SUBMIT 2014: "sometimes referred to as Groper[citation needed]"
Packet by Columbia A and MCTC
Edited by Jordan Brownstein, Brian McPeak, Dan Puma, Tanay Kothari, Sohan Vartak, Chris Manners, Isaac Hirsch, Ankit Aggarwal

Tossups

1. In a poem named for these entities, a man claiming to be "Vegtam, son of Valtam" resurrects a volva and asks her a number of questions, the last of which reveals his true identity, Odin. A god of these entities is capable of taking the forms of "beasts, birds, and long sliding snakes" and is known alternately as Icelus or Phobetor. The tapir-like Japanese (*) baku are said to subsist upon these entities. According to Ovid's Metamorphoses, a god of these entities was sent to break the news of Ceyx's death to Alcyone. In the Odyssey, Penelope describes how these entities pass through gates of horn and ivory. The Minka Bird, the creator god Baiame, and the Rainbow Serpent were active during a "time" named for these phenomena, according to Australian aborigines. For 10 points, identify these phenomena which Morpheus and the other Oneiroi brought to sleeping people.

ANSWER: <u>dreams</u> (or <u>nightmares</u>; or Baldur's <u>dreams</u>; or Baldrs <u>draumar</u>; or the <u>Dream</u>time; or the <u>Dream</u>ing)

- 2. In this short story, a pawnbroker's widow named Mrs. Mercer collects "used stamps for some pious purpose." Early on in this story, the protagonist discovers a rusty bicycle pump under a bush and several books, including a copy of *The Memoirs of Vidocq*, which he enjoyed the most because its pages were yellow. The aunt of this story's protagonist hopes his journey is not for "some Freemason affair." This story's protagonist fails to find a sixpenny (*) entrance and ends up spending a shilling of the florin his uncle gave him in order to enter the title location, where he fails to buy a gift from a girl flirting with two Englishmen and realizes that he is "a creature driven and derided by vanity." For 10 points, name this short story from *Dubliners* in which a boy visits an Oriental bazaar in order to buy something for Mangan's sister.

 ANSWER: "Araby"
- 3. Duncan Haldane developed some namesake pseudopotentials that can be used to model this effect. This effect was partially explained by a predictive wavefunction developed by Robert Laughlin, and topological insulators can exhibit its "spin" type. The two major varieties of this effect are determined by whether the (*) filling factor has a fractional or integer value. This effect describes how, in two-dimensional electron systems, conductivity takes on discrete values equal to multiples of *e* squared over Planck's constant. For 10 points, identify this effect discovered by Klaus von Klitzing, analogous to a classical effect in which a current transverse to a magnetic field creates a voltage difference.

ANSWER: the <u>quantum Hall</u> effect (accept <u>integer quantum Hall</u> effect or <u>fractional quantum Hall</u> effect or <u>quantum spin Hall</u> effect; prompt on "Hall effect")

- 4. This artist included some shepherds and two oak trees in his outdoors version of *The Judgment of Solomon*. One work by this artist features a castle with a damaged roof in its left background and two knights conversing in its right; that painting is set on a checkered floor and features St. Nicasius and St. (*) Francis flanking the Madonna's throne. In another painting of his, a seated young man holding an angle and straight edge stares at a cave while a turbaned man converses with an elderly man clutching a parchment. This painter of the *Castelfranco Madonna* also included a soldier leaning on a pike, a woman suckling an infant, and some flashing lightning in another work. For 10 points, name this Renaissance artist of *The Three Philosophers* and *The Tempest*. ANSWER: Giorgione (or Giorgio Barbarelli da Castelfranco; accept either name)
- 5. This man commissioned surveyor John Fulton to challenge the line established by William Harris at the

behest of Edward Tiffin. This politician and Duncan McArthur represented the United States at the signing of the Treaty of Fort Meigs. He led an expedition that erroneously determined the northern Red Cedar Lake, which was thereafter renamed for him, to be the source of the Mississippi. He claimed that Congress did not possess the "unlimited power of legislation" in the territories and thus advocated popular sovereignty in his (*) Nicholson letter. He served as Jackson's second Secretary of War and Buchanan's first Secretary of State, and ran with William Orlando Butler on a ticket that split votes with the Free Soil party and thus lost to Zachary Taylor in 1848. For 10 points, name this prominent mid-19th-century Michigan politician.

ANSWER: Lewis Cass

6. This man names a linear distribution of the amount of tracer and carrier in coprecipitation reactions; that distribution is sometimes named with Berthelot. This scientist proposed that a single quanta of light begins a photochemical chain reaction in hydrogen gas and chlorine gas to make hydrochloric acid. One form of a statement due to this scientist is that it is impossible to cool a system to absolute zero in a finite number of steps, (*) but his formulation says that at absolute zero, chemical reactions do not cause a change in entropy. This man's equation says that reaction potential is shifted by R T over z F times the log of the reaction quotient. For 10 points, name this German chemist who developed the third law of thermodynamics and names an equation that calculates the reduction potential of an electrochemical cell.

ANSWER: Walther Nernst

- 7. A novel titled for these objects contains the entirety of the essay "An Account of the Shrine in the Fields," which was written by a character whose son dies in a mountain climbing accident. At the end of that novel, Mieko stares at one of these objects, having spent most of the novel trying to manipulate Yasuko into having a son of her own. One of these objects appears in the title of a novel whose anemic protagonist dreams about eating the body of a classmate and, much later, is disappointed to learn that a picture of a (*) knight actually depicts Joan of Arc. Fumiko Enchi's most famous novel is named for these objects, which also partially title a 1949 novel about the closeted homosexual Kochan. For 10 points, identify these objects to which Yukio Mishima attributed some titular "confessions," and which are also used by Noh actors to disguise their faces.

 ANSWER: masks (or kamen; or onnamen; accept Confessions of a Mask or Kamen no Kokuhaku)
- 8. Chains of falling fifths and arpeggios in muted pianissimo characterize the last movement of a string quartet by this composer, while another work by him lends its name to an ensemble consisting of piano, violin, cello, flute, and clarinet. A work by this man is divided into three sections, the second of which contains settings of "Red Mass," "Gallows Song," and "Prayer to" the title character, who is represented by a seven-note G-sharp, E, C, D, B-flat, C-sharp, G motif. A vocalist asks another to (*) "look, how brightly the universe shines" in a work by this man which contains a controversial inverted ninth chord. One of his works is based on "three times seven" poems by Albert Giraud, while another is a string sextet based on a Richard Dehmel poem about a meeting in a moonlit forest. For 10 points, name this Viennese composer of *Transfigured Night* and *Pierrot Lunaire*.

ANSWER: Arnold Schoenberg

9. Rumford's Soup was invented to feed the poor people of this polity by the American Benjamin Thompson, who served as an aide-de-camp to its ruler Charles IV Theodore. Two rival duchies fought the Landshut War of Succession in this state, where Adam Weishaupt formed the Order of Illuminati. A Latin phrase meaning "Jerusalem is lost" may be the origin of the name of a series of anti-Jewish pogroms in this polity known as the (*) Hep-Hep riots. To prevent one ruler from acquiring this state, a rival formed the Furstenbund; earlier, the Treaty of Teschen was signed to end a war named for this place also known as the Potato War. A king of this place built the castle of Neuschwanstein and patronized Richard Wagner. Ruled until 1918 by the House of Wittelsbach, which included Mad King Ludwig II, this is, for 10 points, which German state with capital at Munich?

ANSWER: **Bavaria** (or **Bayern**; accept things that specify the "Kingdom," "Duchy," "Electorate," or "Free State" of Bavaria, or their German equivalents)

10. This man's proposed inventions included a large tea glass outfitted with a string, so that it could be carried like a pail. In one work, this man examined internal, or "autoclitic," speech, which can modify other types, including the labeling "tact" and the requesting "mand." In another book, he claims that one of the title concepts removes both credit for actions and blame for misdeeds by promoting a false sense of (*) autonomy, and asserts that bad behavior could be eliminated through cultural engineering. This author of *Verbal Behavior* and *Beyond Freedom and Dignity* examined the formation of superstition in pigeons and created a namesake apparatus in which pressing a lever activates a food dispenser. For 10 points, name this pioneer of operant conditioning, a "radical behaviorist."

ANSWER: Burrhus Frederic Skinner

11. Active galaxies exhibit a spike of four orders of magnitude in this quantity known as the "big blue bump." A parametric description of space density as a function of this quantity is named for Paul Schechter.

Malmquist bias affects surveys of astronomical objects by making it appear that further objects intrinsically have higher values for this quantity. This quantity is related to the velocity width of (*) spiral galaxies by the Tully—Fisher relation. Stars can be categorized into classes named after this quantity according to the widths of their spectral lines; those classes are designated by Roman numerals. Instability results when a star exceeds the Eddington limit for this quantity, and it is proportional to the fourth power of the temperature. For 10 points, name this quantity representing the energy output per unit time, a measurement of brightness.

ANSWER: <u>luminosity</u> (prompt on "absolute magnitude" or "brightness" before mentioned)

12. This philosopher rejected Kant's assertion that nature conforms to the laws of the intellect in a paper that claims the chicken-egg question can be answered with "an earlier egg." This man's Tanner Lecture introduced a threefold separation of reality into the physical world, mental events, and the body of human thought and knowledge; that theory was expanded into a book co-written with John Eccles. This author of *The Self and Its Brain* devised a formula to measure (*) verisimilitude in *Conjectures and Refutations*, and he argued against confusing "trends with laws" in a work that rejects the teleological view of history. Another work by this man claims the only criterion that separates science from non-science is falsifiability. For 10 points, name this Austrian-British philosopher who wrote *The Logic of Scientific Discovery*.

ANSWER: Karl Raimund Popper

13. The Scalacronica describes how the author's father was captured at this battle. This battle's eventual winners arrayed their forces in front of the New Park, and Thomas Randolph's forces here employed one of the last uses of a circular schiltron formation. Several years after this battle, its winners issued the Declaration of Arbroath. It was fought because a deal made between Philip (*) Mowbray and the winning commander's brother Edward was about to expire, and its second day saw the death of the 8th Earl of Gloucester. The leader of one army at this battle famously used a battle axe to split the head of Henry de Bohun. This battle cut off an effort by the losers to relieve the besieged Stirling Castle, and afterwards the losing commander was forced to retreat to Dunbar Castle. For 10 points, name this battle in which Edward II's army was crushed by the smaller forces of Robert the Bruce.

ANSWER: Battle of **Bannockburn** (or Blar Allt a' **Bhonnaich**)

14. A feast for this concept was instituted by Pius XI's encyclical Quam Primas. The tenth of the sephirot, malkuth, is the Old Testament term for this concept, which existence is celebrated on the Sunday before the First Sunday of Advent. Because his servants are not fighting against his being handing over, Jesus claims before Pilate that this concept is (*) "not of this world." When the Pharisees ask about this concept, Jesus says it is

not coming to be observed but already "is within you." John the Baptist urged people to "do penance" because he claimed that this concept "is at hand." Matthew prefers to describe this place as "of Heaven" instead of the otherwise common "of God." This place's keys are given by Jesus to St. Peter. For 10 points, name this Christian theological location, where God exercises his monarchical power.

ANSWER: <u>Kingdom</u> of God (or <u>Kingdom</u> of Heaven; or Christ's <u>King</u>ship; prompt on "heaven" before mentioned)

15. The speaker of one of this author's poems describes spending "ten days and nights, with sleepless eye" watching a fit of hysterics brought on by some exceedingly humorous verses. In another poem, he describes how a certain type of person swears "with an 'I dew vum,' or an 'I tell yeou' " and concludes with the line "Logic is logic. That's all I say." This author of "The Height of the Ridiculous" also related the history of an object which fell to pieces on the hundredth anniversary of both its creation and the Great Lisbon Earthquake. In addition to writing (*) "The Deacon's Masterpiece," which tells of a "wonderful one-hoss shay," this man penned a poem about a "child of the wandering sea" whose final stanza begins "Build thee more stately mansions, O my soul." For 10 points, name this Fireside poet, the author of "Old Ironsides" and "The Chambered Nautilus."

ANSWER: Oliver Wendell Holmes, Sr.

16. At a party in the second act of this opera, a group of characters claim to be able to "read the future in anyone's hand" in "Noi siamo zingarelle," which is followed by a performance by matadors from Madrid. One character in this opera asks his son who has erased "the sea and soil of Provence" from his heart. Two characters in this opera sing the duet "Un dì, felice, eterea," after which one gives the other a flower and tells him to return when it wilts. After the latter character leaves, the former sings the cabaletta (*) "Sempre libera." Dumas fils's La Dame aux Camellias served as the basis for Francesco Maria Piave's libretto for this opera. After Baron Douphol refuses to give a toast, this opera's protagonist sings the brindisi "Libiamo ne' lieti calici" with her other love interest Alfredo. For 10 points, name this Giuseppe Verdi opera centering on the courtesan Violetta Valéry, the title "fallen woman."

ANSWER: La Traviata

17. A character created by this author gives birth in a cave to a baby who is licked clean by a swarm of goats and loses her lover when a laurel branch snaps, causing the one-armed man to drown. Celefon and Kalixtes fight a duel before Venus gives a speech about love at a feast in a novel by this man. That novel's protagonist describes strangling his rival Jehoshaphat, revealing the affair of Angelica and Giovanni, and poisoning the hated Don (*) Ricardo and "il Toro." While working in a copper mine, another of his characters is shackled to a slave named Sahak, who carves "Christos Iesus" in the disk around his neck and inspires in him a desire to believe. The most famous character created by this author of *The Sibyl* serves in the court of "the Prince" in a nameless Italian city-state and is the twenty-six-inch-tall Piccolino. For 10 points, name this Nobel-winning Swedish author of *Barabbas* and *The Dwarf*.

ANSWER: Pär Fabian Lagerkvist

18. This ruler kept three foreign wives in his harem and gave them a lavish tomb near Luxor. One account relates how a general of this ruler took the rebellious city of Joppa by placing his men in "tribute" sacks that were brought inside the gates. This ruler employed the general Djehuti and the scribe Tjaneni, while this ruler's predecessor ordered an expedition that brought myrrh trees back from the Land of (*) Punt. This ruler waged war on the Mettani after a campaign where he led his troops through the Aruna mountain pass. One battle won by this pharaoh took place in the Jezreel valley and resulted in a seven month siege when the King of Kadesh fled from the battle. This pharaoh defaced monuments to his predecessor at Deir-al-Bahri after coming to power. For 10 points, name this victor at Megiddo and stepson of Hatshepsut.

ANSWER: Thutmose III

19. This element is necessary for proper activation of glutamine synthetase in astrocytes, and this element is also given to patients suffering from prolidase deficiency. The enzyme catalase in *Lactobacillus plantarum* uses this element as a cofactor, while another enzyme containing this element catalyzes the formation of ornithine in the final step of the urea cycle; that enzyme is arginase. In eukaryotic mitochondria, a dismutase complex containing this element's cation oxidizes superoxide to form O₂, and the oxygen evolving complex in plant chloroplasts has a notable metalloenzyme core containing calcium and this metal. However, this element may be better known for having a (*) plus 7 oxidation state as part of a potassium compound known to be a strong oxidizing agent in chemistry labs. For 10 points, name this trace nutrient and transition metal with symbol Mn.

ANSWER: <u>manganese</u> (accept <u>Mn</u> before mention)

20. This actor played a character who kills Ted Treffon and is put into a coma after being shot by a CIA agent. This man starred as Biff in a television adaptation of *Death of a Salesman*, and he starred alongside Gary Sinise in an adaptation of a Steinbeck book. This actor, who played Osbourne Cox in a Coen brothers film, played a man who is brutally beaten for stealing a bar of soap, and he starred as a (*) nobleman who attempts to seduce a character played Uma Thurman. One scene featuring this actor has him playing every person in a restaurant, each saying his name over and over. For 10 points, name this distinctive star of *Burn After Reading*, *Empire of the Sun, Dangerous Liaisons*, and a Charlie Kaufman film about *Being* [this man].

ANSWER: John Malkovich

21. At the beginning of this work, one character is told to nail a lightning rod atop his home in preparation for an approaching storm. Another character in this novel pretends to be the nephew of Miss Foley and is later revived as Mr. Electrico. At the climax of this novel, the librarian Charles shoots the Dust Witch with a wax bullet carved with a crescent symbolizing a (*) smile. Set in Green Town, Illinois, this novel sees Will Halloway and his father save Jim Nightshade from the clutches of the Illustrated Man, Mr. Dark, who runs a carnival with Mr. Cooger. For 10 points, identify this Ray Bradbury novel that takes its name from a line in Shakespeare's Macbeth and sees the impatient Jim and Will age by riding a carousel through time.

ANSWER: Something Wicked This Way Comes

Bonuses

- 1. The title character of this novel tells his son Andrei, "I gave you life! I will also kill you!", then shoots him, after learning from Yankel the Jew of Andrei's defection at Dubno Castle. For 10 points each:
- [10] Identify this Nikolai Gogol novel whose title Cossack warrior also loses his other son Ostap, then his own life, during a series of wars against the Poles.

ANSWER: Taras Bulba

[10] Taras Bulba was published seven years before this more famous, though unfinished, Gogol novel, in which Chichikov engineers a convoluted get-rich-quick scheme that involves acquiring the rights to deceased peasants.

ANSWER: <u>Dead Souls</u> (or <u>Myortvye Dushi</u>)

[10] In an essay on "The Overcoat," Boris Eikhenbaum described Gogol's use of this Russian literary technique, also used regularly by Nikolai Leskov. It involves the use of a personal narrator who adopts a specific linguistic idiom.

ANSWER: skaz

- 2. In 1784, Grigory Shelikhov massacred a number of native Alutiiqs on the island of Awa'uq, which is just off the southeast coast of this island. For 10 points each:
- [10] Identify this second-largest island in the United States, home to the country's largest Coast Guard base. Its native animals include the king crab and a large brown bear.

ANSWER: Kodiak Island

[10] Kodiak Island was thoroughly wrecked by the 1912 eruption of this volcano in the Aleutian range. It was the largest volcanic eruption in the 20th century, and it directly created the Valley of Ten Thousand Smokes.

ANSWER: Novarupta

[10] Novarupta released thirty times as much magma as this other volcano in the Pacific Northwest, whose 1980 eruption killed fifty-seven Washingtonians and produced pyroclastic flow so fast it may have broken the speed of sound.

ANSWER: Mount St. Helens (or Lawetlat'la; or Loowit)

- 3. This experimental technique improves upon scanning tunneling microscopy by capturing three-dimensional surface profiles. For 10 points each:
- [10] Identify this microscopic technique that images the structure of a surface using a cantilever with a sharp tip, which is deflected by interactions with surface atoms.

ANSWER: atomic force microscopy or AFM (accept scanning force microscopy or SFM; prompt on partial)

[10] Depression of the cantilever in an atomic force microscope may be modelled with this law, which says the force needed to extend a spring is proportional to the distance.

ANSWER: Hooke's law

[10] Cantilever deflection can be measured with piezoresistivity, laser vibrometry, optical interferometry, or by using this electrical circuit element. Its two parallel branches are connected by a voltmeter and each have two resistors; three resistances are known and one must be determined.

ANSWER: Wheatstone bridge

- 4. Name the following about flesh eating birds in religion. For 10 points each:
- [10] Zoroastrian "burials" are conducted in these structures in order to let vultures eat the flesh of the deceased and thereby prevent the corruption of earth and fire.

ANSWER: towers of silence (or dakhma; or cheel ghar)

[10] Because the Himalayas don't have much soft ground or fuel for cremation, Tibetan monks often "bury" the dead through this practice of cutting them open and leaving them for the birds.

ANSWER: sky burial (accept jhator or bya gtor)

[10] In Hinduism, this god, the mount of Vishnu, feeds exclusively on the flesh of nagas.

ANSWER: Garuda

5. An incident in this country prompted one man to deliver a speech asserting the right of a British citizen to "feel confident that the watchful eye... of England will protect him against injustice and wrong." For 10 points each:

[10] Identify this country where Don Pacifico, a Gibraltar-born merchant, was attacked by an anti-Semitic mob, leading to the Royal Navy's blockade of a port in this country.

ANSWER: **Greece** (or **Hellenic** Republic)

[10] The aforementioned "Civis Romanus sum" speech was given by this then-Foreign Secretary, an interventionist who served as Prime Minister during the Second Opium War and the American Civil War.

ANSWER: Henry John **Temple**, 3rd Viscount **Palmerston** (accept either underlined portion)

[10] Palmerston also clashed with François Guizot in this diplomatic contretemps, in which the former's candidate Leopold of Saxe-Coburg Gotha was rejected by the French-backed moderado faction, which ensured that Francis, Duke of Cadiz became King Consort.

ANSWER: the Affair of the Spanish Marriages (do not accept "The Spanish Match")

6. An early example of this musical figure can be found at the beginning of the concluding movement of Johann Stamitz's *Symphony in D Major*. For 10 points each:

[10] Identify this device, found at the beginning of Beethoven's first piano sonata, which consists of a crescendoing arpeggio rising through several octaves. Its name comes in part from the 18th-century school founded by Stamitz.

ANSWER: the Mannheim Rocket

[10] A Mannheim Rocket appears at the beginning of the fourth movement of this Mozart symphony, the only one to open with an accompaniment figure.

ANSWER: Symphony No. <u>40</u> in G minor (or the <u>Great G minor</u> Symphony; or <u>K</u>V. <u>550</u>)

[10] This Austrian composer employed a Mannheim Rocket in the opening movement of his *Trout Quintet*. He famously left his eighth symphony unfinished.

ANSWER: Franz Peter Schubert

7. The title creature of this poem "hangs still" at the "master-fulcrum of violence." For 10 points each:

[10] Name this poem about a man who tries to avoid the "swallowing of earth's mouth" when he sees a bird whose "wings hold all creation in a weightless quiet."

ANSWER: "The Hawk in the Rain"

[10] "The Hawk in the Rain" is the title poem of the first collection by this English Poet Laureate and husband of Sylvia Plath.

ANSWER: Ted Hughes

[10] Plath wrote this poem about "a bag full of God" who "Bit my pretty red heart in two." The title figure is described as "a man in black with a Meinkampf look."

ANSWER: "Daddy"

8. Like a similar class of cells, they produce interferon gamma, but unlike that similar class, they do not express TCR or CD3. For 10 points each:

[10] Name these only immune cells to express CD56. According to the "missing 'self' " hypothesis, they target cells whose surfaces have lost the MHC class I molecule.

ANSWER: natural killer cells (or NK cells)

[10] Having acquired a target cell, NK cells release perforin, which forms pores in the target's cell membrane, allowing these serine proteases to enter and begin cleaving caspases.

ANSWER: granzymes

[10] Cleavage of caspases is one way to induce this process which also involves release of cytochrome c from mitochondria and is sometimes dysfunctional in cancerous cells.

ANSWER: apoptosis

- 9. This ruler's decapitated head was allegedly placed in a wine-sack by Queen Tomyris after his ill-fated campaign against the Massagetae. For 10 points each:
- [10] Name this founder of the Achaemenid dynasty who began his conquests by revolting against the Median empire.

ANSWER: <u>Cyrus</u> the <u>Great</u> (accept <u>Cyrus II</u> or <u>Cyrus</u> the <u>Elder</u>; prompt on "Cyrus")

[10] Cyrus's namesake cylinder claims that this other ruler had incurred the "fury of the gods" for keeping the Jews in Babylon. Cyrus rectified that issue by crushing this last Babylonian king at the Battle of Opis and sending him into exile in Carmania.

ANSWER: **Nabonidus** (or **Nabû-na'id**, apparently, but who cares)

[10] Cyrus was less merciful towards Croesus, a king of this kingdom whom he apparently burned on a pyre.

Croesus had earlier introduced gold coinage to this Anatolian kingdom.

ANSWER: Lydia

- 10. This thinker constructed a dichotomy between natural sciences and social sciences in terms of their concern for real-world limitations in his book *Living Within Limits*. For 10 points each:
- [10] Name this ecologist who conceived of "the tragedy of the commons" to illustrate that rational decision-making with regards to a common resource will necessarily lead to depletion of that resource.

ANSWER: Garrett James Hardin

[10] Hardin's ideological counterpart Mancur Olson argued that organization is difficult because of this problem, where people do not have an incentive to produce because they benefit from the goods produced by others.

ANWER: **free rider** problem

[10] This only female Nobel Laureate in Economics and author of *Governing the Commons* disputed Hardin's proposed solutions to the tragedy of the commons by showing alternative methods of resource management successfully employed by communities.

ANSWER: Elinor Ostrom

- 11. In this play, Mrs. Hale recalls that another character had been more lively when she was "Minnie Foster, one of the town girls singing in the choir." For 10 points each:
- [10] Name this play by Susan Glaspell, in which Mrs. Hale and Mrs. Peters pick up on subtle clues to the murder of John Wright and decide to hide them from the sheriff and the attorney George Henderson to protect Wright's wife Minnie.

ANSWER: Trifles

[10] With her husband George Cram Cook, Glaspell founded the Provincetown Players, which often produced the plays of this man, who wrote *The Emperor Jones* and *Long Day's Journey into Night*.

ANSWER: Eugene O'Neill

[10] In this play by O'Neill, Abbie Putnam murders her child with Eben Cabot in order to prove her love to him. Abbie had been married to Eben's evil father Ephraim, who wanted to cheat his sons of their inheritance by passing on his farm to her.

ANSWER: Desire Under the Elms

12. This is an exciting bonus about the Ottoman Empire that fills the "Other Arts" distribution. For 10 points each: [10] The Ottoman architect Sinan added the tomb of Selim II to this Istanbul landmark designed by Isidore of Miletus. Its characteristic dome is supported by four triangular pendentives.

ANSWER: **Hagia Sophia** (or **Ayasofya**)

[10] Fritware was a common product in the Anatolian city of Iznik, which was a hub for the production of a namesake style of this craft. The Greeks perfected the "red-figure" style of designing these objects.

ANSWER: **pot**tery (or **pot**s or **vase**s)

[10] The stock characters Karagöz and Hacivat ("ha-chi-vat") were prevalent in this dominant form of entertainment for the Ottoman public.

ANSWER: **shadow play**s (or **shadow puppet**s)

- 13. Identify the following about the second-coolest member of the Strachey family, computer scientist Chris Strachey. For 10 points each:
- [10] Strachey introduced the "ad hoc" and "parametric" types of this technique, which respectively allow functions to be "overloaded" by accepting different types and allow functions or data types to be written generically. Along with encapsulation and inheritance, it is one of the defining features of object-oriented programming.

ANSWER: **polymorphism** (accept word forms)

[10] While some suggest it should've been named for Moses Schönfinkel, Strachey coined the name of this technique, in which a function that takes multiple arguments is transformed into a chain of single-argument functions.

ANSWER: **curry**ing (after Haskell Curry)

[10] Strachy also designed CPL, a programming language influenced by this archaic language, for which Backus—Naur form was developed.

ANSWER: ALGOL

- 14. Ivan III didn't earn the title "Grand Prince of All Rus" by sitting around looking pretty. Identify the following about his deeds. For 10 points each:
- [10] Ivan brought a number of Italian architects, including Pietro Antonio Solari and Marco Ruffo, to Moscow in order to renovate this massive tower-filled fortress, which like St. Basil's Cathedral is now located on Red Square.

ANSWER: the Moscow Kremlin

[10] After the death of Maria of Tver, Pope Paul II urged Ivan to marry Zoe, a member of this Byzantine Greek family. The founder of this dynasty, Michael VIII, reclaimed Constantinople from Baldwin II and the Latin Empire.

ANSWER: Palaeologus (or Palaiologina)

[10] Ivan's armies spent a few months of 1480 engaged in a standoff with the forces of Akhmat Khan of the Great Horde. The two armies were camped on opposite sides of this river in western Russia.

ANSWER: the **Ugra** River (accept "the Great Stand on the **Ugra**")

- 15. One person who adopted this appellation was the first husband of Laudine, the Lady of the Fountain, while another kills a number of adventurers seeking to rescue the captured Lady Lyonesse. For 10 points each:
- [10] Identify this title held by both Esclados, who was killed by Yvain, and Sir Ironside, who was killed by Gareth.

ANSWER: the **Red** Knight (or "le **Ros**"; or "the **Red** Knight of the Red Lands")

[10] Another Red Knight killed the father of this hero, then stole a cup from King Arthur, prompting this man to avenge his father and retrieve the cup. According to Chretien de Troyes, this knight failed to ask the question that would've healed the wounded Fisher King.

ANSWER: Sir **Perceval** (or **Parsifal**; or **Peredur**)

[10] In the *Perlesvaus*, this knight briefly adopts the moniker "Red Knight" after winning the red shield of Judas Maccabeus. He's more famous for chickening out of a beheading contest with the Green Knight.

ANSWER: Sir Gawain (or Gwalchmei; or Gualguanus; or Gauvain)

- 16. Identify the following authors of horror fiction. For 10 points each:
- [10] "The Shadow Over Innsmouth," "The Dunwich Horror," and "The Call of Cthulhu" are among the many works in the genre by this huge-faced American recluse.

ANSWER: Howard Phillips **Lovecraft**

[10] The author of the collection *Widdershins*, which contains the classic horror novella *The Beckoning Fair One*, shares *this* first name with the gamekeeper who has an affair with Constance Chatterley in a D.H. Lawrence novel.

ANSWER: Oliver (accept Oliver Onions or Oliver Mellors)

[10] Ghost Stories of an Antiquary and its imaginatively-named sequel More Ghost Stories of an Antiquary were written by this English author, whose most famous story is probably "Oh, Whistle, and I'll Come to You, My Lad."

ANSWER: Montague Rhodes <u>James</u>

17. Identify the following about blowing shit up using chemistry. For 10 points each:

[10] An explosive's effectiveness is often measured relative to that of this famous explosive, a compound consisting of a benzene ring in which one hydrogen has been replaced by a methyl group and three by NO₂ groups.

ANSWER: 2,4,6-<u>trinitrotoluene</u> (accept <u>TNT</u> or <u>C6H2(NO2)3CH3</u>)

[10] Sometimes TNT is combined in an 80-20 mixture with this metal to improve heat output. A hydride of this metal and lithium is a popular reducing agent, and a chloride of this metal is often used to catalyze the Friedel-Crafts reaction.

ANSWER: aluminum (accept aluminium or Al)

[10] The most relatively effective explosive is a variant of this hydrocarbon in which all eight hydrogens have been replaced by nitro groups. Philip Eaton's synthesis of this compound blew the minds of those who thought its 90-degree bond angles would produce too much strain.

ANSWER: <u>cubane</u> (accept octanitro<u>cubane</u> or <u>C8H8</u> or <u>C8(NO2)8</u>)

18. This artist depicted his second wife Marjorie Organ in *The Masquerade Dress*, and his portrait of Isadora Duncan in a red dress is called *The Little Dancer*. For 10 points each:

[10] Name this American artist of *Salome* and *La Neige* who wrote *The Art Spirit* helped found a group of New York artists that included John Sloan, George Luks, and Everett Shinn.

ANSWER: Robert Henri

[10] Along with four other members of "The Eight," Henri belonged to this artistic movement that sought to capture the nitty-gritty realistic scenes of daily street life in New York.

ANSWER: **Ashcan** school

[10] This other American realist painter was a student of Henri and did paintings of boxers such as *Both Members of This Club* and *Dempsey and Firpo*.

ANSWER: George Bellows

- 19. Near the end of this event, the 13-year-old Yvonne Oakes fell to her death, and Allen Cottier acted as spokesperson during this event. For 10 points each:
- [10] Name this 19-month protest organized by Adam Fortunate Eagle, a member of the Indians of All Tribes group.

ANSWER: Occupation of Alcatraz (accept anything indicating a protest that occurred on Alcatraz island)

[10] A similar occupation organized by the AIM to protest Lakota president Dick Wilson occurred in this town on the Pine Ridge Reservation. This town is the namesake of an 1890 massacre of Spotted Elk's tribe.

ANSWER: Wounded Knee (accept Wounded Knee Creek)

[10] This 1934 act, proposed by John Collier, slowed the privatization of reservations established by the Dawes Act but was criticized as a "back to the blankets" policy by some Native American activists

ANSWER: Indian Reorganization Act (or Wheeler-Howard Act, accept Indian New Deal, I guess)

20. This work posits that the designation "Jack the Ripper" is used only to signify one man. For 10 points each: [10] Name this philosophical work adapted from some lectures at Princeton, which helped develop the causal theory of reference.

ANSWER: Naming and Necessity

[10] *Naming and Necessity* is by this analytic philosopher. He's also known for his work on modal logic and Wittgenstein.

ANSWER: Saul Kripke

[10] In another work, Kripke analyzed Wittgenstein's ideas of a private kind of these entities. He argues that, by introducing a kind of these that is only understood by one person, Wittgenstein had created a paradox.

ANSWER: language

- 21. In this novel, Pricey is shipped from Leadville to England after sustaining brain damage from an attack by a gang of miners. For 10 points each:
- [10] Name this novel in which the wheelchair-bound historian Lyman Ward complains about the morals of his assistant Peggy and narrates a biography of his grandmother, the artist Susan Ward.

ANSWER: Angle of Repose

[10] This American author of Angle of Repose also wrote The Spectator Bird.

ANSWER: Wallace Earle Stegner

[10] One of Stegner's students at Stanford was this author who wrote about the Stamper family in *Sometimes a Great Notion* and about the sadistic Nurse Ratched in *One Flew Over the Cuckoo's Nest*.

ANSWER: Ken Kesey

- 22. Identify the following about a Peruvian politician. For 10 points each:
- [10] After winning against Mario Vargas Llosa in a 1990 election, this authoritarian president employed the Grupo Colina death squad and was convicted of human rights abuses while exiled in Japan.

ANSWER: Alberto Fujimori

[10] At the Barrios Altos massacre, members of the Grupo Colina death squad killed some partygoers whom they had inexplicably mistaken for members of this Maoist insurgent group, a rival of the MRTA.

ANSWER: <u>Shining Path</u> (accept <u>Communist Party of Peru</u>, <u>Partido Comunista del Perú</u>, or <u>Sendero Luminoso</u>)

[10] This head of SIN, Peru's aptly-acronymed intelligence service, loved to videotape himself bribing people. He is currently awaiting trial for a wide range of crimes, most notably bribing Alberto Kouri to switch parties in 2000. ANSWER: Vladimiro Ilich **Montesinos** Torres

- 23. The main path through the National Zoo is named for this man, who designed the complex. For 10 points each:
- [10] Name this American landscape architect who collaborated with Calvert Vaux on Central Park.

ANSWER: Frederick Law Olmstead

[10] Olmstead designed the grounds for this architect's first major Romanesque project, a Kirkdale-plan asylum called the Buffalo State Hospital. He also designed Trinity Church in Boston, and is often listed with Sullivan and Lloyd Wright as one of the great 19th century American architects.

ANSWER: Henry Hobson Richardson

[10] One of Richardson's apprentices was this Beaux-Arts architect whose JP Morgan Library was renovated in 2006 by Renzo Piano.

ANSWER: Charles Follen McKim