  
<SCI, CHEM>

2.  **The last words of one person to die exploring this location were "I am just going outside and may be some time." This region was the subject of the failed Nimrod and Endurance Expeditions, led by Sir Ernest (\*)** Shackleton, as well as the Terra Nova Expedition, which ended with the death of Robert Scott. For 10 points, name this continent on which, in December 1911, Roald Amundsen's team first reached the South Pole.   
  
Answer: Antarctica   
  
<HIST, WORLD>

The five-beat rhythm “triplet, quarter, quarter, two eighths, quarter” opens this piece and forms a drum ostinato in “History Has Its Eyes On You” from Act 1 of Hamilton. For ten points each,  
  
[10] Name this first movement of a seven-movement suite. The aforementioned rhythm evokes a militaristic motion throughout this piece, as contrasted with the “peaceful” movement that follows it.  
  
ANSWER: Mars, the Bringer of War (accept either or both names; do not accept or prompt [and definitely do not reveal!] The Planets)  
  
[10] ”Mars, the Bringer of War,” “Jupiter, the Bringer of Jollity,” and “Neptune, the Mystic” are among the seven movements of this suite. This work does not include movements for Earth or the then-undiscovered Pluto.  
  
ANSWER: The Planets  
  
[10] This English composer was inspired by astrology to write The Planets.  
  
ANSWER: Gustav Holst  
  
<FA, AUDIO>

3.  **In The Three Musketeers, studs containing these objects belonging to Anne of Austria are given to the Duke of Buckingham and stolen by Milady de Winter. Mathilda Loisel goes into debt to replace paste replicas of these (\*)** gemstones, one of which is “As Big as the Ritz” in an F. Scott Fitzgerald short story. For ten points, name this precious stone set into jewelry in Guy de Maupassant’s “The Necklace.”  
  
ANSWER: diamonds  
  
<LIT, OTHER>

Nikolai Milyutin organized zemstva for these people after Alexander II carried out their emancipation in 1861. For ten points each,  
  
Name these Russian peasants. ANSWER: serfs  
  
Alexander II was one of these Russian leaders. This position was abolished in 1917, shortly before the last of these rulers, Nicholas II, was executed.  
  
ANSWER: tsar of Russia  
  
Serfs fleeing bondage often joined groups of these people, peasant soldiers often conscripted by the tsar. Leaders of these people included Ivan Mazepa and Yemelyan Pugachev.  
  
ANSWER: Cossacks  
  
<HIST, EURO>

4.  **A parrot in this novel shrieks “Allez Vous-en!” [ah-LAY voo ZON] at passing cottage guests, and this novel’s protagonist cries upon hearing Mademoiselle Reisz’s [rize's] piano playing. The protagonist compares herself to the motherly Adele Ratignolle [rah-tih-nyoll] in her marriage to Léonce. She has an affair with Alcée Arobin [ah-roh-BAN] and falls in love with (\*)** Robert Lebrun, which ultimately leads to her suicide in the Gulf of Mexico. For 10 points, identify this novel about Edna Pontellier [pon-tell-ee-ay], a work by Kate Chopin [shoh-PAN].   
  
Answer: The Awakening   
  
<LIT, AMER>

Answer some questions about painters of landscapes, for 10 points each.   
  
[10] This founder of impressionism painted several landscapes of his garden in Giverny that prominently feature water lilies.   
  
Answer: (Oscar-)Claude Monet (do not accept “Manet”)   
  
[10] Thomas Cole, the painter of landscapes such as The Oxbow and The Titan’s Goblet, founded this American school of art named after a New York waterway.   
  
Answer: Hudson River School   
  
[10] This English painter created several landscapes of Dedham Vale and depicted a wagon crossing the river Stour in The Hay Wain.   
  
Answer: John Constable  
  
<FA, VISUAL>

5.  **This book describes a creature who “launch'd forth, filament, filament, filament out of itself,” and a narrator who “look’d up in perfect silence at the stars.” This collection contains “A Noiseless Patient Spider” and “When I Heard the Learn'd Astronomer” and this work honors (\*)** Lincoln with the poems “When Lilacs Last in the Dooryard Bloomed” and “O Captain! My Captain!” “Song of   
  
Myself” appears in, for 10 points, what poetry collection by Walt Whitman?   
  
Answer: Leaves of Grass   
  
<LIT, AMER>

This man wrote the familiar poem Auld Lang Syne, although Americans would have trouble recognizing it in its original dialect. For 10 points each:   
  
[10] Name this Scottish poet who wrote the epic poem Tam O’ Shanter and a poem about his nation’s historical Battle of Sherramuir.   
  
Answer: Robert Burns   
  
[10] Robert Burns wrote that his love was like a “red, red” one of these flowers “newly sprung in June”. Robert Herrick advised to gather the buds of this flower “while ye may” in To the Virgins, to Make Much of Time.   
  
Answer: rose   
  
[10] In this poem, Burns called the title pest a “crowlin ferlie” and “blastit wonner” and prays “And   
  
would some Power the small gift give us / To see ourselves as others see us!”   
  
Answer: To a Louse   
  
<LIT, BRIT>

6.  **This man used scotchpak to make his Silver Clouds exhibit, and made Silver Car Crash as part of his Death and Disaster series. This artist did much of his work at The Factory, where he painted a set of fifty images called the (\*)** Marilyn Diptych using silkscreen. He created thirty-two paintings with legends like “Chicken” and “Tomato.” For 10 points, name this American Pop artist who painted Campbell’s Soup Cans   
  
Answer: Andrew “Andy” Warhol(a), Jr   
  
<FA, VISUAL>

Identify some authors who favored musical themes, for 10 points each.   
  
[10] This poet of the Harlem Renaissance described walking down Lenox Avenue and hearing a “drowsy syncopated tune” in the poem “Weary Blues.”   
  
Answer: (James Mercer) Langston Hughes   
  
[10] This Japanese author included a waiter who whistles The Thieving Magpie in his novel The Windup   
  
Bird Chronicle, and used Beethoven’s Archduke Trio as a motif in his novel Kafka on the Shore.   
  
Answer: Haruki Murakami (accept Murakami Haruki)   
  
[10] This Russian author wrote about Pozdnyshev [POZ-nuh-shev], who kills his wife after she cheats on him with a violinist in The Kreutzer Sonata. This man also wrote War and Peace.   
  
Answer: Lev (or Leo) Nikolayevich Tolstoy   
  
<LIT, OTHER>

7.  **In this process, spliceosomes and ribozymes remove introns before exons leave the nucleolus. To begin this process, polymerase binds to a promoter like the TATA box and separates hydrogen bonds. In the elongation step, this process uses uracil to create a (\*)** single-stranded complementary polymer for gene expression. The product of this process can be used in translation. For ten points, name this process that creates messenger RNA from a strand of DNA.  
  
ANSWER: transcription  
  
<SCI, BIO>

This politician, a four-term governor and four-time failed Presidential candidate, is the most recent third-party candidate to earn Electoral College votes, doing so in 1968. For ten points each,  
  
Name this politician who “stood in the schoolhouse door” in 1963 to stop his state’s flagship university from admitting James Hood and Vivian Malone.  
  
ANSWER: George Wallace  
  
Wallace’s “stand in the schoolhouse door” was a short-lived attempt to fulfill his pledge for this concept “now,” “tomorrow,” and “forever.” Public schools in the U.S. were prevented from doing this by Brown v. Board of Education.  
  
ANSWER: segregation (accept “segregation now, segregation tomorrow, segregeation forever”; accept additional information, like segregating public schools; accept equivalent descriptions, like not integrating)  
  
Wallace’s plea for eternal segregation was made in his 1963 inaugural address as this state’s governor. Two years later, Martin Luther King led a civil rights march in this state from Selma to its capital, Montgomery.  
  
ANSWER: Alabama  
  
<HIST, AMER>

8.  **The Spitzer telescope operates in this range of the light spectrum. This region of light is used in spectroscopy to measure vibrating bonds. William Herschel discovered this non-visible type of light from the sun by measuring its (\*)** heating ability. For 10 points, name this region of electromagnetic radiation used in night vision goggles and thermal imaging that, unlike ultraviolet light, has longer wavelengths than visible light.   
  
Answer: infrared light (accept infrared radiation)   
  
<SCI, PHYS>

The gravitational form of this quantity is equal to mass times little G times height. For 10 points each,   
  
[10] Name this type of energy, symbolized U, that results from object’s position in a force field. A roller coaster at the top of a hill converts this energy into kinetic energy when it goes down.   
  
Answer: potential energy   
  
[10] The negative change in potential energy is equal to this quantity. This quantity also equals force times distance. Answer: work   
  
[10] The potential energy stored in this object is one-half times the namesake constant times displacement squared. When a mass is attached to one, it can undergo simple harmonic motion.   
  
Answer: spring (accept answers involving elastic material)   
  
<SCI, PHYS>

9.  **This integer is the smallest abundant number, as well as the square root of the largest perfect square in the Fibonacci sequence. A polyhedron with six vertices and eight faces will have this many edges. This value, represented in hexadecimal as (\*)** “C,” is the number of edges on a cube and the number of faces on a dodecahedron. For ten points, name this smallest integer divisible by both 4 and 6, the number of items in a dozen.  
  
ANSWER: twelve  
  
<SCI, OTHER>

The Thule people were ancestors of this ethnic group, displacing the Dorset culture shortly before the Little Ice Age broke the Thule into separate communities. For ten points each,  
  
Name this ethnic group of indigenous North Americans who live throughout the Arctic. Like the Yupik of Russia, these people have been classified as Eskimo, a term now often considered derogatory.  
  
ANSWER: Inuit people  
  
The Inuit live in Alaska, Greenland, and this country, the second largest by area in the world.  
  
ANSWER: Canada  
  
This newest Canadian territory was separated from the Northwest Territories in 1999. Its name translates to “our land” in Inuktitut, a primary Inuit language.  
  
ANSWER: Nunavut   
  
<GEO, GEO>

10.  **Canadian soldiers launched a failed amphibious raid on this body of water at Dieppe. Cities on this body of water include Le Havre, Calais lay], Brighton, and Dover, whose sheer white cliffs sit on the shoreline of this body of water. In 1994, a (\*)** Eurostar train tunnel underneath this body of water was opened. The islands of Jersey, Guernsey, and the Isle of Wight lie in, for ten points, what channel that separates France from the island of Britain?  
  
ANSWER: English Channel (accept English Channel after “channel” is read; accept The Channel before  
  
“channel” is read)   
  
<GEO, GEO>

For 10 points each, give the following about the aftermath of the 405 BCE Battle of Aegospotami [aygus-pah-tuh-mee].   
  
[10] At Aegospotami, Lysander led a rout of the Athenian navy, thus essentially ending this war over control of the Greek mainland.   
  
Answer: (Second) Peloponnesian War   
  
[10] Lysander was an admiral from this militaristic Greek city-state, which was traditionally more of a power in ground combat. After the Peloponnesian War, this city-state installed the Thirty Tyrants in Athens.   
  
Answer: Sparta (or Lacedaemon)   
  
[10] In addition to Sparta's installing of the Thirty Tyrants, they insisted that Athens tear down a set of these defensive structures. Sparta itself lacked these structures, claiming that their army itself was protection enough.   
  
Answer: city walls (accept the Long Wall(s))   
  
<HIST, OTHER>

11.  **This work stands opposite a fresco of the Crucifixion in the Santa Maria delle Grazie. One figure in this work spills a shaker of salt with his right arm while clutching a bag. Thomas raises his index finger on one side of the central man, who (\*)** stretches his arms over the table next to a very feminine Apostle John. For 10 points, name this mural by Leonardo da Vinci depicting the twelve disciples with Jesus at his final meal.   
  
Answer: The Last Supper (accept Il Cenacolo or L’Ultima Cena)  
  
<FA, VISUAL>

The “Bring Back Our Girls” hashtag was created in response to one of this group’s actions. For 10 points each:   
  
[10] Identify this Nigerian terrorist organization that gained international attention for abducting over 200 teenage girls from a secondary school in Chibok in April 2014. Their name is often translated as “Western education is forbidden.”   
  
Answer: Boko Haram (or People Committed to the Prophet's Teachings for Propagation and Jihad or Jama'atu Ahlis Sunna Lidda'Awati Wal-Jihad)   
  
[10] On the same day as the Chibok abduction, Boko Haram bombed a bus station in this Nigerian capital, causing nearly 300 casualties.   
  
Answer: Abuja   
  
[10] Boko Haram is funded and supported by a North African arm of this terrorist organization, currently led by Ayman al-Zawahiri, which orchestrated the attacks on September 11th, 2001.   
  
Answer: al-Qaida (or al-Qaeda)   
  
<HIST, WORLD>

12.  **Leos Janacek dedicated his Sinfonietta to the army of this country, his homeland. Bedrich Smetana's Ma Vlast depicts this country, including its Vltava River. Another composer from this modern country traveled to America, where he composed the American string quartet and the (\*)** From the New World symphony. Antonin Dvorak championed the folk music of, for 10 points, what European country, whose Vltava River flows through the capital of Prague?   
  
Answer: Czech Republic or Czechoslovakia   
  
<FA, AUDIO>

With James Hartle, this man described a model in which the beginning of the Universe is a singularity of space and time. For ten points each,  
  
[10] Name this Cambridge physicist whose popular science work, A Brief History of Time, describes black holes and other cosmological ideas to the non-scientist.  
  
ANSWER: Stephen Hawking  
  
[10] Hartle and Hawking’s singularity existed prior to this event, in which the universe quickly and greatly expanded out of a high-density state. The steady-state model competes with this theory, claiming that the universe is eternal.  
  
ANSWER: Big Bang  
  
[10] The steady state theory was largely discarded after the 1964 discovery of this phenomenon, the faint “glow” of radiation left over from the aftermath of the Big Bang. This phenomenon’s spectrum has a temperature of 2.7 Kelvin.  
  
ANSWER: cosmic microwave background radiation (accept CMBR; prompt on partial answers)  
  
<SCI, PHYS>

13.  **This artist painted a red curtain being pulled back, revealing a young George Washington gesturing to an axe, in Parson Weems’ Fable. In another work by this artist, three elderly women view Leutze’s Washington Crossing the Delaware. A work by this (\*)** Regionalist at the Art Institute of Chicago shows his sister Nan and their dentist holding a pitchfork in front of a farmhouse. For ten points, identify this painter of American Gothic.  
  
ANSWER: Grant Wood  
  
<FA, VISUAL>

For ten points each, answer the following about buoyancy.  
  
Archimedes’s Principle states that the amount of water displaced by a floating object is determined by this property of the object.  
  
ANSWER: mass  
  
If the object completely sinks, rather than floats, the amount of water displaced is equal to this other property of the object. This quantity, the amount of space an object occupies, is measured in liters.  
  
ANSWER: volume  
  
This scientist formulated the Hydrostatic Paradox from the fact that the pressure of a liquid depends only on its height. The SI unit of pressure is named for this Frenchman.  
  
ANSWER: Blaise Pascal  
  
<SCI, CHEM>

14.  **This work’s creator had earlier painted the title phenomenon Over the Rhone. Blue hills rise in the background of this painting, which was created in an asylum outside the French village of Saint Rémy [sahn reh-MEE]. A (\*)** cypress tree dominates this painting’s foreground, in front of a village illuminated by a swirling crescent moon. For 10 points, name this depiction of an evening sky created by Vincent van Gogh.   
  
Answer: The Starry Night (accept De sterrennacht [deh SHTEH-reh-nahkt])   
  
<FA, VISUAL>

Bosons are not subject to this principle because they have symmetric wave functions. For ten points each,  
  
Name this principle of quantum mechanics, named for an Italian scientist, which dictates that two fermions cannot share the same quantum state.  
  
ANSWER: Pauli exclusion principle  
  
The primary use of the Pauli exclusion principle describes the positioning of these negatively-charged particles around the nucleus of an atom.  
  
ANSWER: electrons  
  
Electrons, like all fermions, have a half-integer value for this quantity, one of the four quantum numbers. This quantity describes the angular momentum of a particle.  
  
ANSWER: spin (prompt on ms)   
  
<SCI, PHYS>

15.  **A textbook analysis of these reactions is often depicted in the two halves of a Galvanic cell. The mnemonic “OIL RIG” describes the process of these reactions. Decomposition is an example of this type of reaction, as is (\*)** combustion, because electrons are transferred from carbon to oxygen in the air. For ten points, name this type of chemical reaction in which oxidation states change, named for the pair of half-reactions that compose them.  
  
ANSWER: redox reactions (accept reduction-oxidation reactions; prompt on partial answers)  
  
<SCI, CHEM>

For ten points each, name the following countries that border Italy.  
  
Italy shares the Brenner Pass with this nation. In 2016, officials from Vienna lobbied for tighter border controls between Italy and this nation but were denied by the European Union.  
  
ANSWER: Austria  
  
Mont Blanc rises above the Italian border with this Alpine country.  
  
ANSWER: Switzerland  
  
Italy’s east is largely a coast on the Adriatic Sea, but its northeast region, including the city of Trieste, borders this country’s Karst Plateau.  
  
ANSWER: Slovenia  
  
<GEO, GEO>

16.  **A sample is vaporized and becomes this type of species for use in mass spectrometry. In an electrolytic solution, these species will collect at the anode and (\*)** cathode. Carbonate is a polyatomic example of these species with a minus-two charge. Plasma consists of these particles at high temperatures. For ten points, give this term for a chemical species created when electrons are removed or added to a neutral atom or molecule.  
  
ANSWER: ions (accept anions and/or cations)  
  
<SCI, CHEM>

For 10 points each, give the following about important uses of the number 1 in mathematics.   
  
[10] Because multiplying a real number by 1 does not change the value of the real number, 1 has this property for multiplication. This property is also held by 0 for addition.   
  
Answer: identity property (or identity element, or phrasings like "1 is the multiplicative identity") [10] A polynomial is called "monic" if the term of highest degree has a value of 1 for this quantity, the constant multiplier on a variable term.   
  
Answer: coefficient   
  
[10] According to Euler's Identity, 1 plus this exponential expression is equal to zero.   
  
Answer: e to the i times pi power (or e to the pi times i power)   
  
<SCI, OTHER>

17.  **The Darien Scheme was a failed attempt to create this structure. Ferdinand de Lesseps was arrested for bribery related to a plan for this structure, which failed due to landslides and yellow fever. The Hay-Bunau-Varilla Treaty allowed the (\*)** U.S. to build this structure after its country declared independence from Colombia. For 10 points, name this 48-mile long structure, whose three locks allow ships to cut across Central America.   
  
Answer: Panama Canal   
  
<HIST, WORLD>

A small dog stands at the feet of this painting’s central couple, and a convex mirror in the background reflects the painter. For 10 points each,   
  
[10] Name this painting, which shows the marital union of a man with a large hat and a woman in a green dress, a work by Jan Van Eyck [yahn van ike]   
  
Answer: The Arnolfini Wedding (accept The Arnolfini (Double) Portrait; accept Giovanni Arnolfini and His Bride; accept any other answer including “Arnolfini” and the suggestion of a wedding or marriage)   
  
[10] A mirror reflects a crowd of diners in the background of the painting A Bar at the Folies-Bergère [foh-LEE-bayr-JAYR], a work by this French realist, who also painted Olympia.   
  
Answer: Édouard Manet (do not accept Monet)   
  
[10] This popular American artist depicted himself looking in a mirror and sketching a much younger version of his face in a painting that appeared in the Saturday Evening Post.   
  
Answer: Norman Perceval Rockwell   
  
<FA, VISUAL>

18.  **This work's title character loses his wife Creusa while carrying his son and father from their burning city. The Cumaean Sibyl gives a vision in the underworld in Book Six of this work, whose first book opens "I sing of arms and the man." The title (\*)** Trojan prince courts the Carthaginian princess Dido before settling in Italy in, for 10 points, what Latin epic poem about the founding of Rome, written by Virgil?   
  
Answer: The Aeneid   
  
<LIT, OTHER>

One character in this novel, Fanny Robin, goes to the wrong church on what should have been her wedding day. For 10 points each,   
  
[10] Identify this Thomas Hardy novel in which William Boldwood kills Sergeant Troy, and Bathsheba Everdene marries Gabriel Oak.   
  
Answer: Far from the Madding Crowd   
  
[10] “Far from the Madding Crowd”’ is a line from this English author’s poem “Elegy Written in a   
  
Country Churchyard.”   
  
Answer: Thomas Gray   
  
[10] This author italicized five lines of Gray as the only part of a sonnet “of any value” in the preface to Lyrical Ballads, which included this author’s “Tintern Abbey” and Samuel Taylor Coleridge’s “The Rime of the Ancient Mariner.”   
  
Answer: William Wordsworth   
  
<LIT, BRIT>

19.  **One issue in this case was Dr. John Emerson's purchase of Harriet Robinson in the Wisconsin territory. This case was dismissed because the plaintiff did not have standing to sue; the opinion in this case then ruled that Congress could not ban (\*)** slavery in territories and ruled the Missouri Compromise unconstitutional. For 10 points, name this controversial 1857 Supreme Court case that ruled people of African descent could not be U.S. citizens.   
  
Answer: Dred Scott v. (John) Sanford (or Sandford)   
  
<HIST, AMER>

This man was cursed to wander the earth as punishment for committing the first biblical murder. For ten points each,  
  
[10] Name this son of Adam and Eve, who murdered his brother Abel in a jealous rage.  
  
ANSWER: Cain (accept Qayin)  
  
[10] The Curse of Canaan was given to the son of this man, whose mysterious crime was looking upon his father’s nakedness. This man was the youngest son of Noah.  
  
ANSWER: Ham  
  
[10] In the books of Matthew and Mark, Jesus placed a curse on a tree of this type after he discovered that it wasn’t yet in season to bear this type of fruit.  
  
ANSWER: fig tree  
  
<RMPSS, REL>

20.  **The title object of this musical composition is forged by Alberich. Its composer built a theater in Bayreuth [bi-ROYT] specifically to host this work, which takes 16 hours to perform over four nights. It ends with Brunnhilde riding into a (\*)** funeral pyre and the burning of the Hall of the Gods. Das Rheingold [RINE-gold], Die Walküre [dee VAL-koor], Siegfried, and Götterdämmerung make up, for 10 points, what epic four-opera "cycle" written by Richard Wagner [ree-kart VAHG-ner]? Answer: The Ring of the Nibelung (or The Ring Cycle or the Der Ring des Nibelungen; accept Das Rheingold before "16 hours" is read)   
  
<FA, OTHER>

When Nazi Germany invaded and conquered a country, they supported pro-German governments to rule the new territory. For 10 points each,   
  
[10] Philippe Pétain [pay-TAAN], a former war hero at the Battle of Verdun, was appointed leader of this puppet government in southern France, which signed a peace treaty with the Germans in 1940.   
  
Answer: Vichy France   
  
[10] This country allied with the Germans under Miklos Horthy until 1944, when the Soviet army invaded and Hitler replaced Horthy with Ferenc Szalasi. Shortly thereafter, the Soviets began a siege of this country's capital, Budapest.   
  
Answer: Kingdom of Hungary   
  
[10] As the Germans invaded Norway in 1940, this man led a Nazi-supported coup; he later led Norway as a collaborationist state. After the war, he was convicted of high treason and executed, and his name remains a Norwegian synonym for "traitor."   
  
Answer: Vidkun Quisling   
  
<HIST, EURO>