

Delta Burke 2015
Round 12

1. These works are the source of idioms such as "I say it's spinach, and I say the hell with it" along with "Back to the old drawing board." The show *Late Night with Seth Meyers* occasionally has live performances of these works. On an episode of *Seinfeld*, the character Elaine can't figure out the meaning of one of these works. The phrase "On the Internet, nobody knows you're a dog" is also originally from one of these works, which are the subject of a weekly caption contest. For 10 points, name these humorous drawings from a certain Manhattan-centric periodical.

ANSWER: cartoons from *The New Yorker* [prompt on partial answer]

2. This region is labelled E in the Jeffreys-Bullen model, and its upper boundary is home to ultra-low velocity zones. This region, whose density is between ten and twelve grams per centimeter cubed, is responsible for shadow zones. Located below some post-perovskite and the D-double-prime layer, this 2300 kilometer thick region is beneath the Gutenberg discontinuity. An uppercase "K" is used to denote a seismic wave that is refracted through this region. Earth's magnetic field is generated by an internal dynamo that is supported by convection in this region. For 10 points, name this liquid portion of the Earth that is located below the mantle and above the inner core.

ANSWER: outer core [prompt on "core;" do NOT accept "inner core"]

3. This man killed the sheriff William Heselrig, and near the end of his life, John de Menteith betrayed him. Hugh Cressingham's skin was used to make a sword belt for this man, who was the subject of a Blind Harry biography. This man resigned as Guardian after losing a battle where his army was arranged in sheltrons. This losing commander at the Battle of Falkirk had earlier joined with Andrew Moray and defeated the English at a 1297 battle. For 10 points, name this Scottish patriot who was victorious at Stirling Bridge, and who was played by Mel Gibson in *Braveheart*.

ANSWER: William Wallace

4. The Phu Phan Mountains divide this country's Khorat Plateau into two basins in its eastern Isan region. The Tenasserim Mountains run north-south along a thin land bridge this nation shares with its western neighbor. This country's historically important city of Chiang Mai in the north lost a bid to host the 2020 World Expo to a city in this country on the Chao Praya River, Ayutthaya. This nation shares the Isthmus of Kra with Myanmar. FTP name this Southeast Asian nation with capitol Bangkok.

ANSWER: Thailand

5. *The Corpse Exhibition* is a collection of short stories set during and after this military conflict. Brian Turner's poetry collection *Here, Bullet* describes experiences he had fighting in this war. Veterans of this conflict are taken to do PR at the Thanksgiving Day Dallas Cowboys' game in the novel *Billy Lynn's Long Halftime Walk*. Matt Gallagher's book *Kaboom: Embracing the Suck in a Savage Little War* elaborates on his blog posts during his service in this war. FTP, George Packer's book *Assassins' Gate* details America's involvement in what early 2000's conflict?

ANSWER: Iraq War

6. This man proposed, contra Kant, that the propositions of arithmetic are inductive and a posteriori rather than a priori. This thinker defended a philosophical viewpoint by arguing that humans are capable of higher pleasures than swine. This author of *A System of Logic* claimed that his wife, Harriet Taylor, co-wrote a treatise arguing for equality of the sexes titled *The Subjection of Women*. This author of *On Liberty* was influenced by the Felicific Calculus of his father's friend, Jeremy Bentham. FTP what British philosopher propounded the greatest good for the greatest number in his book *Utilitarianism*.

ANSWER: John Stuart Mill

7. Kurtzke developed a scale to measure the disability status of people with this disease, which can be treated with the drug Avonex or other forms of interferon beta. This disease was first studied by Jean-Martin Charcot, and its clinical manifestations are similar to neuro-myelitis optica. The dissemination of white matter lesions in space and time are used to diagnose this disease, whose phases include secondary-progressive and relapsing-remitting. For 10 points, name this disease that is characterized by loss of myelin in the central nervous system, and is often abbreviated MS.

ANSWER: multiple sclerosis [or or disseminated sclerosis; accept MS before mentioned]

8. The center of Hopper's painting *Soir Bleu* features one these people wearing white and sitting at a table. James Stewart played one of these people who has medical knowledge in a 1952 film. These people partly title a song that begins "Isn't it rich? Are we a pair? / Me here at last on the ground, you in mid-air." The aria "Vesti la giubba" is from a verismo opera titled after these people. That opera includes a character named Canio, who was based on the figure Pierrot [*pee-uh-ROH*] from commedia dell'arte. A song from *A Little Night Music* is entitled "Send in" these people. For 10 points, name these comic performers, one of whom was named Bozo.

ANSWER: clowns [accept synonyms; prompt on less specific answers]

9. One novella by this author depicts the son of a failed conspirator against the Japanese government who thinks he's dying of liver cancer. That story which satirizes Mishima's attack on the Shield society is titled "The Day He Himself Shall Wash My Tears Away." A dark bildungsroman by this author depicts a group of boys abandoned in a village during a plague in World War II. The irresponsible dreamer Bird urges doctors to allow his infant son, born with a brain hernia, to die in another novel by this author. FTP identify this Nobel Prize-winning Japanese author of *Nip the Buds, Shoot the Kids* and *A Personal Matter*.

ANSWER: Kenzaburo Oe

10. According to the Gagudju version of this myth system, a creature called Almudju climbed up from underground to release all the animals of the world from its belly. Mamaragan was an embodiment of lightning in this mythos, though he oddly lives in a puddle in the desert. A malign water spirit that threatened people in this myth system was called a Bunyip. The creator deity in this myth system is the Rainbow Serpent. FTP the Dreamtime is a central feature of the religion of what indigenous people of Australia?

ANSWER: Australian Aborigines

11. One leader of this polity gave the Cornerstone Speech, stating that it was "the first government ever instituted upon the principles in strict conformity to nature." This country lost the Battle of Cherbourg [*SHAIR-boorg*], which was fought off the coast of France. The formation of this entity was promoted by Robert Rhett, who was a member of a group called the Fire-Eaters. Britain refused to officially recognize it, even though this government held the belief that "cotton was king." Alexander Stephens was the Vice-President of, FTP, what collection of eleven slave states which seceded from the United States?

ANSWER: Confederate States of America [or the Confederacy]

12. Herwarth Walden sold this painting to his wife Nell before it was acquired by MoMA from Rene Gaffe, a Belgian collector. A figure in this painting who holds a flowering twig in his fingers wears both a cross on a necklace and a Star of David on a ring. Some memories from the city of Vitebsk are depicted in this work, whose top portion contains a farmer carrying a scythe as well as a woman and two houses that are upside down. Created a year before a self-portrait with seven fingers, this painting includes a green man staring at a cow. For 10 points, name this Marc Chagall painting.

ANSWER: I and the Village

13. Faxen and Holtsmark introduced the partial-wave expansion of a quantity named for this process. Wheeler proposed and Heisenberg developed a matrix named for this process in which each element corresponds to a Feynman diagram. The square of the absolute value of its namesake amplitude equals the differential cross section. The deep inelastic type of this process helped with the discovery of quarks. A type of this process that is inversely proportional to the fourth power of wavelength is named for Rayleigh and explains why the sky appears blue. For 10 points, name this process in which particles are deflected by collisions with other particles.

ANSWER: scattering [accept specific types]

14. This writer exhorted, “Hear what the earth says:--“ at the end of a poem that begins with the list of names “Bulkeley, Hunt, Willard, Hosmer, Meriam, Flint”; that poem’s title “Hamatreya” illustrates this author’s interest in Hindu scripture. Another poem by this author praises the “embattled farmers” who stood “[b]y the rude bridge that arched the flood/ . . . And fired the shot heard ‘round the world.” He described himself as a “transparent eyeball” in his essay “Nature.” FTP name this landlord and friend of Henry David Thoreau who led the New England Transcendentalist writers.

ANSWER: Ralph Waldo Emerson

15. Refugees escaping this conflict were assimilated into substandard housing called “Bidonvilles.” This conflict escalated after civilians were subject to restaurant bombings in the Cafe Wars. One side in this war was criticized by Michel Foucault [*foo-KOH*] after the torture techniques of the OAS came to light. Refugees from the colonial power in this war saw an influx in citizen refugees referred to as Pied Noirs, while the other side in this conflict was led by Ahmed Ben Bella. The FLN came to power during this war, which was ended by the Evian Accords. For 10 points, identify this 1954 to 1962 conflict in which France lost an African colonial possession across the Mediterranean.

ANSWER: Algerian War for Independence [or Algerian Revolution]

16. The beginning of this work discusses a painting of a vision on the lake of Nemi, where Diana might still linger and haunt the shore. It contains sections such as “The Worship of Trees” and “The Influence of the Sexes on Vegetation,” and discusses the worship and sacrifice of a divine ruler known as “The King of the Wood.” This work heavily influenced Joseph Campbell’s *The Hero with a Thousand Faces* and was named after an object used to gain access to the underworld. For 10 points, identify this “study in magic and religion” by James Frazer.

ANSWER: *The Golden Bough*

17. This poet constructed a complicated mythology around characters like Tharmas, Luvah, Urthona, and Urizen, collectively called The Four Zoas, who came about from the dissolution of Albion. This poet described the “dark satanic mills” of Britain’s early industrial age in a poem that wonders whether Jesus ever came to England and which begins, “And did those feet in ancient time.” One poem by this author laments the hard life of the title profession in the child Tom Dacre and the speaker, who could barely cry “weep, weep” when his mother died. FTP what Romantic poet included “The Chimney Sweeper” in his *Songs of Innocence*?

ANSWER: William Blake

18. On November 1, 2015, the Reverend Michael Curry was installed as the first African-American presiding bishop of this US denomination. Curry follows Katherine Schori, who in 2006 became the first female presiding bishop of this fairly liberal denomination, which consecrated its first gay bishop in 2003. The American victory in the Revolutionary War necessitated the creation of this denomination, as its clergy were no longer willing to swear fealty [*FEE-uhl-tee*] to the English monarch. FTP name this Christian denomination that is part of the Anglican Union, the name of which refers to a church structure that puts the “E” in African-American AME churches?

ANSWER: Episcopal Church or Episcopalians

19. Richard Marlar found this protein at the pre-historic Cowboy Wash site in fossilized fecal matter. This protein, which has a Hill coefficient of one, contains a single polypeptide chain of 153 amino acid residues. This protein was isolated from sperm whales by John Kendrew, who made it the first protein to have its three-dimensional structure obtained using X-ray diffraction. The red color of meat is due to this protein, which contains only one heme group, unlike a similar tetrameric protein. For 10 points, name this protein that transports oxygen to muscle cells.

ANSWER: myoglobin [do NOT accept "hemoglobin"]

20. The Aro Confederacy was a political union centered in this country from the late 17th till the early 20th century. The northeast of this country saw 500 years of rule beginning in the late 14th century by the Kanem Bornu Empire. Nnamdi Azikiwe was the first president of this modern-day country, taking power in 1963 after this country's 1960 independence from Great Britain. In 1994, this country's military ruler Sani Abacha ordered the execution of the Ogoni activist and writer Ken Saro-Wiwa. FTP what African nation saw its Igbo minority defeated in the Biafran War, and moved its capital to Abuja from Lagos in 1991?

ANSWER: Nigeria

Delta Burke 2015
Round 12 Bonuses

1. Mindanao is the second largest island of this nation, which also owns the Sulu Archipelago. FTPE:

[10] Name this Asian country whose principle language is Tagalog.

ANSWER: Philippines [or Pilipinas]

[10] This current President of the Philippines is the son of Corazon, who served as President after the 1986 People Power Revolution removed Ferdinand Marcos from power.

ANSWER: Benigno Aquino III

[10] The Philippines is home to this Islamic militant group, which carried out the 2001 Dos Palmas kidnappings. This group killed over 100 people in 2004 when it bombed SuperFerry 14.

ANSWER: Abu Sayyaf Group [or ASG]

2. For Sunni Muslims, the “Six Books” are the canonical collection of these sayings. FTPE:

[10] What Arabic term designates these directly reported statements made by Muhammad?

ANSWER: hadith

[10] Much of this Islamic legal code was derived from interpretations of the hadiths.

ANSWER: Sharia

[10] The third Caliph, Uthman, is thought to have commended the recording of the sayings of the prophet. Uthman is one of the first four caliphs of Islam, collectively known by this term.

ANSWER: Rightly Guided or Righteously Guided” or “Rashidun”

3. Including triclinic, there are this total number of crystal systems. For 10 points each:

[10] Name this number of diatomic elements and value on the pH scale for neutral substances.

ANSWER: seven

[10] The types of unit cells in this crystal system are simple, body-centered, and face-centered.

ANSWER: cubic [accept word forms]

[10] This value, which is eight for body-centered cubic and twelve for face-centered cubic, refers to the number of neighboring atoms with which a given atom is in contact.

ANSWER: coordination number

4. This panoramic novel describing the dissolution of the Han Dynasty is attributed to Luo Guanzhong. FTPE:

[10] In what work do the title entities, comprising rivals from the Wei, Shu, and Wu factions, vie for rule?

ANSWER: Romance of the Three Kingdoms

[10] The Ronguo and Ningguo branches of the Jia family are described in this 18th-century Chinese novel, another of that country’s four classics along with *Romance of the Three Kingdoms*.

ANSWER: Dream of the Red Chamber or Story of the Stone

[10] Jia Baoyu, the central figure of *Dream of the Red Chamber*, has a name referring to this type of precious stone especially prevalent in China, which is in Baoyu’s mouth when he is born.

ANSWER: jade

5. The election of 1964 saw this president win the largest landslide victory since Monroe during the Era of Good Feelings. For 10 points each:

[10] Name this former president whose vision for the country was packaged in his “Great Society” legislation and who escalated US involvement in Vietnam.

ANSWER: Lyndon Baines Johnson [or LBJ; prompt on “Johnson”]

[10] Barry Goldwater, a senator from this state, was Johnson’s opponent in the 1964 election.

ANSWER: Arizona

[10] Johnson’s campaign ran this anti-Goldwater ad, showing a girl picking flowers in a field when an explosion followed by a mushroom cloud appears in the background.

ANSWER: Daisy ad [or Daisy Girl; or Peace, Little Girl]

6. Unveiled in 1541, it depicts St. Peter holding a pair of keys and St. Bartholomew displaying his flayed skin, although this work's exposed genitals were covered by Daniele da Volterra. FTPE:

[10] Name this fresco located on a wall in the Sistine Chapel that depicts Christ's second coming.

ANSWER: The Last Judgment [or Il Giudizio Universale]

[10] *The Last Judgment* was created by this man, who also painted the Sistine Chapel's ceiling.

ANSWER: Michelangelo di Lodovico Buonarroti Simoni [accept either]

[10] This man's triptych entitled *The Last Judgment*, which was stolen by pirates in 1473, depicts St. Michael wearing armor and Christ sitting on a rainbow throne in between a lily and a sword.

ANSWER: Hans Memling [or Hans Memlinc]

7. This huge lake is home to the world’s only true freshwater seal, the Nerpa. FTPE:

[10] What is this deepest lake on earth, holding nearly a fifth of the world’s unfrozen fresh water?

ANSWER: Lake Baikal

[10] Lake Baikal sits near the city of Irkutsk in this vast, cold eastern region of Russia.

ANSWER: Siberia

[10] TripAdvisor tells Chris Borglum a side trip to Lake Baikal is only a 25-hour train ride from this capital of Mongolia, so he’s booking a visit soon.

ANSWER: Ulaan Bator

8. SLC4A1, also known as the transport protein Band 3, mediates the exchange of chloride for this other anion, which is found in temporary hard water. For 10 points each:

[10] Name this negatively charged ion found with a positively charged sodium ion in baking soda.

ANSWER: bicarbonate [or HCO₃⁻; or hydrogen carbonate; do NOT accept partial answers]

[10] This enzyme, which is inhibited by the drug aceta-zolamide, catalyzes the reaction between bicarbonate and a proton to make carbon dioxide and water.

ANSWER: carbonic anhydrase

[10] Carbonic anhydrase was the first known enzyme with an ion of this element in its active site. In galvanization, an iron surface is coated with this element to provide protection from corrosion.

ANSWER: zinc [or Zn]

9. Vidkun Quisling, whose name is synonymous with “treason” among older folks, led this country as a collaborator with Nazis in WWII. FTPE:

[10] What is this Scandinavian country whose king Haakon VII went into exile during WWII?

ANSWER: Norway

[10] Norway’s parliament, created by constitution in 1814, has this name.

ANSWER: Storting

[10] From 1397-1523 Norway was part of the Kalmar Union with Denmark and this country which shares a thousand mile border on Norway’s east.

ANSWER: Sweden

10. This theory venerates knowledge derived from sensory experience. FTPE:

[10] What is this philosophical view which is the third stage of human development in the mind of its first formulator?

ANSWER: positivism

[10] This founder of positivism and sociology developed a secular “religion of humanity” to replace traditional religion. That worked out well.

ANSWER: August Comte

[10] Positivism is an extension of this more basic idea that all knowledge is derived from our sense experience of the world, associated with John Locke.

ANSWER: empiricism

11. This character complains about his inability to take off his boots at the beginning of a play. FTPE:

[10] What companion of Vladimir takes part in the title action of a Samuel Beckett play?

ANSWER: Estragon or Gogo

[10] In *Waiting for Godot*, Gogo and Didi meet Lucky and this servant of his, who releases a string of gibberish when he puts on a hat and is told to “Think!”

ANSWER: Pozzo

[10] *Waiting for Godot* is an example of this literary school named by Martin Esslin and characterized by a sense of meaninglessness and inability to truly connect with others.

ANSWER: Theater of the Absurd

12. A song by this man was the first sheet music to sell one million copies. For 10 points each:

[10] Name this ragtime composer whose operas include *Treemonisha*.

ANSWER: Scott Joplin

[10] This rag became popular in 1973 after it was used as the theme song to the movie *The Sting*.

ANSWER: "The Entertainer"

[10] Scott Joplin also composed the now lost opera *A Guest of Honor*, which centers on these two men and their 1901 dinner at the White House.

ANSWER: Theodore Roosevelt and Booker T. Washington [both required]

13. This quantity through a closed surface is proportional to the net charge enclosed. FTPE:

[10] Name this quantity that is symbolized by the uppercase Greek letter phi, and is the product of the electric field at a point on a closed surface and the area of that surface.

ANSWER: electric flux [do NOT accept "magnetic flux"]

[10] Gauss's flux theorem, also known as Gauss's law, contains this physical constant, which equals one over the quantity four times pi times Coulomb's constant.

ANSWER: vacuum permittivity [or permittivity of free space; or electric constant]

[10] Gauss's law is a member of this set of four equations, which also includes Faraday's law.

ANSWER: Maxwell's equations

14. A person wearing a costume resembling this animal is not seen around fifty percent of the time in an experiment in which subjects are asked to count the number of basketball passes. FTPE:

[10] Name this type of animal, one of which named Koko could communicate with sign language.

ANSWER: gorilla [prompt on "ape"]

[10] Mountain gorillas in Rwanda were studied by this woman, who was murdered in 1985.

ANSWER: Dian Fossey

[10] Along with Jane Goodall, Dian Fossey was a disciple of this man, who made several discoveries with his wife Mary at Olduvai Gorge in Tanzania.

ANSWER: Louis Leakey [prompt on "Leakey"]

15. Francis Cugat created the best known cover of this book, which has a blue background, the lights of a carnival at the bottom, and a reclining nude figure in each of the eyes of a woman. FTPE:

[10] Name this novel set in the summer of 1922 that ends with the narrator stating, "So we beat on, boats against the current, borne back ceaselessly into the past."

ANSWER: The Great Gatsby

[10] *The Great Gatsby* was written by this American, who also wrote *Tender is the Night*.

ANSWER: F. Scott Fitzgerald

[10] Jay Gatsby is a bit obsessed by this object that "burns all night" at the end of Daisy's dock.

ANSWER: green light [prompt on partial answer]

16. Answer the following about the fall of the Inca Empire, for 10 points each.

[10] This conquistador and 180 men conquered the Inca Empire.

ANSWER: Francisco Pizarro

[10] This final ruler of the Inca, the son of Huayna Capac, was held captive by Pizarro and was killed even after his ransom had been paid.

ANSWER: Atahualpa

[10] The Spanish helped Atahualpa win his internecine war against the forces of this brother of his.

ANSWER: Huascar

17. In the programming language C++, the first element of one of these data structures has an index of zero and can be accessed by using square brackets. For 10 points each:

[10] Name these data structures that represent a collection of elements of the same type.

ANSWER: linear arrays [or one-dimensional arrays]

[10] Accessing an array can be done in this type of time, also known as Big O of 1. It's not final, but this word names a type of unmodifiable value that can store a literal value in a program.

ANSWER: constant

[10] In languages such as C Sharp, the Split function is used to convert an object of this type to an array. Other standard functions that accept this data type as input include IndexOf and Concat.

ANSWER: strings

18. This deity was really angry when she was lightly wounded by Diomedes while protecting her son during a battle in the Trojan War. FTPE:

[10] What goddess was the mother of Aeneas by Anchises?

ANSWER: Aphrodite or Venus (clue is true of both)

[10] Aphrodite had a daughter, Beroe, with this prince whose blood, after he was gored to death by a boar, sprouted forth the anemone flower.

ANSWER: Adonis

[10] The sisters Euphrosyne, Aglaea, and Thalia, known by this collective name, are in some myths associated with Aphrodite.

ANSWER: Graces [or Charites]

19. One poem by this author asks, "What passing bells for those who die as cattle?" FTPE:

[10] What World War I poet of "Anthem for Doomed Youth" was killed just one week before the armistice in 1918?

ANSWER: Wilfred Owen

[10] Owen is best known for this poem in which soldiers struggle with a phosgene gas attack. The title of this poem is in Latin and follows the phrase "The old Lie."

ANSWER: "Dulce et Decorum Est"

[10] The speaker of this Owen poem determines he's "in Hell" and encounters the enemy he killed.

ANSWER: "Strange Meeting"

20. This man was reinforced by Colonel Montgomery's troops at the Battle of Quebec, and another exploit of his included taking Fort Schuyler by himself. FTPE:

[10] Name this man, whose attempts to give up West Point to the British had him branded a traitor.

ANSWER: Benedict Arnold

[10] This accomplice of Benedict Arnold was not as lucky since he was captured and eventually hanged as a spy.

ANSWER: Major John Andre

[10] Benedict Arnold scored a major victory with Ethan Allen and the Green Mountain Boys at this fort, which is where Henry Knox acquired cannons to break the British occupation of Boston.

ANSWER: Fort Ticonderoga