

**ACF Fall 2018**

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**Packet by Rutgers A, Cambridge B, and Florida**

**Tossups**

1. The third book of this text describes a city in which men are separated based on whether they originate from silver, iron, brass, or gold. A character in this text imagines a line and cuts it into two unequal sections; the shorter section represents the visual world, while the longer section represents the intelligible world. This text argues that education in gymnastics is essential for the guardian class. This dialogue opens with Glaucon accompanying a character to a celebration where Polemarchus and Thrasymachus define justice. The “Allegory of the Cave” appears in, for 10 points, what Socratic dialogue that defines an ideal city-state?

ANSWER: *The Republic* [or *Res Publica*]

2. A female engineer from this country invented a device used to solve engine stall in planes called “Miss Shilling’s Orifice.” Specially built “bouncing bombs” were used by a squadron of this country’s air force known as the Dam Busters. This country was the planned target of Operation Sea Lion. The leader of this country remarked “never in the field of human conflict was so much owed by so many to so few” to commend the service of its Hurricane and Spitfire pilots. For fifty-seven consecutive nights, the Luftwaffe [“LOOFT-vah-fuh”] bombed this country’s capital during the Blitz. For 10 points, name this country led through World War II by Winston Churchill.

ANSWER: United Kingdom [or Great Britain; prompt on England]

3. Little Walter was one of the first musicians to play this instrument with an amplifier. It’s not the guitar, but musicians playing this instrument often use “bending” to adjust the pitch of their notes. Benjamin Franklin is credited with inventing a supposedly-dangerous instrument of this name used in the “Aquarium” section of the *Carnival of the Animals*. This instrument plays solos near the beginning of Neil Young’s “Heart of Gold” and Billy Joel’s “Piano Man.” A comb and reed plates form the chambers of this instrument, which is alternatively known as a French harp. For 10 points, name this handheld instrument popular in blues music, sometimes called a mouth organ.

ANSWER: harmonica [or glass harmonica; accept French harp until mentioned; accept mouth organ until mentioned]

4. The posterior part of this bone is bent to form the gonial angles. This bone’s namesake “arch” is formed from segments known as Meckel’s cartilages, and is also known as the first pharyngeal arch. The hyoid bone sits at the base of this bone, which is separated by the zygomatic arch from the temporal bone. The muscles of mastication are inserted into this bone, which lies below the maxilla and, apart from the inner ear bones, is the only movable bone in the skull. For 10 points, the lower teeth are held in place by what bone used for chewing food?

ANSWER: mandible [or lower jaw; or jawbone; prompt on skull]

5. A drama major in one of this man’s novels is warned not to fall into the cold, dark “field well” by a woman who is grieving her boyfriend’s suicide. Philip Gabriel translated a novel by this author whose characters include a cat murderer named Johnnie Walker. That novel uses alternating bold and normal type to represent the “boy named Crow,” who lives in Miss Saeki’s library. This author’s most recent novel is *Killing Commendatore*. The map-obsessed Storm Trooper rooms with Toru Watanabe as he dates Naoko in one of this man’s novels, which takes its name from a Beatles song. For 10 points, name this Japanese author of *Kafka on the Shore* and *Norwegian Wood*.

ANSWER: Haruki Murakami [accept either underlined part]

6. In a region of this country, children celebrate Christmas Eve by feeding snacks to anthropomorphic “Christmas logs,” which “release” presents as excrement on Christmas morning. Roughly three-quarters of this country’s population participates in its annual Christmas lottery, which is the biggest lottery in the world. Revellers wearing white clothes and red scarves pray to Saint Fermin before participating in the *encierro* portion of a festival held in this country. Many pilgrims walk this country’s Way of St. James to visit the Cathedral of Santiago de Compostela. For 10 points, name this country where Pamplona hosts an annual “running of the bulls.”

ANSWER: Kingdom of **Spain** [or Reino de **España**]

7. This empire lost a naval squadron to a cyclone during a standoff with the United States in Apia Harbor. This empire poisoned desert wells and built the Shark Island prison camp during a military campaign sparked by Hendrik Witbooi’s rebellion. The “place in the sun” speech was delivered by this empire’s ruler, who initiated the Agadir crisis by sending the *Panther* gunboat to French-controlled Morocco. Africa was partitioned into European colonies at an 1884 conference hosted in this empire’s capital. This empire, which committed the Herero genocide, lost all of its African colonies in the Treaty of Versailles. For 10 points, name this empire ruled by Kaiser Wilhelm II.

ANSWER: **Germany** [or **Deutschland** or the **German** Empire]

8. This book’s 27th chapter outlines the “redemption of votive gifts,” or the redemption of vowed offerings. 1 Peter 1:16 cites this book’s repeated admonition to “be holy, because I am holy.” In this book, Nadab and Abihu are punished for using a “strange fire” to offer a sacrifice. This book’s description of casting a goat into the desert to drive away sin is the origin of the term “scapegoat.” Chapters 17 through 26 of this book are called the Holiness Code and lists rules for sacrifices and punishments for blasphemy. This book details instructions from God to the Israelites after they reached Mount Sinai. For 10 points, name this book that follows Exodus, the third book of the Old Testament.

ANSWER: Book of **Leviticus** [or **Vayikra**]

9. The hexahydrate of this compound, which generally forms very spiky or steep crystals, is called ikaite [eye-kay-ATE]. Parts of concrete can react with carbon dioxide to form this compound, which can cause corrosion. The depth after which this compound is no longer found in the ocean is its namesake compensation depth. Polymorphs of this compound include vaterite and aragonite. The Mohs scale of mineral hardness defines 3 as this compound’s most stable polymorph, calcite. Heating the solid form of this substance forms quicklime. For 10 points, name this chemical compound found in limestone with chemical formula  $\text{CaCO}_3$ .

ANSWER: **calcium carbonate** [or **CaCO<sub>3</sub>** until it is read]

10. In a poem by this writer, the speaker hopes that “dunghill mists away may fly” if they can “raise up thoughts above the sky.” This writer is said to have “moved, restless, waiting for the Governor” in an “homage” to this poet written by John Berryman. She describes a love “prized more than whole mines of gold” that “rivers cannot quench” in a poem that ends with the declaration “if ever two were one, then surely we.” This author of a poem dedicated to her “Dear and Loving Husband” remarks that her “hope and treasure lie above” in some “Verses upon the Burning of our House.” For 10 points, name this colonial era poet of *The Tenth Muse Lately Sprung Up in America*.

ANSWER: Anne **Bradstreet**

11. A King of Naples who married *into* this family ordered his executioners to shoot “straight to the heart but spare the face!” This family included a king who was ridiculed as the “Rabbit of Holland” for his poor Dutch, Louis I. The first modern German constitution was authored by a ruler from this family, King Jerome of Westphalia. The best known member of this family may have removed the “u” from its surname in order to conceal his origins as a minor Corsican nobleman. That member of this family came to power in the coup of 18 Brumaire but lost his empire at the Battle of Waterloo. For 10 points, name this family that produced Napoleon.

ANSWER: **Bonaparte** family [or **Buonaparte**; the first clue refers to Joachim Murat]

12. This artist used the term *croqueton* [“cro-kay-TAWN”] for the studies he made in preparation for paintings. Years after finishing a work, this artist restretched its canvas to add a border of red, orange, and blue. This painter of *Circus Sideshow* was promoted by the critic Félix Fénéon, who praised his use of chromoluminarism. This artist’s best-known painting features a man in red smoking a pipe in the bottom left. In that painting, an umbrella-holding woman with a monkey on a leash is one of a crowd of Parisians lounging along the River Seine. For 10 points, name this pointillist painter of *A Sunday Afternoon on the Island of La Grande Jatte*.

ANSWER: Georges **Seurat**

13. They’re not electromagnetic waves, but the namesake impedance of these things is measured in rayls [“rails”] per square meter and is equal to their namesake pressure divided by their namesake density. A-weighting can be used to quantify these things in relation to humans’ sensitivity to them. The deep scattering layer was discovered by probing with these things, which detected a “false bottom” in the ocean. The speed of these waves is equal to the square root of bulk modulus over density. The propagation of these waves are used by sonar to navigate underwater, and their namesake pressure is measured with decibels. For 10 points, name these waves that can reflect to form echoes.

ANSWER: **sound** waves [or **acoustic** waves]

14. A novel written in this language concerns Bartlebooth’s attempts to produce and solve 500 watercolor jigsaw puzzles. Experimental novels like *Life: A User’s Guide* and *A Void* were written in this language by members of the Oulipo [OOH-lee-poh] group. It isn’t English, but most of Samuel Beckett’s later works were written in this language. The protagonist of a novel written in this language travels to the Home for Aged Persons to attend the funeral of his mother, who died “today. Or, maybe yesterday.” Later, the protagonist of that novel inexplicably shoots an Arab on the beach. For 10 points, *The Stranger* was written in what language used by the writers Georges Perec and Albert Camus?

ANSWER: **French** [or **Français**]

15. A piece by this composer begins with a three chord motif with the syllables “Le-be-wohl” written across each chord. The opening *Grave* [GRAH-vay] movement of one of this composer’s sonatas begins with a long C minor fortissimo chord. This composer wrote pieces named *Les Adieux* [LAY ah-DYOO] and *Waldstein* during his “middle period.” A work by this composer instructs the performer to hold the sustain pedal throughout the entire piece and opens with slow right hand C-sharp minor triplets. That piece by this composer was inspired by Lake Lucerne and is subtitled *Quasi una fantasia*. For 10 points, name this composer of the *Moonlight Sonata*.

ANSWER: Ludwig van **Beethoven**

16. Robert Bellah used President Kennedy's inaugural address to illustrate the "civil" form of this phenomenon in America. Emile Durkheim claimed this phenomenon arose out of "collective effervescence." In a lecture on this phenomenon "as a Cultural System," Clifford Geertz defined it as a "system of symbols [that formulates] conceptions of a general order of existence." Edward Taylor and E. Evans Pritchard were among those who studied the "primitive" form of this phenomenon, seen in systems like totemism and animism. For 10 points, anthropologists often study the relationship between mythology and what belief systems, which can be polytheistic or monotheistic?  
ANSWER: **religion** [or civil **religion**; or primitive **religion**]

17. In this US state, a fort commanded by William Moultrie withstood a British siege because its soft wooden walls literally absorbed the cannonballs fired at it. The British occupation of this state was led by a general nicknamed "Butcher" due to his alleged participation in the Waxhaws massacre, Banastre Tarleton. Guerilla forces led by Francis Marion harassed redcoats in this state, which was the site of the Battle of Kings Mountain. British troops withdrew from this state after the Battle of Cowpens. Members of this state's militia were sometimes called "gamecocks." For 10 points, name this state where the British Army besieged Charleston.  
ANSWER: **South Carolina**

18. A quantity named for this man is squared in the denominator of the density parameter omega. In October 2018, a law originally named for this man was renamed in honor of its earliest formulator Georges Lemaître [luh-MET-ruh]. He developed a classification system which separates objects labelled 'S' and 'SB' on the prongs of a so-called "tuning fork." A constant first estimated as 500 kilometres per second per megaparsec appears in a law co-named for this man, which states that a galaxy's recession speed is proportional to its distance from Earth. For 10 points, many deep field photos of galaxies have been taken by what astronomer's namesake "space telescope"?  
ANSWER: Edwin **Hubble** [or **Hubble** parameter; or **Hubble** tuning fork; or **Hubble** constant; or **Hubble**-Lemaitre law; or **Hubble** Space Telescope]

19. A participant in this event uses a thick shoe made from pieces of discarded leather to hold a wolf's jaws open. The giant herdsman Eggthér plays his harp while the rooster Fjalar [FYAWL-ar] crows to announce this event. One participant in this event takes nine steps before collapsing from poison after killing a serpent that encircles the world. The giant Surtr [SURT] leads an army from Muspelheim to battle against the gods in this event, which is announced when Heimdall blows the Gjallarhorn [GYAWL-ar-horn]. Vidarr avenges his father Odin during this event by killing the wolf Fenrir. For 10 points, name this apocalyptic battle of Norse myth.  
ANSWER: **Ragnarök** [prompt on apocalypse, end of the world or equivalents]

20. This poet likens "crowds upon the pavement" to "fields of harvest wheat" in a poem describing his walk "down Bristol Street." Though mostly known for his poems, this author collaborated on plays like *The Ascent of F6* with his companion Christopher Isherwood. One of this man's poems claims that "accurate scholarship can unearth" what "huge imago made a psychopathic god," although even "schoolchildren know" that "those to whom is evil is done / do evil in return." This poet of "As I Walked Out One Evening" sits in a dive bar on 52nd Street at the beginning of a poem which proclaims "we must love one another or die." For 10 points, name this poet of "September 1, 1939."  
ANSWER: W. H. (Wystan Hugh) **Auden**

Tiebreaker. An extended form of this function is defined as the integral from zero to infinity of “ $x$  to the  $z$  minus 1 times  $e$  to the negative  $x$ ”. The “hyper” form of this operation gives the number 27,648 for an input of 4. The Taylor series of the exponential function has denominators involving this function, which is extended to all real numbers by the gamma function. The sum from “ $n$  equals zero” to infinity of 1 over this function of  $n$  gives the number  $e$ . This function is applied to give the number of permutations of  $n$  objects. For 10 points, name this function that, for  $n$ , gives the product of the natural numbers from 1 to  $n$ .

ANSWER: **factorial** function [or  $n$  **factorial**]

## Bonuses

1. This artist arranged 72 objects, including a loaded pistol and an axe, to be used however audience members desired for the 0th entry of her *Rhythm* series. For 10 points each:

[10] Name this performance artist who gained prominence through her collaborations with Ulay. She invited museum visitors to sit across a table from her in her performance *The Artist Is Present*.

ANSWER: Marina **Abramovic**

[10] *The Artist is Present* was performed at the Museum of Modern Art in this city. A 1989 poster by the Guerrilla Girls notes that “less than 5% of the artists are women, but 85% of the nudes are female” in the Modern Art section of this city’s Met Museum.

ANSWER: **New York** City [or **NYC**]

[10] This Japanese performance artist allowed audience members to cut pieces of her dress in *Cut Piece*. Along with her husband, John Lennon, she protested the Vietnam War by lying in a hotel bed for two weeks.

ANSWER: Yoko **Ono**

2. Isaac Asimov used this poet’s “Venus and Adonis” to speculate that he had harbored romantic feelings for the Earl of Southampton. For 10 points each:

[10] Name this poet whose “Fair Youth” sonnets may be about a male lover, although he also wrote poems dedicated to a “Dark Lady.” Willie Hughes is named as his lover in the short story “The Portrait of W.H.”

ANSWER: William **Shakespeare**

[10] This author of the aforementioned “Portrait of W.H.” was imprisoned in Reading Gaol [RED-ing JAIL] for pursuing sexual relationships with other men, including Alfred Douglas. He wrote *The Importance of Being Earnest*.

ANSWER: Oscar **Wilde**

[10] Biographer Rene Weis suggested that Shakespeare had an affair with this playwright. The title English king lusts after his male attendant Piers Gaveston in this man’s play *Edward II*.

ANSWER: Christopher **Marlowe**

3. A Saxon chronicler of this name wrote the *Res gestae saxonicae* while living in Corvey Abbey. For 10 points each:

[10] Give this name shared by that historian and his ancestor, a king of the Saxons who resisted Charlemagne’s attempts to conquer and Christianize his people.

ANSWER: **Widukind**

[10] The second and third books of Widukind’s *Res gestae saxonicae* describe the rule of this Duke of Saxony. This victor at the Battle of Lechfeld was crowned the first German Holy Roman Emperor in 962.

ANSWER: **Otto the Great** [or **Otto I**]

[10] At Lechfeld, Otto put an end to the westward invasions of this Carpathian tribe. This ethnic group was unified by Stephen I, who is venerated by this ethnicity’s modern descendents at a namesake basilica in Budapest.

ANSWER: **Magyars** [or **Hungarians**]

4. The Gibbs free energy change of an electrochemical cell reaction is equal to the product of -1, Faraday's constant, the number of electrons transferred, and this quantity. For 10 points each:

[10] Name this property of galvanic cells, which is measured in volts. This quantity is positive if current can flow from the anode to the cathode.

ANSWER: electrode **potential** difference [or **voltage**; or **electromotive force**; or **redox potential**; prompt on "reduction potential"; prompt on "oxidation potential"]

[10] This equation gives the electrochemical potential of a galvanic cell as a function of concentrations and temperature. It is named for a German chemist who formulated the third law of thermodynamics.

ANSWER: **Nernst** equation

[10] Electrochemical cells use many kinds of standard electrodes. A very common one is the saturated calomel electrode, which contains this element and its chloride.

ANSWER: **mercury** [or **Hg**]

5. The text of this civilization's creation myth was preserved in written form by Friar Francisco Ximenez. For 10 points each:

[10] Name this civilization whose creation myth, known as the Popol Vuh, tells of how the Hero Twins journeyed to Xibalba [chi-BAWL-bah] to defeat the Lords of the Underworld.

ANSWER: **Mayan** civilization

[10] After the Hero Twins defeated the Xibalbans in the ball game, they were burnt in a great oven before being regenerated in the form of these animals. In Japanese mythology, one of these animals named Namazu causes earthquakes.

ANSWER: **catfish** [prompt on **fish**]

[10] In Mayan mythology, it is believed that humans were created from this crop. The Maya would wash and hull this crop through nixtamalization to make food such as tortillas and tamales.

ANSWER: **maize** [or **corn**]

6. A man with this surname is called a "lamb among men" in James Russell Lowell's *A Fable for Critics*. For 10 points each:

[10] Give this surname of Amos Bronson, who founded the Fruitlands commune. Amos' daughter, who shares this surname, satirized her father in *Transcendental Wild Oats* and wrote three novels about the students of Professor Bhaer's Plumfield Estate School.

ANSWER: **Alcott** [accept Amos Bronson **Alcott** or Louisa May **Alcott**]

[10] Elsewhere in *A Fable for Critics*, Lowell claims that feeling emotional in the presence of this poet is akin to "being stirred up with the very North Pole." This poet wrote "To a Waterfowl" and "Thanatopsis."

ANSWER: William Cullen **Bryant**

[10] Lowell also feuded with this author, who he accused of creating unrealistic female characters. A Mark Twain essay titled for this author's "Literary Offenses" mocks a scene from one of his novels in which Natty Bumppo shoots a nailhead from a thousand yards.

ANSWER: James Fenimore **Cooper**

7. This building sits across the street from the Menil Collection. For 10 points each:

[10] Name this octagonal building in Houston, Texas whose entrance features Barnett Newman's *Broken Obelisk* over a reflecting pool designed by Philip Johnson. It houses 14 black-hued canvases created by an artist who also painted the Seagram Murals.

ANSWER: **Rothko Chapel** [prompt on partial answer]

[10] Mark Rothko's large canvases of flat, solid colors are considered part of the "color-field" branch of this art movement, which critic Clement Greenberg contrasted with so-called "action painting."

ANSWER: **abstract expressionism** [prompt on partial answer]

[10] This action painter's extensive use of "drip painting" in works like *Lavender Mist* and *Autumn Rhythm* inspired his nickname "Jack the Dripper."

ANSWER: Jackson **Pollock**

8. A San Francisco theater collective named for this group organized free stores, clinics, and concerts in the Haight-Ashbury District during the Summer of Love. For 10 points each:

[10] Name this proto-anarchist group led by Gerrard Winstanley that opposed the enclosure of British land in the 17th century. Members of this group practiced communal farming on St. George's Hill in Surrey.

ANSWER: the **Diggers** [or the **True Levellers**; do not accept or prompt on "Levellers"]

[10] The Diggers agitated during the reign of this Lord Protector of England. He commanded the New Model Army during the English Civil War.

ANSWER: Oliver **Cromwell**

[10] Like the Diggers, these 19th century English dissenters are often described as articulating an early form of Marxism. These disgruntled textile workers, who opposed the industrialization of their jobs, often destroyed factory machinery at their protests.

ANSWER: the **Luddites**

9. Because it depletes the amount of available plankton, infestations of this species in the Missouri and Mississippi Rivers have threatened populations of the American paddlefish. For 10 points each:

[10] Name this species of mollusk that was originally native to southern Russian and Ukrainian lakes.

ANSWER: **zebra mussel** [or *Dreissena polymorpha*; prompt on partial answer]

[10] Zebra mussels are commonly classified as one of these organisms, which are introduced to a non-native area and often outcompete other local species for resources. Kudzu is one of these organisms.

ANSWER: **invasive** species

[10] An invasive species that feeds on marsh plants in Louisiana, the nutria, is a member of this largest mammalian order. Members of this order such as the capybara often gnaw on objects with their large incisors.

ANSWER: **rodents** [or **Rodentia**]

10. With his mentor W. V. O. Quine, this philosopher is the co-namesake of an indispensability thesis about mathematical realism. 10 points each:

[10] Name this philosopher who illustrated his claim that "meaning just ain't in the head" with a thought experiment about an alternate version of earth where the chemical symbol for water is "XYZ."

ANSWER: Hilary (Whitehall) **Putnam**

[10] Putnam's "Twin Earth" thought experiment argues for the externalist view of this concept, which, broadly speaking, is the study of meaning in language. In linguistics, this concept is typically contrasted with syntax.

ANSWER: **semantics**

[10] Hilary Putnam is also known for his functionalist theory of this entity. Dualists believe that this entity is fundamentally different than the body.

ANSWER: the **mind**



11. This man sponsored a 1935 anti-lynching bill with Edward Costigan that failed to pass Congress. For 10 points each:

[10] Name this New York senator whose namesake legislation, passed in 1935, created the National Labor Relations Board and guaranteed collective bargaining rights to unions.

ANSWER: Robert F. **Wagner**

[10] The Wagner Act was signed into law by this president, who sought to win labor union support for his New Deal policies.

ANSWER: **Franklin Delano Roosevelt** [or **FDR**; prompt on **Roosevelt**]

[10] Before he was a senator, Wagner chaired New York's investigation of this clothes company. A 1911 fire in this company's Manhattan factory killed 146 of its mostly female garment workers.

ANSWER: **Triangle Shirtwaist** Company [or **Triangle Shirtwaist** Factory fire]

12. In a 1981 study by Brewer and Treyns, participants' failures to recall a picnic basket and wine bottle in an office space were attributed to the influence of these things. For 10 points each:

[10] Name these frameworks popularized in the studies of British psychologist Frederic Bartlett. Responsible for processing and categorizing information, they can be utilized through assimilation and accommodation.

ANSWER: **schemas** [or **schemata**]

[10] This Swiss psychologist was inspired by Immanuel Kant to introduce the psychological schema. He is better known for proposing four stages of cognitive development.

ANSWER: Jean **Piaget**

[10] The "internalization of schemas," along with the development of skills like language and object permanence, conclude this first of Piaget's four stages. It is followed by the preoperational stage.

ANSWER: **sensorimotor** stage

13. Women in this "romance of many dimensions" are represented by lines. For 10 points each:

[10] Name this Edwin Abbott novella whose protagonist, A Square, is arrested after suggesting a third dimension can be reached by traveling "upward, not northward."

ANSWER: **Flatland: A Romance of Many Dimensions**

[10] The Time Traveller characterizes the four dimensions as "length, breadth, thickness, and duration" in this author's *The Time Machine*. Smoke and heat rays rain down on Earth in his *The War of the Worlds*.

ANSWER: H. G. (Herbert George) **Wells**

[10] A group of power hungry Fourth Dimensionists attempt to colonize Earth in this author's *The Inheritors*. This author of *Nostromo* wrote about Legatt hiding aboard a captain's ship in his short story "The Secret Sharer."

ANSWER: Joseph **Konrad** [or Jozef Teodor **Konrad** Korzeniowski]

14. Adherents of this religious text sometimes show their reverence for it by fanning it with peacock feathers. For 10 points each:

[10] Name this religious text written in the Gurmukhi script. This text is divided into 31 ragas and contains 1,430 *angs*, or "limbs."

ANSWER: **Adi Granth** [or Adi Sri **Granth** Sahib Ji; or Guru **Granth** Sahib; or **Granth** Sahib]

[10] The Adi Granth is the living Guru of this religious faith that originated in Punjab. Many adherents of this religion do not cut their hair and wear turbans.

ANSWER: **Sikhism**

[10] *Kesh*, uncut hair covered by a turban, is one of this many Ks of Sikhism, another of which is *kirpan*, a small dagger. This many men made up the Panj Pyare, the first group of people to be baptized into Sikhism.

ANSWER: **five**

15. Answer the following about the mathematician Évariste Galois [AY-vuh-reest gal-WAH], for 10 points each:

[10] Galois introduced his namesake theory to study the roots of these expressions. The zeroes of these expressions with degree two can be found using the quadratic formula.

ANSWER: **polynomials** [or quadratic **polynomials**]

[10] Galois laid the foundations for the “theory” of these structures that consist of a set of elements along with an operation on those elements. The set of integers together with addition constitutes one of these structures.

ANSWER: **groups** [or **group** theory]

[10] This French mathematician declared Galois’ work on the theory of equations to be “incomprehensible.” In his namesake discrete probability distribution, the variance and expected value are equal.

ANSWER: Siméon Denis **Poisson** [or **Poisson** distribution]

16. Jean-Baptiste Lully wrote many “grand” pieces in this genre, including “O Lachrymae.” For 10 points each:

[10] Name this genre of polyphonic sacred choral pieces exemplified by Josquin des Prez’s [“jo-SCAN de pray’s”] “Ave Maria ... Virgo Serena.” Medieval era pieces in this genre were traditionally constructed as a discant over a cantus firmus.

ANSWER: **motets**

[10] This composer wrote a set of motets that include his pieces “Jesu, meine Freude” and “Der Geist hilft unser Schwachheit auf.” [“SCHVOCK-hite OFF”] This composer also wrote the *St. Matthew’s Passion* and the *Goldberg Variations*.

ANSWER: **Johann Sebastian Bach** [prompt on **Bach**]

[10] Bach’s other choral works include various pieces in this genre, such as one named for its key signature, B minor, and one written “for the Dresden court.” Pieces in this genre typically include a section titled “Kyrie”

[KEER-ee-ay].

ANSWER: **masses**

17. In this state, a gang of suspiciously well-dressed Republican protesters tussled with election canvassers in the Brooks Brothers riot. For 10 points each:

[10] Name this state in which “butterfly ballots” and “hanging chads” caused widespread confusion during the 2000 presidential election.

ANSWER: **Florida**

[10] Florida’s electoral votes were eventually awarded to this then-Governor of Texas, giving him the presidency over his democratic rival Al Gore.

ANSWER: George **Walker Bush** [or George **Bush, Jr.**; prompt on partial answer; prompt on **Dubya**; do not accept or prompt on “George HW Bush” or “George Bush, Sr.”]

[10] Some blame Gore’s Florida loss on the scandal surrounding this Cuban boy, who was forcibly removed from Florida to be returned to his father’s custody in Cuba.

ANSWER: Elián **González** [prompt on **Elián**]

18. Bertolt Brecht coined the term “alienation effect” in an essay about the dramatic tradition of this country, which notes how an actor from this country “makes it clear that he knows he is being looked at.” For 10 points each:

[10] Name this non-European country whose verse play *The Chalk Circle* inspired Brecht to write *The Caucasian Chalk Circle*. Another Brecht play set in this country is about a prostitute who cross-dresses as her fictional cousin to maintain a tobacco shop.

ANSWER: **China** [the other Brecht play is *The Good Woman of Szechuan*]

[10] Brecht’s *Caucasian Chalk Circle* takes place on a collective farm in this country. This country’s leader Joseph Stalin urged writers to think of themselves as “engineers of the human soul.”

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

[10] Brecht’s theory of “epic theatre” rejects this man’s belief that a tragic play should provoke catharsis in its audience. In his *Poetics*, this man argues that a play should take place over 24 hours in a confined location, a theory referred to as this philosopher’s “unities.”

ANSWER: **Aristotle** [or **Aristotelian unities**]

19. A song named for this thing’s “King” mostly consists of random Spanish and Italian phrases, like “quando para mucho mi amore de felice corazón.” For 10 points each:

[10] Name this thing. It is the only noun in the title of a song by the same band with the lyrics “little darling / it’s been a long cold lonely winter.”

ANSWER: the **sun** [also accept “Here Comes the **Sun**” or “**Sun King**”]

[10] “Here Comes the Sun” and “Sun King” were performed by this British band, whose “Fab Four” consisted of Paul, George, John and Ringo.

ANSWER: the **Beatles**

[10] This Beatles’ song describes a “limitless undying love that shines around me like a million suns.” Its chorus notes “nothing’s going to change my world,” and repeats the mantra “Jai Guru Deva.”

ANSWER: “**Across the Universe**”

20. This unit was officially adopted as a measurement unit in its namesake “Convention” held in 1875, which established the International Committee for Weights and Measures. For 10 points each:

[10] Name this base SI unit for measuring length. It was initially standardized with a bar made of platinum and iridium.

ANSWER: **meter**

[10] From 1960 to 1983, the meter was defined in terms of the wavelength of a spectral line of this element’s isotope 86. Discovered by William Ramsay, this noble gas is often produced in the fission of uranium.

ANSWER: **krypton** [or **Kr**]

[10] In 2002, the CIPM declared that the meter should only be used on small length scales due to this theory’s effects. This theory, developed by Einstein, describes how gravity arises due to spacetime curvature.

ANSWER: **general relativity** [or **GR**; prompt on **relativity**; do not accept or prompt on “special relativity”]

Tiebreaker. Semyon Dezhnev discovered this man's namesake body of water eighty years before he did. For 10 points each:

[10] Name this Danish-born Russian navigator who led the Great Northern Expedition into Alaska. He also led to expeditions to explore Kamchatka.

ANSWER: Vitus **Bering**

[10] Explorers for the Russian-American Company established Fort Ross in this modern U.S. state in 1812 to supply their Alaskan settlements with food.

ANSWER: **California**

[10] This Russian explorer was the first human to reach the final frontier: space. This cosmonaut left the atmosphere in the Vostok 1 capsule in 1961, kicking off the Space Race with the U.S.

ANSWER: Yuri **Gagarin**

EXTRAS

Name these characters used in Java syntax, for 10 points each:

[10] In Java, comments are indicated using two instances of this symbol. In HTML, closing tags contain this symbol along with one or more letters inside angle brackets.

ANSWER: forward **slash** [or **oblique**; or **virgule**]

[10] This symbol, which is used to indicate "printf" ["print eff"] format specifiers in C, denotes the modulus operator in Java.

ANSWER: **percent** sign

[10] This symbol denotes the ternary operator in Java. In many C-like languages, it is used to declare nullable types.

ANSWER: **question** mark

One of this author's novels begins with vultures entering the presidential palace. For 10 points each:

[10] Name this author of *The Autumn of the Patriarch*. Although his best-known novel, *One Hundred Years of Solitude*, is most closely associated with magical realism, he is also considered a part of the Latin American Boom.

ANSWER: Gabriel **García Márquez** [prompt on partial surname]

[10] This Peruvian Boom author depicted a fictionalised Rafael Trujillo in his book *The Feast of the Goat*. He also wrote a radio play-filled novel about the relationship between *Aunt Julia and the Scriptwriter*.

ANSWER: Mario **Vargas Llosa** [prompt on partial surname]

[10] Both *The Autumn of the Patriarch* and *The Feast of the Goat* belong to this genre of Latin American literature, in which the main antagonist is always a caudillo [kaw-DEE-yo]. Other novels written in this genre include *Facundo* and *Yo el supremo*.

ANSWER: the **dictator novel** [or la **novela** del **dictador**; prompt on partial answer]