

Delta Burke 2015
Round 2

1. This commodity is the first and more powerful of two entities that nickname the period of Brazilian history dominated by Sao Paulo plantation and farming interests in the late 19th and 20th centuries. A common historical tale states that Gabriel de Clieu stole one of these plants and brought it to Martinique in 1720. Lloyd's of London was created in an establishment that primarily served this substance. FTP what beverage supposedly became the drink of choice for Colonial Americans after a boycott on tea in the 1770s?

ANSWER: coffee

2. This organization is the largest private landowner in Florida, running huge farming operations through its for-profit subsidiary, AgReserves, Incorporated. It also owns the Polynesian Cultural Center on Oahu's north shore which earned over \$60 million in 2012, all tax free since this organization receives a religious exemption for that theme park. Much of its holdings are run by its Deseret Management Corporation. FTP what church recently opened the Creek City Mall near its iconic Neo-Gothic Tabernacle headquarters in Salt Lake City?

ANSWER: LDS Church or Mormons or Church of Latter Day Saints

3. The density of these structures is measured using DXA, or dual-energy X-ray absorptiometry, and can be increased by bisphosphonates. The cells that degrade these objects have a membrane called a ruffled border. Their namesake morphogenetic proteins were discovered by Marshall Urist and belong to the TGF-beta superfamily. Clopton Havers researched the internal structure of these objects and names some canals in them. There are compact and spongy types of these objects, and specific examples of them include the malleus, incus, and stapes. Red and yellow are the two types of marrow found in their interior. For 10 points, name these objects affected by osteoporosis.

ANSWER: bones

4. This man's first novel is partly set on Calf Island and centers on the 777 year old Flapping Eagle, who seeks mortality. An alias created by this man that combines the first names of Conrad and Chekhov titles a 2014 memoir. This author of *Grimus* and *Joseph Anton* wrote a novel about 1,001 babies born in the hour following a certain country's 1947 independence. Another of his books begins with the bombing of a plane that includes the passengers Saladin Chamcha and Gibreel Farishta. That book by this author resulted in the Ayatollah Khomeini issuing a fatwa against him. For 10 points, name this Indian-born author of *Midnight's Children* and *The Satanic Verses*.

ANSWER: Salman Rushdie

5. A portrait by this artist whose two main versions are in the Palazzo Pitti and the Isabella Stewart Gardner Museum includes the eye condition suffered by the titular papal library prefect. In one work, this artist included Apollo playing the lira da braccio on the titular mountain. Giulio [*JOOL-yaw*] Romano was a pupil of this artist, who included the Virgin Mary and Jesus in a painting in which a very young John the Baptist holds the titular goldfinch. Another painting by this artist from Urbino depicts Diogenes [*dahy-OJ-uh-neeZ*] sitting on stairs, Plato pointing his finger upwards, and several other philosophers. For 10 points, name this artist of *The School of Athens*.

ANSWER: Raphael [or Raffaello Sanzio da Urbino; accept any underlined portion]

6. This company names the stadium where the 2014 FSU football team fell behind 21-0 but rallied for a 42-31 victory. A bowl game from 2006 to 2010 played in Birmingham, Alabama, was named for this company's website. On the "Gluten Free Ebola" episode of *South Park*, Randy was quarantined at this restaurant. The stadium belonging to the University of Louisville is named for this company, whose namesake sold his 1971 Chevrolet Camaro in order to found it. A cup of garlic dipping sauce and a pepperoncini is included with each of this company's pizzas. For 10 points, name this chain whose slogan is "Better Ingredients, Better Pizza."

ANSWER: Papa John's Pizza

7. These constructs have arbitrarily long arithmetic progressions according to the Green-Tao theorem. Yitang Zhang used the Bombieri-Vinogradov theorem in a recent paper concerning bounded gaps between these entities. Euler discovered a quadratic polynomial that generates these entities, which are visible on the Ulam spiral. A theorem named for them, which was proved by de la Vallee Poussin and Hadamard, describes their distribution. The difficulty in factoring them is the basis of RSA cryptography, and they can be obtained using the sieve of Eratosthenes. For 10 points, name these numbers that are only divisible by one and themselves.

ANSWER: prime numbers [or primes]

8. An invention by this thinker that was used by parents of around 300 children was mocked in a 1945 article in *Ladies Home Journal* titled "Baby in a Box." This thinker used a learning process he championed in an effort to help the US Navy attack German ships with pigeons who could guide bombs. This inventor of the air crib wrote a utopian novel named after a Thoreau work in which he showed a society guided by his ideas. FTP what author of *Walden Two* and proponent of operant conditioning used a namesake box to study animal behavior?

ANSWER: Burrhus Frederick Skinner

9. A novel set primarily in this city includes the line "Either horn of the dilemma gores us." Another novel set in this city sees Basil Ransom elope with Verena Tarrant, the protégé of the feminist Olive Chancellor. A poem set in this city depicts Augustus Saint Gaudens' "shaking Civil War relief" of an African-American regiment here, near where its aquarium has been torn down, and the speaker describes steam shovels behind a fence on this city's famous "common." FTP Robert Lowell's poem "For the Union Dead" is set in what city, in which Arthur Dimmesdale fathers an out-of-wedlock child with Hester Prynne in *The Scarlet Letter*?

ANSWER: Boston

10. One effect of this event was the Bridge Gulch Massacre, which saw 150 Wintu natives killed by whites. A hurricane off the coast of the Carolinas sunk the SS Central America while it was returning from this event, partially causing the Panic of 1857. This event was a primary reason for the construction of the transcontinental railroad. This event caused waves of immigrants from both China and Latin America to migrate to the area known as the "Mother Lode." For 10 points, what event began when James W. Marshall found a certain substance at Sutter's Mill.

ANSWER: California Gold Rush

11. A work written in this format in 1713 argues against the ability to apprehend mind-independent objects in the person of Philonus, an expression of author George Berkeley's idealist philosophy. Another work structured in this fashion is presented as a letter by Pamphilus, who details arguments for God's existence between Cleanthes, Demea, and Philo, the last of whom speaks for the author, David Hume. The best known examples of this structure present the views of Socrates as transcribed by a student. FTP what conversational structure is used for Plato works like *The Symposium* and *The Republic*?

ANSWER: dialogue

12. A type of these particles discovered by Nambu is generated by spontaneous symmetry breaking. The only scalar type of these particles was observed in the ATLAS and CMS experiments. Photons and gluons are examples of their gauge type, as are W-plus, W-minus, and Z, which mediate the weak interaction. Along with Einstein, the namesake of these particles predicted a new state of matter. These particles, which are named for an Indian physicist, have integer spin and do NOT obey the Pauli exclusion principle, unlike fermions. For 10 points, name these particles, one of which is responsible for other particles having mass and is named for Higgs.

ANSWER: bosons

13. The Huallata is a duck-like creature known as the "goose" of this mountain range. Another animal common to this mountain range is the camelid called the Vicuna. The highest known crater lake is found on top of the stratovolcano called Ojos del Salado in this range. The range's southern portions were created by the subduction of the Nazca plate, resulting in its tallest peak, Aconcagua. FTP what is this range running down the western edge of South America?

ANSWER: Andes Mountains

14. A ballet choreographed by Petipa that is named for this person actually centers on Kitri and Basilio, who arrive at a gypsy camp in the second act. This person is represented by a cello in a tone poem composed by Richard Strauss that contains ten "fantastic" variations. The songs "Golden Helmet of Mambrino" and "The Impossible Dream" are from a musical about this person, who lends his name to a word meaning extravagantly chivalrous or impractically idealistic. For 10 points, name this "Man of La Mancha" whose squire is Sancho Panza in a Cervantes novel.

ANSWER: Don Quixote [prompt on "Man of La Mancha" before mentioned]

15. The Schafflertanz is a ritual dance held every seven years in this city to celebrate the ending of the Black Plague there; that dance is also demonstrated daily on the glockenspiel in this city's Marienplatz. The Residenz is the palace of the Wittelsbach family in this city. After a meeting in this city in 1938 Neville Chamberlain proclaimed that he had secured "peace in our time, with honor." Adolf Hitler was arrested after an attempt to overthrow the Weimar government at a beer hall in this city in 1922. FTP what city known for its Hofbrauhaus and celebration of Oktoberfest is the capital of Bavaria?

ANSWER: Munich

16. This play opens with citizens bringing branches wrapped in wool to offer as supplication at two altars of Pallas. Later a messenger tells the title character that he was found in a forested valley of Cithaeron and brought to Polybus to be raised. A shepherd tells the title character that he released him from pins that pierced his ankles, explaining his name. At the end of this play the title character's wife Jocasta has hanged herself and he has put out his own eyes. FTP this describes what first play of the Theban Cycle by Sophocles?

ANSWER: Oedipus Rex

17. The rapid cooling of thin specimens of this substance in salt baths at various temperatures is used to generate isothermal transformation diagrams. An early form of this substance that originated in India is called its wootz variety. The interstitial-free type of this material has extremely low levels of carbon, unlike traditional types that have around one percent. Limestone is used to produce this material in the basic oxygen process, and a blast of air is used in the Bessemer process. This alloy contains around ten percent chromium in its "stainless" form. For 10 points, name this principle alloy of iron that is known for its hardness and strength.

ANSWER: steel

18. This election was the subject of the Henry Louis Stephens cartoon "Three to One You Don't Get It." A third party in this election had candidates such as John J Crittenden and Edward Everett, who both held Cabinet positions in the Fillmore administration. That party eventually chose John Bell of Tennessee as their choice for the Presidency, and Bell would carry his home state, Kentucky, and Virginia. This election saw the Democrats breaking into Northern and Southern contingents, causing Democratic candidates Stephen Douglas and John Breckenridge to hand the election to the Republican ticket. For 10 points, name this election that was trigger for the secession of seven states, a victory for Abraham Lincoln

ANSWER: Election of 1860

19. Norman O. Brown used the phrase "excremental vision" to refer to this author's mindset in his poem "The Lady's Dressing Room," which describes a young man's disgust at learning that his lover "Celia shits!" In a novel, this author created a title character who stands naked while an imperial procession passes through his legs. That parade of the enemies of Blefescu created by this author are six inches tall and contrasted with the sixty-foot tall Brobdingnagians. FTP what 18th-century British author described the tiny Lilliputians in *Gulliver's Travels*?

ANSWER: Jonathan Swift

20. In a Micmac legend, Glooskamp's uncle, Mikcheech, transforms into one of these creatures. One of these creatures had to bear Mount Mandara when it was being used to churn the ocean of milk. That one was the second avatar of Vishnu, Kurma. A Greek woman transformed into this animal was Chelone, who gives her name to the order of these creatures. While washing their feet, people were kicked into the sea by Sciron and then eaten by a large one of these animals. FTP, what type of creature was thought by numerous Native American tribes to hold the world on its back, similar to how it holds the four elephants who hold the world in Hindu myth.

ANSWER: turtle

Delta Burke 2015
Round 2 Bonuses

1. Some of the incidental music to this work was extracted to form two concert suites. FTPE:

[10] Name this work whose incidental music included "Anitra's Dance" and a piece in which the play's title character runs away from some trolls, "In the Hall of the Mountain King."

ANSWER: Peer Gynt

[10] The incidental music to *Peer Gynt* was written by this Norwegian composer.

ANSWER: Edvard Grieg

[10] After an opening timpani roll crescendo, this work by Grieg begins with a descending second followed by a descending third motif. It was inspired a Robert Schumann work in the same key.

ANSWER: Piano Concerto in A minor

2. Fictional characters that live in this city include Studs Lonigan and heroin addict Frankie Machine. FTPE:

[10] Name this city that is the setting of novels like *The Man with the Golden Arm* and *The Jungle*.

ANSWER: Chicago

[10] This poet of "Fog" wrote that Chicago was "Hog-Butcher for the World, Tool maker, Stacker of Wheat." This man's poem "Grass" begins, "Pile the bodies high at Austerlitz and Waterloo."

ANSWER: Carl Sandburg

[10] This Saul Bellow novel begins "I am an American, Chicago-born." In this novel, the title character works in Einhorn's dog parlor and travels with Stella to Mexico.

ANSWER: The Adventures of Augie March

3. Jeremiah Horrocks and William Crabtree were the only two people to observe this event in 1639, and measurements of it are difficult due to the black drop effect. For 10 points each:

[10] Name this astronomical event in which a certain planet passes across the Sun.

ANSWER: transit of Venus

[10] Transits of Venus usually occur in pairs this number of years apart. Jupiter has this number of regular satellites, and there are this number of planets that orbit the Sun in the Solar System.

ANSWER: eight

[10] This man predicted the 1631 transit of Venus and names a craft searching for Earth-like exoplanets. He also names a law that states a planet's orbit is an ellipse with the Sun at one focus.

ANSWER: Johannes Kepler

4. After the Venezuelan Crisis, the creator of this policy also added his namesake corollary to the Monroe Doctrine. FTPE:

[10] Name this policy created by Theodore Roosevelt which was used in acquiring the Panama Canal Zone. This term was paired in his motto with speaking softly.

ANSWER: Big Stick Diplomacy (stop that snickering, you!)

[10] This rotund successor of Roosevelt dealt with nations of the Western Hemisphere using Dollar Diplomacy. This president would later become Chief Justice of the US in the 1920's.

ANSWER: William Howard Taft

[10] This Secretary of State under Taft encouraged US bankers to move into the Latin American countries to give the US financial leverage. He had previously served in the Senate for the state Pennsylvania.

ANSWER: Philander C. Knox

5. The twelve children of Niobe were killed in this fashion. FTPE:

[10] Artemis and Apollo used what weapons to punish Niobe for boasting?

ANSWER: arrows

[10] Niobe's children were killed because she had made what specific boast?

ANSWER: she was a better mother than Leto or more fertile than Leto [accept equivalents]

[10] Heracles killed the centaur Nessus with an arrow poisoned with the caustic blood of this nine-headed reptile.

ANSWER: Hydra

6. This year saw the May student uprisings in Paris. FTPE:

[10] What year also marked the beginning of the Prague Spring in Czechoslovakia?

ANSWER: 1968

[10] This Czech leader ushered in the Prague Spring but had to resign when the Soviets sent in tanks in 1969.

ANSWER: Alexander Dubcek [*DOOB-chek*]

[10] Dubcek called for economic reforms with a liberalizing edge he called "socialism with" this human feature.

ANSWER: human face

7. They killed themselves rather than surrender at the siege of Masada, and an extreme faction of them was known as the Sicarii because they carried daggers. FTPE:

[10] Name this passionate group of Jews from Judea who sought to end Roman rule.

ANSWER: Zealots

[10] A zealot named Simon and a tax collector named Matthew were two of these twelve disciples of Jesus, whose namesake creed begins "I believe in God the Father Almighty."

ANSWER: Apostles

[10] This man wrote about "The Life and Times of Jesus of Nazareth" in his 2013 book *Zealot*.

ANSWER: Reza Aslan

8. This story involves a punishment given to an Arthurian knight who raped a woman. FTPE:

[10] What Canterbury Tale is told by Alisoun, whose name obliquely references the fact she's been married five times?

ANSWER: Wife of Bath's Tale

[10] In "The Wife of Bath's Tale," Guinevere tells the knight accused of rape that he has one year to find an answer to this question; the answer apparently is "dominance over men."

ANSWER: What do woman want? (accept clear variants, like "What do women truly desire?")

[10] The Canterbury Tales were written by this author of *The House of Fame*.

ANSWER: Geoffrey Chaucer

9. This author described his childhood love of chemistry in the memoir *Uncle Tungsten*, and he wrote about one of his patients in *The Man Who Mistook His Wife for a Hat*. FTPE:

[10] Name this neurologist and author of *Awakenings* who died in August of 2015.

ANSWER: Oliver Sacks

[10] The book *Awakenings* by Sacks centers on a group of patients with a form of this condition that is sometimes called "sleeping sickness." It is characterized by inflammation of the brain.

ANSWER: encephalitis [or encephalitis lethargica]

[10] The titular *Awakenings* occurred when Sacks gave the patients this drug, which is the hydroxylated form of the amino acid tyrosine. This drug is also used to treat Parkinson's disease.

ANSWER: L-dopa [or Levodopa]

10. This creature was found beheaded and skinned outside the Hwange Game Reserve. FTPE:
[10] Name this lion from Zimbabwe who was killed in July of 2015 by a dentist from Minnesota.

ANSWER: Cecil

[10] This president of Zimbabwe, who defeated Morgan Tsvangirai [*CHAHN-gihr-EYE*] in the 2008 and 2013 general elections, called big-game hunting a "sin."

ANSWER: Robert Mugabe

[10] Robert Mugabe has ruled Zimbabwe for over thirty-five years, but the presidents of Equatorial Guinea and Angola have ruled for over thirty-six years. Name either.

ANSWER: Teodoro Obiang Nguema Mbasogo or José Eduardo dos Santos

11. Central American history fun time! FTPE:

[10] This country, site of the Darien scheme, is home to an important man-made waterway that was built by the United States after an attempt led by the French engineer Ferdinand de Lesseps failed.

ANSWER: Panama

[10] The US invaded Panama in 1989 to remove this dictator, nicknamed "Pineapple Face," who had been indicted for drug trafficking.

ANSWER: Manuel Noriega

[10] During a civil war in this country bordering Mexico and Belize, dictator Efraín Ríos Montt committed genocide against the Ixil people. An earlier president, Jacobo Arbenz, was ousted in a coup engineered by the U.S.

ANSWER: Guatemala

12. Black carbon results when sugar reacts with this compound, whose "fuming" type is oleum. FTPE:

[10] Name this strong acid that is often found in car batteries.

ANSWER: sulfuric acid [or H₂SO₄]

[10] In this process, sulfur dioxide and oxygen react in the presence of a vanadium oxide catalyst to produce sulfur trioxide, which then reacts with water to make sulfuric acid.

ANSWER: contact process

[10] This term refers to acids such as H₂SO₄ and H₂CO₃ that have two ionizable hydrogen atoms that are lost in a stepwise fashion during acid-base reactions.

ANSWER: diprotic [prompt on "polyprotic"]

13. Aime Bonpland accompanied this man on a 1799 to 1804 voyage on which he discovered that the Casiquiare [*kah-see-KYA-ray*] Canal connects the Orinoco and Amazon rivers. FTPE:

[10] Name this German naturalist who wrote the five-volume treatise *Kosmos*.

ANSWER: Alexander von Humboldt [do NOT accept "Wilhelm von Humboldt"]

[10] Alexander von Humboldt names one of these entities that is located off of South America's western coast. Other examples of them include the Kuroshio and the Gulf Stream.

ANSWER: ocean currents

[10] Humboldt climbed this Ecuadorian volcano, whose peak is the furthest point from Earth's center. This volcano was depicted in the Frederic Church painting *Heart of the Andes*.

ANSWER: Chimborazo

14. Mack Williams would like to add the members of Outkast riding in a Cadillac to this work. FTPE:
[10] Name this huge relief sculpture outside of Atlanta, Georgia that depicts the Confederate icons Jefferson Davis, Robert E. Lee, and Stonewall Jackson riding horses.

ANSWER: Stone Mountain

[10] This man was initially commissioned to carve Stone Mountain, but it was completed by others. This man would go on to carve Mount Rushmore in South Dakota.

ANSWER: Gutzon Borglum [accept Danish equivalents for Borglum, such as "ass-licker"]

[10] Borglum's sculpture *The Aviator* is located on the campus of this university, which is also home to a building designed by Thomas Jefferson called The Rotunda.

ANSWER: University of Virginia

15. Classical philosophy used this method of argument involving a proposition and its rebuttal. FTPE:

[10] What method was said by a German thinker to encompass a thesis rebutted by an antithesis, but eventually leading to a synthesis?

ANSWER: dialectic

[10] This German author of *The Phenomenology of Spirit* used the term *aufhebung* to refer to the ability of the dialectic to resolve itself into new understanding.

ANSWER: GWF Hegel

[10] Hegel described a movement toward self-consciousness in a dialectical opposition between these two types of people, one of whom controls or even owns the other.

ANSWER: master-slave dialectic (reverse order lame but acceptable)

16. This collection includes selections such as "Revolt," "Wine," and "Death." FTPE:

[10] What 19th-century poetry collection by Charles Baudelaire has a title connoting blooms grown by dark forces?

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

[10] The first poem after the dedication of *Les Fleurs du Mal* addresses this person holding the book as a "hypocrite" and "brother."

ANSWER: reader (accept "Au Lecteur" or "The Reader," obviously!)

[10] Baudelaire uses this term throughout the collection to refer to anger, spite, and melancholy, contrasting it with "ideal" in one section title.

ANSWER: spleen

17. Boudicca's Uprising occurred in Britain during the reign of this man, who forced Lucan and Seneca to commit suicide after the Pisonian conspiracy. For 10 points each:

[10] Name this adopted son of Claudius who reigned as Roman Emperor from 54 AD to 68 AD.

ANSWER: Nero Claudius Caesar Augustus Germanicus [or Lucius Domitius Ahenobarbus]

[10] According to the historian Cassius Dio, during this 64 AD event, Nero climbed to the roof of a palace and sang the "Capture of Troy" while playing a lyre.

ANSWER: Great Fire of Rome [or accept equivalents, such as the burning of Rome]

[10] After the Great Fire of Rome, Nero ordered the construction of this palace, which included a rotating dining area and a 100 foot tall statue of Nero that resembled the Colossus of Rhodes.

ANSWER: Domus Aurea [or Golden House]

18. This phenomenon was studied in one case by Latane and Darley by having smoke appear under a door and seeing whether subjects were more likely to report it alone or with others. FTPE:

[10] What “effect” posits that people are less likely to intervene to help another person when other people who are not helping are nearby?

ANSWER: bystander effect (accept bystander apathy)

[10] Latane and Darley were prompted to study the bystander effect after the notorious murder of this woman in 1964; her rape and murder was originally said to have been witnessed by 38 people who wouldn’t even call the police, though the initial story has been mostly debunked.

ANSWER: Kitty Genovese

[10] The bystander effect is a specific example of the larger concept of the “diffusion of” this feeling, the sense that one has a stake in the outcome of a situation.

ANSWER: responsibility

19. The radius of gyration equals the square root of this quantity divided by mass. FTPE:

[10] Name this rotational analog of mass.

ANSWER: moment of inertia [or rotational inertia; or angular mass]

[10] Steiner’s theorem states the moment of inertia about a parallel axis equals the moment of inertia about this location plus the product of mass and distance squared.

ANSWER: center of mass [or barycenter; or center of gravity; accept word forms]

[10] The equation for calculating the moment of inertia of a solid cylinder or disk includes this fraction, which also appears in the equation for calculating kinetic energy given mass and velocity.

ANSWER: one-half

20. Twentieth bonuses can be hard. Answer the following about Bruno Schulz FTPE:

[10] Schulz was killed by a jagoff Gestapo agent in the Drohobycz Ghetto in this country, where he lived his entire life.

ANSWER: Poland

[10] Schulz is best known for a collection of short stories named for the “street of” these reptiles whose “tears” are used to refer to fake sadness.

ANSWER: crocodiles

[10] Schulz’s three linked stories about tailors’ dummies use this folkloric figure with a Germanic name, one’s disturbing look-alike, often a harbinger of bad luck.

ANSWER: doppelganger