

2016 SOLON

PACKET 10:

TOSSUPS:

1. **This man ordered B-29s to bomb Sinuiju-An-tung and Chong Chon if air raids from those areas occurred. After ordering his troops to cross the Yalu River, this general was discharged and replaced by Matthew Ridgway under President (\*) Truman. After fleeing the Philippines, this man famously said “I came through and I shall return.”** FTP, name this American leader of the allied forces in the Pacific Theater of World War II.

ANSWER: Douglas MacArthur [GP]

2. **Brahms’ symphony of this number has a F-Ab-F motif symbolizing his motto “Frei aber Froh,” or “Free but happy.” A symphony of this number has a C minor funeral march, and was first dedicated to (\*) Napoleon. Tchaikovsky’s symphony of this number is his only one in a major key and is called “Polish.”** FTP, give this number of movements in a traditional concerto, the number of Beethoven’s “Eroica” symphony, and the number of musicians in a piano trio.

ANSWER: 3 (accept 3rd Symphony) [credit]

3. **This corresponds to the time-invariant generators of a symmetry group, and specifically, to the to the Hamiltonian. They are associated with conserved quantum numbers or the eigenvalue of Q. The Noether type of this implies a “conserved current” and the (\*) “color” type of this applies to quarks and gluons and relate to the strong force. This can refer to QCD or electromagnetism but most of the time as an electrical force.** FTP, name this property of matter that is experienced in an electromagnetic field.

ANSWER: Charge [ND but needs rewrite]

4. **Temples built to this god were made circular to minimize wind resistance. In order to recreate man, this god had to play a trumpet made from a conch shell, which he was taught to do by bees. He created man for the fifth time by (\*) sprinkling his blood on bones from the underworld, and he has a dog-headed brother called Xolotl. Montezuma may have thought Hernan Cortes was this god.** FTP, name this feathered serpent god from Aztec mythology.

ANSWER: Quetzalcoatl [GP]

5. **A person who formerly held this job goes fishing at “Big Two-Hearted River.” A deafmute play-acts at this job in “Chickamunga.” Some of them who work on Pianosa include Orr and a man who censors letters as “Washington Irving,” Yossarian. A (\*) “Tattered” person with this job watches another one named Jim Conklin die.** FTP, name this job of Nick Adams, Henry Fleming in *The Red Badge of Courage* and Major Major Major Major in *Catch-22*.

ANSWER: Soldiers (or clear-knowledge equivalents) [CS]

6. **While Rousseau claimed cold climates made people more rational, this man claimed cold climates produced icy personalities and vice versa. Uzbek tells Mirza the Fable of the Troglodytes in his (\*) *Persian Letters*. His most famous work advocates adapting a government to its people's culture, and using the separation of powers then found in England. FTP, name this French author of *The Spirit of the Laws* whose thought influenced the U.S. Founding Fathers.**

ANSWER: Baron **Montesquieu** (accept Charles de **Secondat**) [CS]

7. **This plant tissue's branching pattern is described by Murray's Law, and unlike other vascular tissue, this tissue only carries its namesake sap one way. Root pressure and transpirational pull move sap in this tissue as described by the (\*) cohesion-tension theory. It is made of tracheids and its dead cells become wood. FTP, name this vascular tissue found in plants that transports water up from the roots, contrasted with the downward-trending phloem.**

ANSWER: **Xylem** (prompt "plant vascular tissue" before mention; do not accept or prompt on phloem) [RM]

8. **This ruler undertook a Grand Embassy which failed to receive support for a crusade against the Ottomans, which ended when this leader's half-sister Sophia instigated the Streltsy revolt. This monarch created the nation's first naval base at Taganrog, and created a Table of (\*) Ranks to reorganize the civil service. Among this ruler's other Westernizing efforts was a beard tax on the boyars. FTP, name this Tsar who named a "window to the west" on the Neva after a namesake saint.**

ANSWER: **Peter the Great** (accept **Peter I** or **Peter Alexeyvich**, accept "Pyotr" for "Peter" in all cases, prompt "Peter" or "Pyotr" alone) [CS]

9. **This man collaborated with his rival Francesco Borromini on St. Peter's Baldachin, and one of this man's works faces Borromini's Church of St. Agnes in the Piazza Navona. In one of this sculptor's works, the barefoot title figure sits on a cloud as a smiling angel holds an (\*) arrow. Another of this artist's works features a giant obelisk as well as figures representing the Danube and Ganges. FTP, name this Baroque sculptor of *Ecstasy of St. Theresa* and *Fountain of the Four Rivers*.**

ANSWER: Gian Lorenzo **Bernini** [the work in the Piazza Navona is *Fountain of the Four Rivers*] [TB]

10. **Ezra Pound claimed a poem about "petals on a black, wet bough" was inspired by other works in this form. Issa primarily wrote in this form. One of these poems begins "Squalls shake the banana tree," and another is about a monkey wanting a (\*) raincoat. These poems are collected in *The Narrow Road to the Deep North*. The most famous is about a frog's "plop" into the water. FTP, Basho wrote what 17 morae Japanese poems?**

ANSWER: **Haiku** (or **Hokku**) [The Ezra Pound poem is "In a Station of the Metro;" all other haikus mentioned are by Basho] [CS]

**11. This disease is the subject of Knudson's two-hit hypothesis. Mutations in BRCA1 and 2 increase susceptibility to one form of this disease, and cells produce excess telomerase if affected by this disease. Genes that cause this disease are known as (\*) oncogenes, and forms of it can develop from HPV infection. The spread of cells affected by this disease is known as metastasis. FTP, name this disease characterized by uncontrolled cell division that results in tumors.**

**ANSWER: Cancer** (accept any specific type of cancer such as "breast cancer," etc.) [Mutations in BRCA1 and 2 are linked to breast cancer] [RM]

**12. In a poem in this collection, the poet tells his beloved "yet you will be like this corruption," a corpse he found on a walk. Another poem compares poets to birds whose wings are too awkward and heavy to fly with. "The Albatross" and "The Litanies of (\*) Satan" appear in this collection. Another poem calls the reader "Ennui," "my brother," and a "hypocrite." "Wine" and "Spleen and Ideal" are sections in, FTP, what Charles Baudelaire collection?**

**ANSWER: Les Fleurs du Mal** (or The Flowers of Evil) [CS]

**13. During this battle, professional soldiers called housecarls fought on the losing side, and this battle was preceded by Harald Hardrada's defeat at Stamford Bridge. The losing side's commander supposedly died after taking an arrow to the (\*) eye. That death scene is depicted on the Bayeux Tapestry, which chronicles this battle. FTP, name this 1066 battle, a victory against Harold Godwinson for William the Conqueror that gave him the throne of England.**

**ANSWER: Battle of Hastings** [TB]

**14. Kurtosis is a measure of how much a given distribution deviates from this mathematical object. According to the Central Limit Theorem, the distribution of sample means of any distribution converges to this type of distribution. They are defined in terms of their (\*) mean and variance and are described by the 68-95-99.7 rule, which is also known as the empirical rule. FTP, name this type of probability distribution that is shaped like a bell.**

**ANSWER: Normal** Distribution (accept Gaussian Distribution, accept bell curve before mentioned) [EF]

**15. The San Fernando Valley decided not to secede from this city in 2002. This city is home to the Mexican-influenced Olvera Street and the Griffith Observatory. Hancock Park in this city contains the La Brea Tar Pits, and Frank Gehry designed its (\*) Walt Disney Concert Hall. Its suburbs include Venice Beach and Anaheim, the home of Disneyland. FTP, name this largest city in California, which contains Hollywood.**

**ANSWER: Los Angeles**, California (accept L.A.) [PP]

**16. Fifty-eight variations of this painting were made by Pablo Picasso. Mariana of Austria is depicted in the back of this painting, and it depicts a room in the Alcazar Palace with a large brown dog resting at its bottom. In the left of this painting, the (\*) artist himself can be seen working on a canvas, and one of the title figures offers a drink to the central Infanta. FTP, name this painting of the family of Philip IV of Spain, created by Diego Velazquez.**

**ANSWER: Las Meninas** [CS]

**17. This figure's birth is celebrated on the holiday of Vesak, which in some areas includes releasing birds and animals. This figure preached to a murderer who wore his victims' fingers on a necklace, and his delivery of the (\*) Fire Sermon is recounted in the Pali Canon. After seeing an old man, a sick man, and a corpse he began to ponder suffering, and he attained enlightenment under a bodhi tree. For ten points, name this founder of a namesake religion, born Siddhartha Gautama.**

**ANSWER: Buddha** (accept either of Siddhartha Gautama before mentioned, accept Shakyamuni) [TB]

**18. This city's government was targeted in the Coup of the Four Hundred, and this city was besieged by Pausanias. After a major defeat for this city, Lysander installed the Thirty Tyrants to govern it, and this city was also forced to destroy its (\*) Long Walls after losing the Battle of Aegospotami to its rival. This city was once led by Pericles and it was the foremost power in the Delian League. FTP, name this city who lost to Sparta in the Peloponnesian War.**

**ANSWER: Athens** [CS]

**19. Jon Stewart hit this man with a chair at SummerSlam 2015, and in his early career he was known as a "Doctor of Thuganomics." His entrance music begins "Your time is up, my time is now," and includes a distinctive four-note trumpet melody. Outside of the (\*) WWE, this man hosts the FOX series "American Grit," and he played Amy Schumer's meathead boyfriend in "Trainwreck." For 10 points, name this pro wrestler who advocates "hustle, loyalty, and respect."**

**ANSWER: John Cena** (or John Felix Anthony Cena, accept Juan Cena or the Prototype) [TB]

**20. This experiment used a conical glass-full of radium emanation closed off by a thin film of mica. This experiment was aided by Hans Geiger and Ernest Marsden and was performed in 1909 and a (\*) zinc sulfide screen was used as a backdrop for this experiment. The result of this experiment was that around one in 20,000 alpha particles were deflected off its namesake medium. FTP, name this experiment performed by Ernest Rutherford that proved that atoms have a positively charged center by using the namesake element.**

**ANSWER: Gold Foil Experiment** [credit after rewrite]

**Tiebreaker:**

**21. Aime Cesaire remade this man into a slave who demands to be called X. This character thinks about a god who “dwellleth i’ the cold o’ the moon,” in a Robert Browning poem.**

**This man worships Setebos, a god that his mother (\*) Sycorax worshipped. More famously, he offers to scour the island for “scamels” to get more alcohol, conspires with Stephano and Trinculo, and attempts to rape Miranda. FTP, what wild man serves Prospero in *The Tempest*?**

**ANSWER: Caliban** (accept “**Caliban Upon Setebos**,” accept **X** before mention) [Cesaire’s rewrite of Caliban appears in his *A Tempest*] [CS]

**BONUSES:**

1. This author wrote “the expression of the face balks account” in one poem. For 10 points each,  
[10] Name this author who wrote of “the parts and poems not of the body only, but of the soul” in “I Sing the Body Electric.” He also wrote “Out of the Cradle Endlessly Rocking” and the *Calamus* poems.

**ANSWER:** Walt(er) **Whitman**

[10] Whitman collected almost all of his poems in this book of 33 sections plus two annexes. It includes “I Saw in Louisiana a Live-Oak Growing,” “A Noiseless, Patient Spider,” and “Song of Myself.”

**ANSWER:** **Leaves of Grass**

[10] A Whitman poem about this place declares “distance avails not.” Hart Crane’s *The Bridge* includes a *Proem* to its bridge. Whitman edited its *Eagle* newspaper and wrote *Crossing [this borough’s] Ferry*.

**ANSWER:** **Brooklyn** (accept *Crossing Brooklyn Ferry*; prompt on “New York (City)” or equivalents)  
[CS]

2. This molecule’s presence in the cell membrane allows for the cell membrane’s characteristic fluidity. For ten points each,

[10] Name this steroid which is transported in the blood using LDL and HDL and is known to accumulate in blood vessels.

**ANSWER:** **Cholesterol**

[10] This steroid is formed from cholesterol and is part of the androgen group. This hormone promotes male secondary sexual characteristics.

**ANSWER:** **Testosterone**

[10] This glucocorticoid is produced from cholesterol in the adrenal glands and is released in response to low blood-glucose concentrations. It is commonly known as “the stress hormone”.

**ANSWER:** **Cortisol** [RM]

3. This character arrives at a ball dressed as the Red Death. For 10 points each:

[10] Name this man, who writes the opera *Don Juan Triumphant*. From Box 5 in the Palais Garnier, he watches Christine Daae, to whom he sings “The Music of the Night.”

**ANSWER:** The **Phantom** of the Opera (or **Erik**; accept The **Opera-Ghost**; prompt on “the Angel of Music”)

[10] This composer included “Don’t Cry for Me Argentina” in *Evita*. *The Phantom of the Opera* is a musical by this British composer of *Joseph and the Amazing Technicolor Dreamcoat*.

**ANSWER:** Andrew **Lloyd Webber** (prompt on partial last name)

[10] Andrew Lloyd Webber also a musical about these animals, in which Grizabella sings “Memory” after Old Deuteronomy chooses her to be reborn, based on TS Eliot’s *Old Possum’s Book of Practical* [ones].

**ANSWER:** **Cats** [CS]

4. This 2016 United States presidential candidate was the former Director of Pediatric Neurosurgery at Johns Hopkins University. For 10 points each:

[10] Name this Republican who, after dropping out of the race, became the chairman of My Faith Votes and later was tapped as Donald Trump's prospective Secretary of Housing and Urban Development.

**ANSWER: Ben(jamin) Carson**

[10] This former Governor of Texas was known for a debate gaffe in 2012 when he failed to remember the three cabinet departments he would eliminate. He was nominated as Trump's Secretary of Energy.

**ANSWER: Rick Perry**

[10] This other losing Republican candidate from Louisiana was the first Indian-American governor in the US. Trump may choose this man to head the Department of Health and Human Services.

**ANSWER: Bobby Jindal [PP]**

**5.** In adiabatic processes, this quantity is kept constant. For 10 points each,

[10] Name this form of thermal energy that spontaneously passes between a system and its surroundings.

**ANSWER: Heat**

[10] Heat can be transferred by this process based on the movement of fluids. This process occurs in the mantle.

**ANSWER: Convection**

[10] Heat is converted into mechanical work in heat engines, whose maximum efficiency is given by this scientist's namesake cycle.

**ANSWER: Sadi Carnot [EF]**

**6.** This man's general Hernando de Soto explored the Mississippi River. For 10 points each:

[10] Name this conquistador who destroyed an empire that had spanned much of Peru and Bolivia. This man founded the city of Cuzco on the ruins of a destroyed empire.

**ANSWER: Francisco Pizarro**

[10] This empire that Pizarro captured had been ruled by kings such as Pachacuti. This empire built a temple at Machu Picchu and used counting strings called *quipu*.

**ANSWER: Incan Empire**

[10] This man fought against Huascar in the Inca Civil War. He was the last Incan emperor and was killed by Pizarro despite filling a "ransom room" with jewels and precious metals.

**ANSWER: Atahualpa (accept Atabalipa or Atawallpa) [HP]**

**7.** Traditional decorations for this holiday include *rangoli* and *diya*. For 10 points each:

[10] Name this festival also celebrated with fireworks and exchanging of gifts. One story of this holiday is that it celebrates Rama's defeat of Ravana.

**ANSWER: Diwali (accept Deepavali)**

[10] Diwali is a festival of lights observed by members of this religion. Members of this religion venerate the Trimurti of Vishnu, Shiva, and Brahma.

**ANSWER: Hinduism**

[10] Another explanation of the Diwali holiday is that it marks the birth of this Hindu goddess of wealth. This goddess emerged from the churning of the ocean bearing a lotus flower.

**ANSWER: Lakshmi (accept Mahalakshmi or Shri) [TB]**

**8.** The most famous work of Derek Walcott is a rewrite of this author's most famous work, but set in the Caribbean. for 10 points each:

[10] Name this author who invoked the muse to sing of “The rage of Achilles” in that epic, arguably the most famous in Greek.

**ANSWER: Homer** (or '**Omeros**)

[10] This Greek playwright of *The Bacchae* and *Alcestis* wrote a play in which the title character helps the Argonauts obtain the golden fleece.

**ANSWER: Euripides** [Unmentioned play is *Medea*]

[10] Euripides wrote *The Cyclops*, the only completely surviving play from a bawdy genre named for these creatures. A traveller surprises one of them by using his breath both to heat his hands and cool his soup.

**ANSWER: Satyr** (accept **Satyr** Play) [Sophocles' *Ichneutae* is the only other surviving satyr play, but is fragmentary; the last sentence refers to Aesop's fable “The Satyr and the Traveller”] [CS]

**9.** The line “Never was so much owed by so many to so few” referred to combatants in this battle. For ten points each:

[10] Name this World War II aerial campaign in 1940, in which the Royal Air Force foiled Nazi plans to destroy the namesake country's infrastructure and defenses.

**ANSWER: Battle of Britain** [prompt on “the Blitz”]

[10] In the Battle of Britain, the RAF confronted this German air force unit, commanded by Hermann Goring.

**ANSWER: Luftwaffe**

[10] This city was the site of Operation Dynamo, where Allied soldiers were evacuated from the beaches after being surrounded by German forces during the Battle of France. The operation is now known as this city's namesake “Miracle.”

**ANSWER: Dunkirk** [GP]

**10.** Violin trills are used to represent singing birds in one movement of this piece. For 10 points each:

[10] Name this set of four violin concerti. Each concerto is based on a different sonnet and represents a different one of the title time periods.

**ANSWER: *The Four Seasons*** (accept *Le quattro stagioni*)

[10] *The Four Seasons* was written by this Italian composer of the oratorio *Juditha Triumphans*.

**ANSWER: Antonio Vivaldi**

[10] This contemporary of Vivaldi pioneered the opera style in his operas like *The Coronation of Poppea*. His *L'Orfeo* is the oldest currently-performed opera.

**ANSWER: Claudio Monteverdi** [HP/CS]

**11.** This culture hero stole Water Buffalo's children, which flooded the Fourth World. For 10 points each:

[10] Name this Navajo figure. One of his eyes became Arcturus while he was juggling. This Raven-like figure created the world by kicking a ball of mud.

**ANSWER: Coyote**

[10] Raven and Coyote are these types of figures, like Loki. Figures described by this term such as Reynard and Anansi are named for the manner in which they use subterfuge.

**ANSWER: Trickster**

[10] This other Native American trickster figure often impregnates bathing maidens. He is usually depicted as a hunched-over flute player.

**ANSWER: Kokopelli [CS]**

**12.** Answer the following about the presidency of Ronald Reagan, for 10 points each.

[10] In 1981, the largest union representing these types of workers went on strike. Reagan declared the situation a national emergency under the Taft-Hartley Act and fired over 11,000 of these workers after 48 hours.

**ANSWER: Air traffic controllers**

[10] Reagan was a proponent of this type of macroeconomics, embodied in part by the Laffer curve. Advocates for this economic philosophy claim lower tax rates lead to employment growth and that tax cuts for the wealthy eventually benefit all social classes.

**ANSWER: supply-side economics (or trickle-down economics, prompt on “Reaganomics”)**

[10] Reagan faced scandal during his presidency when it was revealed that his administration had secretly sold weapons to this country in order to fund the Nicaraguan Contras. Fifty-two American hostages were released from this country on the same day Reagan took office in 1981.

**ANSWER: Islamic Republic of Iran (accept Iran-Contra Scandal or Iran Hostage Crisis) [GP/TB]**

**13.** Comet tails point away from this entity due to its emission of high energy plasma. For 10 points each:

[10] Name this star, the center of the solar system.

**ANSWER: Sun (prompt on “Sol”)**

[10] The Sun is powered by fusion, the formation of heavier atoms from smaller ones. However, fusion of atoms of this element, along with nickel, will result in no net energy and may result in a supernova.

**ANSWER: Iron**

[10] Beyond the Solar system, the next closest star system is this one at about 4.37 light years away. It shares its name with the three stars it consists of, which are denoted A, B, and C.

**ANSWER: Alpha Centauri [EF]**

**14.** For 10 points each, answer the following about literary stuff you can wear.

[10] In a Guy de Maupassant short story, Madame Loisel discovers that this title object belonging to Madame Forestier was only worth five hundred francs.

ANSWER: diamond **necklace** (accept “The **Necklace**,” accept “La **Parure**”)

[10] In “The Overcoat,” a story by this Russian author, the ghost of protagonist Akaky Akakievich haunts the streets of St. Petersburg seeking revenge.

ANSWER: Nikolai **Gogol**

[10] One famous anecdote about Ernest Hemingway claims that he wrote a six-word short story about these objects which are “for sale, never worn.” A red set of them can’t stop dancing in a Hans Christian Andersen story.

ANSWER: baby **shoes** (accept clear-knowledge equivalents; accept “The Red **Shoes**”) [TB]

**15.** This material is composed of loosely-bound repeating hexagonal sheets of carbon. For 10 points each:

[10] Name this material that is used as a dry lubricant in locks and also more commonly in pencil lead.

ANSWER: **Graphite**

[10] This term is used for the multiple distinct forms in which a chemical element can exist in the same state of matter. Graphite is an example of this for carbon.

ANSWER: **Allotrope**

[10] This other allotrope of carbon has a cage-like fused-ring structure of 60 carbon atoms. It is named for an architect who popularized the geodesic dome.

ANSWER: **Buckminsterfullerene** (accept **buckyballs**, prompt on “Richard Buckminster **Fuller**”) [EF]

**16.** Works by this French philosopher include *Discourse on the Method* and *Meditations on First Philosophy*. For 10 points each:

[10] Name this philosopher who believed the pineal gland was the seat of the soul and famously said, “I think, therefore I am”.

ANSWER: Rene **Descartes**

[10] One of Descartes’ most important contributions to mathematics was this system that allows for the plotting of numbers and features x and y axes.

ANSWER: Cartesian **plane**

[10] In *Meditations on First Philosophy*, Descartes used the example of this substance in a namesake “argument” to assert that intellect is needed to understand the world.

ANSWER: **Wax**

**17.** Italian city-states were constantly vying for power over each other. Answer these questions about some of them. For 10 points each:

[10] This maritime city-state was famous for its mercenary crossbowmen. Simon Boccanegra ruled this city in Liguria, the home of Andrea Doria.

**ANSWER: Genoa** (accept Genova)

[10] This other maritime city-state constantly fought with Genoa. Its doges threw rings into the sea on Ascension Day in the “Marriage of the Sea” ceremony. This city is now most famous for its canals.

**ANSWER: Venice** (accept Venezia)

[10] The Viscontis and Sforzas ruled this industrial city, which signed the Peace of Lodi with Venice. This capital of the Ambrosian Republic has usually been the capital of Lombardy.

**ANSWER: Milano** [CS]

**18.** In one of this man’s bawdier works, he compared touching his mistress to exploring America. For 10 points each:

[10] Name this British poet who wrote “No Man Is An Island,” which contains the lines “Never send to know for whom the bell tolls, it tolls for thee.”

**ANSWER: John Donne** [the poem in the opening is “Elegy XIX: To His Mistress Going to Bed.”]

[10] Donne was one of the most prominent representatives of this loosely affiliated group of poets, who relied on extended metaphors called conceits. Andrew Marvell and George Herbert have also been called by this term.

**ANSWER: Metaphysical**

[10] In Holy Sonnet X [TEN], Donne commands this entity “Be not proud, though some have called thee mighty and dreadful.” A passage in First Corinthians asks this entity “Where is thy sting?”

**ANSWER: Death** (accept “Death be not proud”) [TB]

**19.** The coldest temperature ever recorded on Earth was -89.2°C at Vostok on this continent. For 10 points each:

[10] Name this continent. In a race to a geographic feature on this continent, Roald Amundsen arrived five weeks before Robert Scott’s Terra Nova Expedition.

**ANSWER: Antarctica**

[10] This sea east of the Antarctic Peninsula contains the Filchner-Ronne Ice Shelf.

**ANSWER: Weddell** Sea

[10] This mountain range in Antarctica is situated on the Ronne Ice Shelf and includes the Sentinel Range. Vinson Massif, the highest point on the continent, is located in this range.

**ANSWER: Ellsworth** Mountains [PP]

**20.** This artist was known for using extravagant and expensive pigments like lapis lazuli and natural ultramarine. For 10 points each:

[10] Name this Dutch Golden Age painter of domestic interior scenes of the bourgeoisie such as “The Milkmaid” and “The Geographer.”

**ANSWER: Johannes Vermeer**

[10] Vermeer's famous painting is a tronie that depicts a girl wearing a blue and yellow headscarf and the title piece of jewelry.

**ANSWER: *Girl with a Pearl Earring*** (accept *Meisje met de parel*)

[10] This style of painting used by Vermeer used exaggerated motion to create drama. Caravaggio and Rembrandt also belong to this artistic style.

**ANSWER: Baroque** [RM]