

Valencia Delta Burke 2013
Round 13 (Champeenship!)

1. In Haruki Murakami's *Kafka on the Shore*, the leeches falling from the sky are an allusion to Ebisu, the patron of these people. Agwe is the Vodoun loa of them, and devotees possessed by him traditionally salute members of the congregation and push chairs around the temple with an oar. Ukupanipo is the Hawaiian shark god that directly controls the livelihoods of people who fulfill this occupation. In Ovid's *Metamorphoses*, this was Glaucus's job before he ate an herb that made him immortal. The apostles Andrew and his brother Simon Peter were, FTP, what kind of person who captures marine life as a form of professional livelihood?

ANSWER: fishermen [accept equivalents]

2. A metabolite of this vitamin has a 13-cis form that is used to treat acne. A sign of a deficiency of this vitamin is a buildup of keratin plaques known as Bitot spots. Deficiencies of this vitamin include keratomalacia [*ker-ah-to-mah-LAY-she-eh*], which causes ulcers, and xerophthalmia [*zeer-op-THAL-mee-uh*]. The absorption of a photon causes this vitamin's namesake aldehyde to isomerize from its 11-cis form to its all-trans form. Along with D, E, and K, this vitamin is fat-soluble. Sometimes known as retinol, this vitamin can be derived from beta-carotene. For 10 points, name this vitamin that is found in carrots and is important in preventing night blindness.

ANSWER: Vitamin A [accept retinol before mentioned]

3. This novel ends with one member of the central family bellowing because he was driven the wrong way around a monument to the Confederate dead. The last image of that character's sister in this novel is a photograph of her with her Nazi husband in Europe. The oldest brother of the central family in this novel is beaten up after befriending a little Italian-American girl, and later that day drowns himself in the Charles River. Benjy often thinks that Caddy "smelled like trees" in what novel, FTP, with a title taken from Macbeth, written by William Faulkner?

ANSWER: The Sound and the Fury

4. X-ray examination has shown that this painting's underdrawing of its female subject is strikingly similar to a later 1439 portrait of the artist's wife Margaret. The rare Affenpinscher dog at bottom center testifies to the title figures' wealth and perhaps to the idea of fidelity, while the orange on a windowsill at left may represent prelapsarian innocence. A convex mirror on the back wall reflects two figures, either witnesses to the title event or the artist and another. Latin graffiti on the back wall states the artist's name. FTP this describes what Netherlandish painting of a merchant and his wife by Jan Van Eyck?

ANSWER: Arnolfini Wedding (or Arnolfini Portrait)

5. During this war, the U.S.A. launched Operation Praying Mantis after the bombing of the USS Samuel B. Roberts. The first engagement of this war began with air raids on the city of Khorramshahr, and one side was invaded after its failed attempt to assassinate Tariq Aziz. The United States initiated Operation Earnest Will during this conflict's "Tanker War" phase. Near the end of this war, one side carried out the Halabja poison gas attack against the Kurds and the U.S.A. unwittingly supplied one side of this war through their complex attempts to aid the Contras in Nicaragua. FTP, name this war fought in the 1980s between nations led by the Ayatollah Khomeini and Saddam Hussein.

ANSWER: Iran-Iraq War

6. In one book, this thinker discussed the difference between the “contagious” and “homeopathic” types of sympathetic magic. The preface to his most famous book references an article about the Kazars that appears in another of his essay collections entitled *Folklore*. This author began researching the “King of the Wood”, a title given to the priest of Diana at the shrine of Nemi, before expanding his notes into a mammoth “Study in Comparative Religion” that addresses the myth of the “dying god” and takes its title from the *Aeneid*. For 10 points, name this author of *The Golden Bough*.

ANSWER: Sir James George Frazer

7. During a festival held every 12 years by a sect of this religion, pilgrims anoint a 57 foot high statue of Bahubali with substances such as milk and flowers. This religion’s most significant figure was born Prince Vardhamana but earned a new name after spending 12 years as an ascetic and achieving kevala, the highest stage of perception. One sect of this religion believes that women must be reincarnated as men before they can achieve moksha, or liberation. That sect, the Digambara, is contrasted with the Svetambara, in that the followers of the former do not wear clothes or own possessions. FTP, name this religion founded by Mahavira whose followers observe the strict doctrine of nonviolence ahimsa.

ANSWER: Jainism

8. This quantity is raised to the third power in the definition of Planck length. In the Einstein field equations, the product of 8 pi and the gravitational constant is divided by this quantity to the fourth power. An early calculation of it was made by Ole Romer using the eclipses of Jupiter's moons. This quantity is found in the Lorentz factor and is divided by velocity when calculating the index of refraction. In an equation developed by Einstein, energy equals mass times this quantity squared. For 10 points, name this value that is approximately three hundred million meters per second.

ANSWER: speed of light [prompt on "c"]

9. One battle in this war saw a US general misquoted as ordering “give them more grape, Bragg,” which was used as a slogan in that general’s later successful presidential campaign. In asking Congress to declare war, the president noted the Thornton Skirmish on the Nueces Strip at which a US army patrol lost 16 men. Henry David Thoreau was jailed for refusing to pay taxes which might support this war, which saw Zachary Taylor’s forces win decisively at Buena Vista. FTP James K. Polk was in office during what 1846 to 1848 conflict with national forces led by Antonio Lopez de Santa Anna?

ANSWER: Mexican-American War

10. This author wrote about a character who destroys a ship on which Ippolito Nievo is traveling to destroy some documents in his novel centering on Simone Simonini. He also wrote a novel in which an editor sorts through the papers of a man named Roberto della Griva who is shipwrecked near the International Date Line. This author of *The Prague Cemetery* and *The Island of the Day Before* wrote a novel in which Belbo, Diotallevi and Casaubon develop the plan and another in which the murder of Adelmo of Otranto is investigated by Adso of Melk and William of Baskerville. For 10 points, name this author of *Foucault’s Pendulum* and *The Name of the Rose*.

ANSWER: Umberto Eco

11. A recent promotion on Thursday nights at this restaurant was free Buffalo Bites with any adult entree purchase. This restaurant gives away a certain appetizer on Mondays if Ryan Newman finishes in the top ten of a NASCAR Sprint Cup Series race. Jadeveon Clowney's epic hit on Michigan running back Vincent Smith occurred in Tampa in a college football bowl game named for this restaurant. Menu items at this restaurant include No Rules Parmesan Pasta, Walkabout Soup, Alice Springs Chicken, and "shrimp on the barbie." For 10 points, name this casual dining steakhouse that is Australian themed and home to an appetizer called the Bloomin' Onion.

ANSWER: Outback

12. Chechen Island sits in this body of water, which the Greeks called the Hyrcanian Sea and which is saline because it is a remnant of the Tethys Sea. Along with Lake Baikal, it is home to one of only two species of freshwater dolphin. In its north it receives both the Ural and Volga Rivers, and Turkmenistan and Kazakhstan comprise its eastern shoreline. The largest city on this body of water is on the Absheron Peninsula in Azerbaijan. Baku lies on, FTP, what inland "sea," sometimes described as the largest lake in the world?

ANSWER: Caspian Sea

13. This person derived the relationship between surface tension and surface excess amount, which appears in his namesake adsorption equation. Along with a Frenchman, he names an equation that provides a relation between the chemical potentials of each of the species in a given phase. The number of degrees of freedom equals the number of components minus the number of phases plus two in this man's namesake phase rule. A quantity named for this man equals enthalpy minus the product of temperature and entropy. That quantity is less than zero if a reaction is spontaneous. For 10 points, identify this chemist who names a free energy symbolized by a capital G.

ANSWER: Josiah Willard Gibbs

14. A suite in F major by this composer includes a solo euphonium playing the folk song "Swansea Town," and another work for military band by this composer has "Chaconne," [sha-KOHN] "Intermezzo," and "March" movements. One work by this composer is named for the setting of Thomas Hardy's novel *The Return of the Native*, and another was written for the St Paul's Girls' School orchestra. A seven-movement suite by this composer is the source of the hymn "I Vow to Thee My Country" and opens with a movement in 5/4 time. For 10 points, name this Englishman who included "Mars, the Bringer of War" in his composition *The Planets*.

ANSWER: Gustav Holst

15. Each of the eight sentences of this eight-line poem are a three-word independent clause, with all but the last ending with the same two-letter pronoun. The poem's epigraph refers to a pool hall, the name of which could be a metaphor for the life of pleasure that leads to death, the main theme. The poem's central pronoun refers to the "seven" at the "Golden Shovel" who "Lurk late" and "strike straight." Written by the author of *Annie Allen*, the first Black woman to win a Pulitzer, FTP what deceptively simple poem's central figures "jazz June" and "die soon" in a work by Gwendolyn Brooks?

ANSWER: "We Real Cool"

16. A short-lived government in this modern-day country was divided into Vonckists and Statists. This country's independence movement was started after a performance of *The Mute Girl of Portici*, and was ended with the signing of the Treaty of London. During WWI, this country stalled Germany at the Battle of Liege after being invaded as part of the Schlieffen Plan. An earlier ruler of this country was famous for brutally cutting off people's hands in this nation's colony of the Congo. Ruled by Albert I and Leopold II, FTP, name this nation with capital Brussels.

ANSWER: Belgium

17. The development of this philosophical movement drew on the distinction between genetic and descriptive psychology and the notion of intentionality found in the work of Brentano. Its formulator called the *content* of experience "noema" and distinguished that from "noesis", its *process*. Psychological studies of body image were used by Maurice Merleau-Ponty in a work that discusses this school's theory of perception. Heidegger used the lens of this philosophical school to write *Being and Time* after being taught by its founder. For 10 points, name this school that studies structures of consciousness, which was founded by Edmund Husserl.

ANSWER: phenomenology

18. The structure of some objects containing this substance was investigated by Navaroo, Frenk, and White using N-body simulations. Valentijn and van der Werf suggested that molecular hydrogen accounts for most of this substance. Douglas Clowe "proved" its existence while studying the Bullet Cluster and gravitational lensing effects. This substance may be composed of massive compact halo objects or weakly interacting massive particles. This mostly non-baryonic substance is divided into warm, hot and cold types. For 10 points, name this hypothetical substance that, along with dark energy, makes up around eighty-five percent of the mass of the universe.

ANSWER: dark matter

19. With only about 5,000 employees, this is the smallest cabinet-level agency in the US. Its first secretary, Terrell Bell, created a commission that produced the influential report "A Nation at Risk," which recommended "market-competitive but performance-based" pay for employees who work in the field which this department covers. Created by President Jimmy Carter in 1979 along with the Department of Health and Human Services by carving up a previously existing agency, this department has tried to spur innovation with its Race to the Top program. FTP what cabinet-level department is headed by Arne Duncan and is concerned with teaching and learning?

ANSWER: Department of Education

20. One novel by this author includes a titular poem that begins, "I was the shadow of the waxwing slain/By the false azure of the windowpane." That 999-line poem is framed by commentaries by a man who claims to be the exiled king of Zembla. Another novel by this man sees the narrator describe his failure to consummate his youthful sexual desire for the 12-year-old Annabel Leigh, who later dies of typhus. That narrator does consummate his adult desire for the daughter of Charlotte Haze, over whose control he kills Claire Quilty. *Pale Fire* and a novel featuring Humbert Humbert are, FTP, works by what Russian author of *Lolita*?

ANSWER: Vladimir Nabokov

Delta Burke 2013
Round 13 Bonuses

1. This man names a law from magnetism that is analogous to Gauss's law in electrostatics. FTPE:

[10] Name this French physicist who also names the SI unit of electrical current.

ANSWER: Andre-Marie Ampere

[10] This man added the displacement current to Ampere's law. In statistical mechanics, this man co-names the probability distribution that describes the velocities of molecules in a gas.

ANSWER: James Clerk Maxwell

[10] Instead of Ampere's law, this law is used when the length of the wire is finite. This law determines the magnetic field near a current, and is thus a magnetic analog of Coulomb's law.

ANSWER: Biot-Savart law

2. Many religiously affiliated hospitals balked at requirements for these items to be covered by the Affordable Care Act. FTPE:

[10] What are these items that were fully legalized for married couples in the 1965 Supreme Court case of *Griswold v. Connecticut*?

ANSWER: contraceptives (try to anti-prompt on specific types—say “more general”)

[10] The *Griswold* case was the first to cite an inherent right to this concept, a legal precedent used to justify the right to abortion in 1973.

ANSWER: marital or personal privacy

[10] This female co-founder of Planned Parenthood coined the term “birth control” and helped encourage Gregory Pincus to develop the first birth control pill.

ANSWER: Margaret Sanger

3. The best-known translation of this collection was made by Richard Burton. FTPE:

[10] What collection of tales is contained within a frame narrative in which Scheherazade tells stories to a Persian king to avoid being beheaded?

ANSWER: *One Thousand and One Arabian Nights* [or *Arabian Nights*]

[10] One well known tale within the *One Thousand and One Nights* involves this sailor hero whose seven voyages led to encounters with the Roc and the Old Man of the Sea.

ANSWER: Sinbad

[10] In the original tale, Aladdin has to use an enchanted one of these items to escape from a magic cave before he can free the more powerful genie from a lamp.

ANSWER: magic ring

4. Imagine you are in a room. You have received a set of characters and instructions for how to process these characters to produce new characters. FTPE:

[10] This scenario briefly describes what famous thought experiment presented by John Searle in his paper, “Minds, Brains, and Programs.”

ANSWER: Chinese room

[10] The Chinese room was used by Searle in an attempt to argue that thinking was not a requirement for passing this test named for this father of computer science. A machine which passes this test would be capable of providing responses similar to those of a human.

ANSWER: Turing test (prompt on responses involving “Artificial Intelligence” or “AI”)

[10] Despite not being able to truly pass a Turing test, this IBM-programmed computer was still able to successfully thwart Ken Jennings during its appearance on *Jeopardy!*

ANSWER: Watson

5. This ruler captured the Ottoman ruler Bayezid the Thunderbolt after the Battle of Ankara. FTPE:
[10] Name this Islamic conqueror who famously made pyramids of skulls outside of conquered cities. His great-great-great-grandson Babur founded the Mughal Empire.

ANSWER: Tamerlane (or Timur the Lame)

[10] Tamerlane's body was laid to rest in the Gur-e Amir, a mausoleum built in this city that served as the capital of his empire.

ANSWER: Samarkand

[10] At the Battle of Terek River Tamerlane defeated Tokhtamysh, who led this Mongolian khanate originally founded by Batu Khan and named for the color of their tents.

ANSWER: Golden Horde (accept Kipchak Khanate or Ulus of Jochi)

6. This geographic entity runs roughly around the edges of the Pacific Plate. FTPE:

[10] Three-fourths of the world's active volcanoes are found in what arc around the Pacific Ocean?

ANSWER: Ring of Fire

[10] One active volcano in the Ring of Fire is this peak between Seattle and Portland that violently erupted in 1980.

ANSWER: Mt. St. Helens

[10] Mt. St. Helens is part of the Cascade Range, mountains created by the subduction of this tectonic plate named for a Spanish explorer under the North American Plate.

ANSWER: Juan de Fuca Plate

7. Musetta describes wandering through the streets in this opera's aria "Quando me'n vo." FTPE:

[10] Name this opera that also includes the aria "Che gelida manina," in which the poet Rodolfo sings about the tiny frozen hand of the seamstress Mimi, who later dies of consumption.

ANSWER: La Boheme

[10] The opera *La Boheme* is by this composer, whose other works include *Tosca* and *Turnadot*.

ANSWER: Giacomo Puccini

[10] Puccini's opera *Turandot* contains this aria, in which Calaf sings "None shall sleep" after Turandot orders her subjects to find out his name. It ends with Calaf repeating "I will win."

ANSWER: "Nessun dorma"

8. Name these African countries given some recent events, for 10 points each.

[10] Adly Mansour became the acting president of this country, the home of Tahrir Square, after Mohamed Morsi was deposed by the military and the constitution was suspended.

ANSWER: Egypt [or Misr]

[10] Operation Serval is a French military operation in the northern portion of this country. Last year, a coup in this African country ousted President Amadou Toumani Toure [*TOO-ray*].

ANSWER: Mali

[10] Michel Djotodia [*joh-toh-JAH*] became president of this country in March of 2013 after Francois Bozize [*BOH-zee-zay*] fled when rebels captured its capital city, Bangui [*bahn-GEE*].

ANSWER: Central African Republic

9. This quantity is held constant in isobaric processes. For 10 points each:

[10] Name this quantity that is inversely proportional to volume in Boyle's law.

ANSWER: pressure

[10] Named for a Frenchman, this law is valid for ideal solutions, and states the vapor pressure of a solution equals the sum of the products of vapor pressure and mole fraction for each solute.

ANSWER: Raoult's law

[10] This quantity, introduced by Gilbert Lewis, measures the escaping tendency of a substance from a phase. This quantity replaces pressure in calculations involving non-ideal gases.

ANSWER: fugacity

10. The convergence of naïve Americans and jaded Europeans formed a major theme of many of this man's novels, including *The Ambassadors*. FTPE:

[10] What author of *The Turn of the Screw* lived most of his adult life in England?

ANSWER: Henry James

[10] Isabel Archer is the title figure of this James novel, in which she suffers a cruddy marriage to Gilbert Osmond.

ANSWER: Portrait of a Lady

[10] In James's novel *Daisy Miller*, the title female contracts and dies from a fever named for this European capital. Winterbourne saw Daisy at the famed Colosseum of this city before she got sick.

ANSWER: Rome

11. One definition of this type of political entity states that it has a monopoly on the legitimate use of violence. FTPE:

[10] What is this type of organized entity, through which various governments wield power?

ANSWER: state

[10] This German sociologist and political theorist put forward that definition of a state in his *Politics as a Vocation*. He also wrote *The Protestant Ethic and the Spirit of Capitalism*.

ANSWER: Max Weber

[10] Weber argued that the focus on predestination by this protestant sect, named for the Swiss author of *Institutes of the Christian Religion*, helped propel the protestant work ethic.

ANSWER: Calvinism

12. This event caused a migration of Okies to California in the 1930s. FTPE:

[10] What two-word term refers to the pervasive dry storms featuring gusts of loose soil in the Great Plains that devastated agriculture?

ANSWER: Dust Bowl

[10] This New Deal agency meant to control farm output and thus prices offered aid to many farmers hurt by the ravages in the Dust Bowl before being declared unconstitutional by the Supreme Court in 1936.

ANSWER: AAA or Agricultural Adjustment Act

[10] Much of the Great Plains had been populated by farmers who took advantage of this 1862 legislation, providing land to any man who would live on it and maintain and improve it for five years.

ANSWER: Homestead Act

13. Answer some questions about a certain fruit in Greek myth. FTPE:

[10] Hippomenes used a golden variety of this fruit to distract Atalanta in a foot race.

ANSWER: apples

[10] Golden apples also grew in the garden of these ladies, who tended Hera's orchard.

ANSWER: Hesperides

[10] This goddess of discord threw a golden apple marked "For the fairest" into a banquet, leading to that whole Trojan War nastiness.

ANSWER: Eris

14. Directors associated with this movement include Claude Chabrol and Eric Rohmer. FTPE:

[10] What term was used to describe a group of French directors of the 1950s-60s associated with the journal *Cahiers du Cinema*?

ANSWER: New Wave or Nouvelle Vague

[10] Probably the best-known New Wave director is this theoretician behind movies like *A Woman Is a Woman* and *Breathless*.

ANSWER: Jean-Luc Godard

[10] The character Antoine Doinel (dwah-nell) is the protagonist of this 1959 movie, after which his story was told in four following movies.

ANSWER: *The 400 Blows* or *Le Quatre Cents Coups*

15. Melanocytes, the medulla of the adrenals, and cranio-facial bones all arise from them. FTPE:

[10] Name this group of embryonic cells that migrate to various locations in the body.

ANSWER: neural crest cells

[10] These eponymous cells of the peripheral nervous system also arise from the neural crest. Some of them form the myelin sheath and are thus analogous to oligodendrocytes in the CNS.

ANSWER: Schwann cells

[10] Neural crest cells arise from this outermost primary germ layer.

ANSWER: ectoderm

16. The fictional Martin Arrowsmith is a member of this profession. FTPE:

[10] As a member of this profession, Arrowsmith discovers a bacteriophage while beginning to face an outbreak of bubonic plague.

ANSWER: medical doctor (accept equivalents)

[10] Arrowsmith is a novel by this first American to win a Nobel in literature, author of *Babbitt* and *Elmer Gantry*.

ANSWER: Sinclair Lewis

[10] Lewis's novel *Babbitt* is set in this fictional city in the fictional state of Winnemac. Its name ironically suggests it offers a pinnacle of human behavior.

ANSWER: Zenith

17. Kapparot [*kah-pah-RAWT*] is a ritual performed before this holiday in which Jewish people transfer their sins to a chicken by swinging it around their head. For 10 points each:

[10] Name this Jewish holy day that is also known as the Day of Atonement.

ANSWER: Yom Kippur

[10] Yom Kippur is observed on the tenth day of this month of the Jewish calendar.

ANSWER: Tishrei [or Tishri]

[10] This prayer recited in Aramaic on the eve of Yom Kippur asks that all vows be repudiated.

ANSWER: Kol Nidre [*kawl nee-DREY*]

18. During the first war of this name, troops under Prince Louis of France laid siege to castles at Dover and Rochester. FTPE:

[10] Name this series of wars, the second of which saw Simon de Montfort take Henry III captive after his victory at Lewes.

ANSWER: Barons' Wars

[10] The First Barons' War resulted from King John's refusal to abide by this document, which he had signed in 1215 at Runnymede.

ANSWER: Magna Carta

[10] During the Second Barons' War, royal forces under this son of Henry III won the Battle of Evesham. As king, this "Hammer of the Scots" defeated William Wallace at Falkirk.

ANSWER: Edward I (or Edward Longshanks)

19. One of these self-similar figures is generated by removing the middle third of a line segment and then repeating the process on the remaining line segments. For 10 points each:

[10] Name these figures that also include the Koch snowflake and Sierpinski triangle.

ANSWER: fractals

[10] This mathematician coined the word fractal and wrote "How Long Is the Coast of Britain."

ANSWER: Benoit Mandelbrot

[10] Named for an Austrian mathematician, this fractal is formed by repeatedly removing seven small cubes from a larger cube. Each face of this fractal is a Sierpinski carpet.

ANSWER: Menger sponge

20. This poem was written in 1650 and includes the lines "An hundred years should go to praise / Thine eyes and on thy forehead gaze / Two hundred to adore each breast." For 10 points each:

[10] Name this Andrew Marvell poem that begins "Had we but world enough and time."

ANSWER: "To His Coy Mistress"

[10] This subject of four poems by Andrew Marvell, including one about glow-worms, is the lover of Juliana, who "does to my thoughts and me" "what I do to the grass."

ANSWER: the Mower [or Damon]

[10] Marvell wrote "An Horatian Ode upon" this man's "Return from Ireland," and John Milton also wrote a sonnet to this man, who was known as Lord Protector after the English Civil War.

ANSWER: Oliver Cromwell