

Valencia Delta Burke Invitational 2013  
Round 4

1. In a work sometimes attributed to this author, Zeus sends an army of crabs to force some mice to flee after defeating frogs in battle. George Chapman made the first English translation of the works of this man, who included the "Catalogue of Ships" in one work. In another work by this man, the main character is recognized by his nurse from a scar on his leg after a long series of adventures that included being held prisoner by Calypso for seven years. For 10 points, name this blind Greek poet who supposedly wrote the *Iliad* and *Odyssey*.

ANSWER: Homer [or Homerus; or Homeros]

2. Dr. Robert Vaughn is excited by the "reshaping of the human body by technology" in a novel named for this type of event; Vaughn leads a group of people who re-enact these types of events because they find them sexually arousing in that novel by J.G. Ballard. Andy Warhol created numerous silkscreens of these events for his "Death and Disaster Series" of the early 1960s. The text of the unfinished novel *The Last Man* was found in Albert Camus's briefcase after he died in one of these events. FTP, what type of violent calamity killed Nathaniel West and artist Jackson Pollock, as well as actor James Dean, who died on Route 466?

ANSWER: car crash or accident (accept synonyms)

3. This process occurs in cells co-named for Benard that form hexagonal patterns. This process occurs when the Rayleigh number reaches a high value. Seafloor spreading is caused by its namesake currents in a portion of the upper mantle known as the asthenosphere. The natural type of this process is caused by temperature gradients that lead to differences in density. The ratio of this process to conduction is given by the Nusselt number. For 10 points, name this transfer of heat by the circulation of a fluid that is used in certain types of ovens.

ANSWER: convection

4. One ruler of this dynasty killed his childhood friend by hitting him with a game board, and this dynasty's Emperor Jing dealt with the Rebellion of the Seven States. This dynasty, which underwent a massive expansion under Emperor Wudi, was founded by Liu Bang. This dynasty was cut into two periods after Wang Mang created the Xin Dynasty. The Taoist Zhang Jue led an insurrection against this dynasty that was put down by its general Cao Cao, that was the Yellow Turban Rebellion. FTP, name this Chinese dynasty that ruled until 200 A.D. and shares its name with the predominant ethnic group of China.

ANSWER: Han Dynasty

5. This philosopher used the words "triangle" and "beauty" to distinguish between simple and mixed modes. His skepticism about the possibility of undeniable truth in religion is central to a work that advocates the separation of church and state, his *Letter Concerning Toleration*. This author also discussed waste as a limitation on property in a work that contains a critique of Robert Filmer's *Patriarcha*. He described the mind as a "tabula rasa" before writing a work that defines the means of survival as life, liberty, health and property. That work inspired parts of the Declaration of Independence. For 10 points, name this author of *Two Treatises of Government*.

ANSWER: John Locke

6. This university's president was asked to serve as Secretary of Health, Education, and Welfare by Lyndon Johnson in 1966, but J. Edgar Hoover scuttled it before Clark Kerr could accept. Glenn Seaborg discovered plutonium at this university, which also was home to Robert Oppenheimer before he joined the Manhattan Project. One student from this university notably orated that students were "raw material . . . to be made into a product" by the school and society. Mario Savio helped initiate the Free Speech Movement at what school, for 10 points, located north of Oakland and flagship of its state's university system?

ANSWER: University of California-Berkeley (accept "Cal" or "Berkeley")

7. One character in this work utters the title analogy shortly before admitting that she should never have slept with Skipper. This play's patriarchal figure bellows that "There ain't nothin' more powerful than the odor of mendacity," a key theme in this play in which Maggie presumably lies about being pregnant in Act IV. Focusing on the dying Big Daddy's last discussions with his son Brick, FTP points what Tennessee Williams play's title refers to Maggie's nickname in a phrase representing the title animal's jumpiness on a heated surface?

ANSWER: Cat on a Hot Tin Roof

8. The dried lava fields of Craters of the Moon are located in the southeastern corner of this state, which is also the home of the Payette and Salmon Rivers. Those rivers' headwaters form in this state's Sawtooth Range, considered the birthplace of Sacajawea. Both the Treasure and Magic Valleys are features of its landscape, along with the Snake River Canyon with nearby Shoshone Falls. French names adorn both its capital and the populous city of Coeur d'Alene, located in this state's northern panhandle. FTP, bordered by Wyoming and Montana to its east, what is this state with capital at Boise?

ANSWER: Idaho

9. This word names the expedition taken in 1872 by Charles Wyville Thomson that was the first devoted completely to oceanography. Film director James Cameron used a submersible named for this word in 2012 to make a record-breaking solo dive. The teacher Christa McAuliffe died in a vehicle named for this word as a result of a faulty O-ring seal. For 10 points, identify this word that names the deepest point of the Marianas Trench and the Space Shuttle that exploded in 1986.

ANSWER: Challenger

10. One player of this instrument recorded live improvisational albums like *La Scala* and *The Koln Concert*. John Hammond produced a band called the "Barons of Rhythm" that was led by another player of this instrument nicknamed "Holy" by Lester Young who composed the song "One O'Clock Jump". One player of it released the album *Genius of Modern Music* whose songs include "'Round Midnight" and "Epistrophy". This instrument was played by the composer of "Mood Indigo" and "It Don't Mean a Thing (If it Ain't Got that Swing)". For 10 points, name this instrument, played by Keith Jarrett, Count Basie, Thelonious Monk, and Duke Ellington.

ANSWER: piano

11. James E. Côte dismissed one controversy surrounding this thinker as “much ado about nothing” in his work *Adolescent Storm and Stress*. That controversy arose from a work subtitled “The Making and Unmaking of An Anthropological Myth” that criticized this thinker’s theory of absolute cultural determinism. This thinker’s major work was dismissed as a “fateful hoaxing” in a work by Derek Freeman. That work analyzes the difference between the turbulent adolescence of young American girls and that of 68 subjects she interviewed from the island of Ta‘ū. For 10 points, name this American anthropologist, author of *Coming of Age in Samoa*.

ANSWER: Margaret Mead

12. In one scene of this novel, Jack Lawton is pandied after claiming that the Latin noun “mare” has no plural. This novel’s protagonist’s aunt Dante owns green and maroon combs and says he should apologize or “the eagles will come and pull out his eyes.” After attending Clongowes, the protagonist is struck by a lengthy sermon on hell given by Father Arnall but later denounces Catholicism during a conversation with Cranley. This work includes the epiphany of the bird-girl and an earlier draft of it was called *Stephen Hero*. For 10 points, name this work about Stephen Dedalus by James Joyce.

ANSWER: *A Portrait of the Artist as a Young Man*

13. Union forces turned back Confederates at the “Round Forest” salient in a battle in this state over New Year’s Day 1863. Nathan Bedford Forrest ordered the execution of surrendered black federal troops in the Fort Pillow Massacre in this state, which was the last state to secede. Confederate General Albert Sydney Johnston was killed at the same time as fighting occurred at the “Hornet’s Nest” in a battle in this state known to Southerners as Pittsburg Landing. FTP what state saw the Battle of Shiloh as well as three Civil War engagements in Chattanooga?

ANSWER: Tennessee

14. A protein of this virus binds to the trans-activation response element. The capsid of this virus is made up of p24, which is encoded by the *gag* gene. A test called the Trofile assay is used to determine which chemokine receptor, CCR5 or CXCR4, this virus is utilizing. Glycosylation of gp120 can hide its epitopes from recognition. This virus can be treated with AZT, which is a reverse transcriptase inhibitor. Diagnosed using an ELISA and Western blot, this virus infects CD4 cells. For 10 points, name this retrovirus that destroys the immune system and causes AIDS.

ANSWER: HIV [or human immunodeficiency virus]

15. This mythological figure presented a golden honeycomb to Aphrodite at her Mount Eryx shrine. In the Platonic dialogue *Euthyphro*, Socrates claims "I am a descendant of" this mythological figure and "my arguments walk away and will not remain fixed where they are placed." This figure, who attempted to murder his talented nephew Perdix, was able to pass a thread through a shell using an ant. The son of this figure died as a result of flying too close to the sun. For 10 points, name this father of Icarus who built a labyrinth to contain the Minotaur for King Minos.

ANSWER: Daedalus

16. This team's cornerback Tramaine Brock had two interceptions of Matt Schaub in its 34-3 win in Week 5 of the 2013 season. This team's rookie safety Eric Reid intercepted Aaron Rodgers in its first game of the 2013 season. This team, which will play in Levi's Stadium next season, beat the Jaguars in London in Week 8 of the current season. This team's nose tackle Ian Williams suffered a season-ending ankle injury and its kicker Phil Dawson scored its only points in a 29-3 loss to division rival Seattle in Week 2 of the current season. For 10 points, name this NFC West team quarterbacked by Colin Kaepernick that lost to the Baltimore Ravens in last season's Super Bowl.

ANSWER: San Francisco 49ers [accept either city or team name]

17. One scene in this work depicts townspeople gathering to listen to a Joe Louis fight, the narrator fretting that a Louis loss would be the equivalent of a black man beaten or a black woman raped. The narrator of this work begins a poem with the lines, "What are you looking at me for? I didn't come to stay." The narrator of this work describes her harrowing abuse and rape by Mr. Freeman, who is murdered after being acquitted in Stamps, Arkansas. This work was written by the poet of "On the Pulse of Morning," which was read at Bill Clinton's inauguration. FTP what is this autobiographical work by Maya Angelou?

ANSWER: *I Know Why the Caged Bird Sings*

18. One person in this work sees a vision of a great sheet carrying a variety of animals before being summoned to a meeting by Cornelius. Another man in this book is told, "silver and gold have I none," before being healed of his lameness at the gate of the temple. In this book, one man declares, "I see the Son of man standing on the right hand of God," before being stoned to death, while another is later converted on the road to Damascus. Including the martyrdom of Stephen and the conversion of Paul, FTP, name this book that follows the Four Gospels in the New Testament.

ANSWER: the Acts of the Apostles

19. One king of this name was influenced by his mistress Alice Perrers, and another was the subject of the Fieschi letter. Jane Seymour had a son of this name who died at the age of fifteen. Piers Gaveston possibly had a relationship with a king of this name, who lost to Robert the Bruce at the Battle of Bannockburn in 1314. One king with this name abdicated in order to marry Wallis Simpson, and another was known for his long legs. For 10 points, identify this name shared by English kings nicknamed "Longshanks" and "the Confessor."

ANSWER: Edward

20. This quantity and the change in free energy change are plotted on an Ellingham diagram. The conjugate variable of entropy is this quantity, which is related to surface tension by the Eotvos rule. It decreases for gases in the Joule–Thomson effect, and a voltage is created by differences in this quantity in the Seebeck effect. Pressure and this quantity appear on a phase diagram. Average kinetic energy depends on this quantity, which is constant in isothermal processes. For 10 points, name this quantity measured on scales named for Celsius and Fahrenheit.

ANSWER: temperature

Delta Burke 2013  
Round 4 Bonuses

1. The biological type of these substances are known as enzymes. For 10 points each:

[10] Name these substances that increase the rate of a reaction without being consumed.

ANSWER: catalysts

[10] Catalysts lower the value of this quantity, whose negative value is divided by the product of the universal gas constant and temperature in the exponential of the Arrhenius equation.

ANSWER: activation energy

[10] These cyclic compounds can be used as phase-transfer catalysts. These compounds can bind alkali metal cations, and their namesake functional group has the general formula R-O-R.

ANSWER: crown ethers [prompt on partial answer]

2. Al-Baqara, or “The Cow,” is the second-longest of these entries at 286 verses. FTPE:

[10] What are these 114 divisions of a monotheistic holy book, including Al-Fatiha, “The Opening.”

ANSWER: suras

[10] The 114 suras comprise this holy book of Islam.

ANSWER: Quran

[10] One important verse in “The Cow” is 255, which uses the title metonym to display Allah’s rule over the universe.

ANSWER: Throne Verse or Ayat al-Kursi

3. Steve Doocy recently claimed "more personnel were sent in to the World War II memorial to keep people out than the State Department actually sent to" the consulate in this city. FTPE:

[10] Name this city in Libya where an American consulate was attacked in September of 2012.

ANSWER: Benghazi

[10] Along with three others, this US Ambassador to Libya was killed in the Benghazi attack.

ANSWER: Christopher Stevens

[10] This woman, the US Ambassador to the UN at the time of the Benghazi attack, was criticized for saying the attack "began spontaneously." As a result, she was forced to settle for the position of National Security Advisor instead of succeeding Hillary Clinton as Secretary of State.

ANSWER: Susan Rice

4. French explorer Antoine Cadillac established a fort at this location in 1701. FTPE:

[10] That fort became what American city, much in the news in 2013 for being the largest US city ever to declare bankruptcy?

ANSWER: Detroit

[10] British forces took Fort Detroit during this North American conflict of 1754-63, part of the Seven Years’ War involving fighting in Europe and Asia as well.

ANSWER: French and Indian War

[10] Fort Detroit was besieged during a rebellion led by and named for this leader of the Ottawa tribe, who was immortalized in the name of an auto brand that was discontinued in 2010.

ANSWER: Pontiac (accept Pontiac’s Rebellion or any other synonym for “rebellion”)

5. The academic study of these entities is called anthroponymy. FTPE:

[10] What linguistic entities are used to address and identify humans?

ANSWER: names

[10] Lewis Henry Morgan briefly examined the naming conventions of this New York tribal people in his book *Systems of Consanguinity*.

ANSWER: Iroquois

[10] The addressing of Jesus as “son of Mary” in the Quran is an example of this type of naming convention in which a surname comes from one’s mother.

ANSWER: matronym

6. This family includes Franny and Zooey, whose stories were told in paired novellas. FTPE:

[10] What fictional family created by J.D. Salinger included the eldest son, Seymour, who kills himself at the end of the story “A Perfect Day for Bananafish”?

ANSWER: Glass family

[10] A better-known Salinger character is this narrator of his novel *A Catcher in the Rye*, who leaves Pencey Prep for New York City in winter.

ANSWER: Holden Caulfield (accept either)

[10] Holden complains about the “piercing” and “out of tune” nature of this musical activity performed without an instrument by his roommate Stradlater as Stradlater prepares for a date.

ANSWER: whistling

7. Answer the following about “super” stuff from physics, for 10 points each.

[10] Superfluidity was discovered in the liquid form of this element below the lambda point. There is currently a shortage of this element, whose nucleus is identical to an alpha particle.

ANSWER: helium [prompt on “He”]

[10] Supersymmetry, which is a successor to the standard model, states that there is one of these particles with integer spin for every fermion. These particles are named for an Indian physicist.

ANSWER: bosons

[10] Superconductivity can be described by this triply-eponymous microscopic theory, which describes how electrons are grouped into Cooper pairs.

ANSWER: BCS theory [or Bardeen Cooper Schrieffer theory]

8. Answer some questions about gods who are not the Aesir in Norse mythology.

[10] This group of gods are associated with fertility, wisdom, and divination. Frey and Freya are among their number.

ANSWER: Vanir

[10] This giant is a sea god who hosts elaborate parties, one of which is the setting for yet another spat between Loki and the Aesir in the *Lokasenna*.

ANSWER: Aegir

[10] These nine “choosers of the slain” party with the souls of dead warriors in Valhalla.

ANSWER: Valkyries

9. Fifteen ships trapped in the Suez Canal due to this conflict were given the name the Yellow Fleet. FTPE:

[10] Name this fairly short 1967 war that saw Israel handily defeat Egypt, Jordan, and Syria.

ANSWER: Six-Day War

[10] During the Six-Day War, the Israel Defense Force was led by this man, who later served as Israel's Prime Minister. This man's signing of the Oslo Accords led to his assassination in 1995.

ANSWER: Yitzhak Rabin

[10] Israel's victory in the Six-Day War led to Syria's forfeiture of this elevated territory now separated from it by the Purple Line.

ANSWER: Golan Heights

10. This instrument, which was formerly known as the hautbois [*HOH-boi*], has a solo at the beginning of Eric Whitacre's piece *October*, and has a predecessor called the shawm. FTPE:

[10] Name this this double-reed woodwind instrument often used to tune an orchestra.

ANSWER: oboe

[10] This composer used an oboe to represent the duck in *Peter and the Wolf*, and other works by this Russian include the *Classical Symphony* and the opera *The Love for Three Oranges*.

ANSWER: Sergei Prokofiev

[10] Sergei Prokofiev composed a concerto for this instrument for Mstislav [*MIS-tuh-slahv*] Rostropovich [*ros-truh-POH-vich*], and Edward Elgar's concerto in E minor for this instrument was made popular by Jacqueline [*zhak-LEEN*] du Pre [*PREY*].

ANSWER: cello

11. This author wrote that "Time present and time past/Are both perhaps present in time future" in his poem "Burnt Norton." FTPE:

[10] Who is this author of "Gerontion" and "The Waste Land"?

ANSWER: T.S. Eliot

[10] "Burnt Norton" is the first poem of this Eliot collection which also comprises "East Coker," "Little Gidding," and "The Dry Salvages."

ANSWER: Four Quartets

[10] The speaker of this Eliot poem wonders whether he "dare disturb the universe" by expressing his affection for a woman, and closes by noting he has "heard the mermaids singing, each to each."

ANSWER: "The Love Song of J. Alfred Prufrock"

12. An 18<sup>th</sup>-century German argued that beauty comprises lack of concept, obligatoriness, spectator disinterest, and objectivity. FTPE:

[10] Such definitions of the basis for beauty and/or quality in art and literature mark this branch of philosophy, concerned with notions of judgment and taste.

ANSWER: aesthetics

[10] The German alluded to above was this author of *The Critique of Pure Reason* and formulator of the categorical imperative.

ANSWER: Immanuel Kant

[10] This early 19<sup>th</sup>-century German author argued that one's aesthetic judgments should arise from aesthetic experiences in his magnum opus *The World as Will and Representation*.

ANSWER: Arthur Schopenhauer

13. A member of this phylum causes heartworm disease in dogs. For 10 points each:

[10] Name this phylum that also contains roundworms such as pinworms and hookworms.

ANSWER: Nematoda [or nematodes]

[10] This disease is caused by ingesting pork infested with larvae of the namesake nematode.

ANSWER: trichinosis [*trik-uh-NOH-sis*] [or trichiniasis; or trichinellosis]

[10] Fire and Mello discovered RNA interference in this nematode used as a model organism.

ANSWER: *C. elegans* [or *Caenorhabditis elegans*]

14. Answer the following about famous filibusters in the United States Senate, for 10 points each.

[10] During a fifteen hour filibuster against the National Recovery Administration, this man provided his recipe for fried oysters. This politician from Louisiana was nicknamed The Kingfish.

ANSWER: Huey Long

[10] This man, a US Senator and plagiarist from Kentucky, ended his 13 hour filibuster against John Brennan becoming CIA director after receiving a letter from Eric Holder regarding weaponized drones.

ANSWER: Rand Paul

[10] Republicans filibustered against this man, LBJ's nominee to be Chief Justice of the Supreme Court, and were successful. He had earlier represented the defendant in *Gideon v. Wainwright*.

ANSWER: Abe Fortas

15. This man's forty-minute silent film *Eat* consists of Robert Indiana consuming a mushroom. FTPE:

[10] Name this pop artist whose studio was known as The Factory, and whose paintings include depictions of green Coca-Cola bottles, Marilyn Monroe, and Campbell's Soup cans.

ANSWER: Andy Warhol

[10] One work by this other pop artist is a sculpture of Ballantine Ale cans. His paintings include *0 through 9* and *Three Flags*, along with several others that also depict numbers and flags.

ANSWER: Jasper Johns

[10] This "friend" of Jasper Johns created three-dimensional collages known as combines, including one entitled *Monogram*, which consists of a tire, stuffed goat, and other items.

ANSWER: Robert Rauschenberg

16. The Tetons of Wyoming are a sub-range of this mountain range. FTPE:

[10] What range runs northwest from northern New Mexico all the way to British Columbia?

ANSWER: Rocky Mountains or Rockies

[10] The highest mountain in the Rockies is this peak in central Colorado.

ANSWER: Mount Elbert

[10] Running along the Rockies is this division which separates watersheds that drain west to the Pacific from those that drain east to the Atlantic.

ANSWER: continental divide



17. Austrian Nobel Prize winner Elfriede Jelinek wrote a play considering “what happened” after this character left her husband. FTPE:

[10] What wife of Torvald leaves him with a famous slamming of a door in a Henrik Ibsen play?

ANSWER: Nora Helmer (accept either)

[10] Nora and Torvald’s marriage is the focus of what play by Ibsen?

ANSWER: A Doll’s House

[10] This former employee of Torvald attempts to blackmail Nora with his knowledge that she forged her father’s signature on a bond.

ANSWER: Krogstad

18. Former air force officer Jerry Rawlings led a 1979 coup d’état in this country. FTPE:

[10] Name this country that gained its independence from Britain under Kwame Nkrumah. W.E.B. Du Bois died in this country while working on the *Encyclopedia Africana*.

ANSWER: Ghana

[10] Although there was a Ghana empire, ancient-day Ghana was home to this empire that was founded by Osei Tutu and whose throne was summoned from the heavens by Okomfo Anokye.

ANSWER: Ashanti Empire

[10] As a colony of Great Britain, Ghana was called a “Coast” of this substance. The throne of the Ashanti Empire was made of this metal.

ANSWER: gold (accept Gold Coast or golden stool)

19. Divided into syeno and monzo types on the upper half of the QAPF diagram, this igneous rock has a very coarse-grained form known as pegmatite. For 10 points each:

[10] Name this rock composed of quartz and feldspar that is popular in kitchen countertops.

ANSWER: granite

[10] This fine-grained, extrusive equivalent of granite names a ghost town located in Nevada.

ANSWER: rhyolite

[10] This six-letter word, which is often contrasted with mafic [*MAF-ik*], is used to describe igneous rocks, such as granite and rhyolite, that are composed of light-colored silicate minerals.

ANSWER: felsic

20. Works in this series of novels include “Newsreels,” in which current events are described, and “The Camera Eye,” in which the author provides personal reflections on events. FTPE:

[10] What is this trilogy that begins with *The 42<sup>nd</sup> Parallel* and ends with *The Big Money* and which is named for the country in which it’s set?

ANSWER: U.S.A. Trilogy

[10] This author of *Three Soldiers* wrote the *U.S.A. Trilogy*.

ANSWER: John Dos Passos

[10] The middle book of the *U.S.A. Trilogy* features biographies of labor activist Joe Hill and Woodrow Wilson, and is named for this year.

ANSWER: 1919