

Round 6

2015 Potatoville Varsity

Alston Boyd • B. Alan Smithee • Alec Krueger • Kevin Jiang • Kristin A. Strey
Franz Varga • Tyler Vaughan • Shreyas Vissapragada • Andrew Wang • Michael H. Wong

Tossups

1. **A rebellion during this event targeted the town of Ballingarry, but was defeated by police forces. During this event, children were allowed to accept goods in exchange for converting to Protestantism. One mode of transportation during this time period were the (*) coffin ships. Robert Peel attempted to mitigate the damage of this event by repealing the Corn Laws. Recent studies have suggested that disease, not starvation, was the leading cause of death during this event. For 10 points, name this event in which a crop disease led to the deaths of millions of people on a certain island nation.**

Answer: Irish Potato Famine (accept Great Famine or An Gorta Mor)

2. **In one of this author's novels, Carol and Grace leave the protagonist in the snow, who later reconciles with Cordelia. The title object of that novel is kept in the red purse of Elaine. This author of *Cat's Eye* wrote a novel in which Richard Griffin is married to Iris Chase, (*) *The Blind Assassin*. The protagonist of one of her novels illegally plays Scrabble with the sterile character, The Commander. Moira and Serena Joy appear in that novel by her, that is set in the dystopian Republic of Gilead. For 10 points, name this Canadian author who wrote about Offred in *The Handmaid's Tale*.**

Answer: Margaret Atwood

3. **In one work, this author notices that both mercy and cruelty garnered support from revolting cities for, respectively, Scipio Africanus and Hannibal. In another work, this author compared fortune to a river and to a woman, noting that Pope Julius II died before suffering bad fortune; that work praises (*) Cesare Borgia and argues that the title figure should be a lion and a fox. For 10 points, name this Italian philosopher, the author of *Discourses on Livy*, who argues it is better for a ruler to be feared than loved in his *The Prince*.**

Answer: Niccolo Machiavelli

4. **When this NHL team was accused of plagiarizing the Canuck's team slogan, its official Twitter account responded with "ok we'll change it to 'We Are In The Playoffs.'" In the 2011-12 season, this team's coach was fired midseason and replaced with Darryl Sutter. Coach Sutter eventually led the team to a Stanley Cup title behind the efforts of their Conn Smyth Trophy winner, goalie (*) Jonathan Quick. This team is currently captained by Dustin Brown, and played the Stadium Series against local rivals, the Anaheim Ducks in Dodger Stadium. For 10 points, name this hockey franchise that plays at the Staples Center, the current Stanley Cup champions.**

Answer: Los Angeles Kings (accept either underlined portion; accept LA)

5. In one of this author's poems, passengers ask the conductor, "What place is this? Where are we now?" That poem repeats the line "Shovel them under me while I work" and begins "Pile the bodies high at Austerlitz and Waterloo." The title phenomenon of another of his poems "sits looking over harbor and city" and "comes on little cat feet." This author of (*) "Grass" and "Fog" wrote of farm boys being lured by "painted women under the gas lamps" in a poem in which the title location is described as the "Player with Railroads" and "Tool Maker, Stacker of Wheat." For 10 points, the "Hog Butcher for the World" is described in what American author's poem *Chicago*?

Answer: Carl August Sandburg

6. A fresco by this artist shows the bread of the Eucharist bleeding during *The Mass at Bolsena*. Transubstantiation is also the subject of another work by this man, in which Pope Gregory I ["the first"], Saint Augustine, and others argue under a depiction of Heaven. In another of his paintings, Mary looks away from a book to watch John the Baptist lift the title (*) bird up for the Christ child. In addition to *La Disputa* and *Madonna of the Goldfinch*, this man painted a fresco in the Apostolic Palace that shows Ptolemy, Aristotle, Plato, and other great thinkers speaking together. For 10 points, name this Italian Renaissance painter of *The School of Athens*.

Answer: Raphael Sanzio da Urbino (accept either underlined portion)

7. A pressure drop due to pair production is thought to have triggered this process in an event observed in 2006. Immediately prior to it, stellar cores undergo silicon burning. Roche lobe overflow in a binary pair containing a white dwarf can cause one type of this that exhibits a characteristic 615 nm silicon spectral line, that type can be used as a (*) standard candle and was used to show the acceleration of the expansion of the universe in 2012. Iron-nickel cores collapse in the Type II version of them, and Cas A and the Crab Nebula are remnants of this process, which can leave behind neutron stars or black holes. For 10 points, name these bright stellar explosions.

Answer: supernovae

8. This deity once disguised himself as the river god Enipeus to sleep with Tyro, who then had the twins Neleus and Pelias. His son Arion was conceived after he seduced his sister Demeter while in the form of a stallion. He lost a contest to (*) Athena, after which this deity use his powers to inconvenience Athens. He delayed Odysseus's return home after Odysseus blinded this god's son, Polyphemus. This god is married to Amphitrite, and they had Triton together. For 10 points, name this Greek god who could cause earthquakes with his trident, the Greek god of the sea.

Answer: Poseidon

9. During this battle, the boulder field Devil's Den was attacked by John Bell Hood's troops. Hundreds of men fighting under James Archer were captured in McPherson's Woods during this battle. A general in this battle, Dan Sickles, disobeyed orders when he moved his troops from their location along (*) Cemetery Ridge. This battle included fighting at Little Round and the infamous "Pickett's Charge." George Meade led the victorious side in this battle, and Robert E. Lee led the losing side. For 10 points, name this Civil War battle that was the site of an "address" by Abe Lincoln.

Answer: Battle of Gettysburg

10. The CoRR hypothesis states that the genetic information of certain organelles are regulated by these types of reactions. When this process forms two products from one reactant, it is known as disproportionation, and zinc and copper undergo this type of reaction in a Daniell cell. Balancing these reactions in acidic media involve adding protons and water to relevant (*) half reactions, which must then be balanced by the number of electrons transferred. The potential of these reactions can be measured by the Nernst equation. Reactions that occur at the anode and cathode comprise, for 10 points, what type of reaction in which the oxidation state of one reactant increases and another decreases?

Answer: reduction-oxidation reactions ["ree-dox" reactions] (accept oxidation-reduction reactions)

11. In one of his poems, this author wrote, “Bear his yoke, they serve him best. His state / Is kingly; thousands at his bidding speed” and asks, “Doth God exact day-labour, light denied?” That poem by this author notes “Ere half my days in this dark world and wide” and considers how this author’s (*) “light is spent.” “On His Blindness” is by this poet, who wrote another work about an antagonist who creates Pandemonium, and is supported by Mammon and Beelzebub. For 10 points, name this British author who wrote about Satan tempting Adam and Eve in *Paradise Lost*.

Answer: John Milton

12. The BARS protein fractionates this organelle’s namesake ribbon at the beginning of mitosis. The acrosome is derived from this organelle, which contains a protein that regulates apoptotic pathways called GAAP. This organelle is the site of O-linked glycosylation, and this organelle tags molecules to be shipped to lysosomes with (*) mannose-6-phosphate. In one model, shuttle vesicles pass from the *cis* face to the *trans* face of this organelle; that model is named for the flat disks that make up this organelle. The cisternal maturation model describes, for 10 points, what organelle that sorts and packages macromolecules named after its Italian discoverer? Answer: Golgi body (accept “apparatus” or “complex” for “body;” accept dictyosome)

13. An early ruler of this empire faced two revolts in Taxila. That ruler apocryphally got his name from a mark he received due to his mother ingesting poison. The founder of this empire contributed to the Battle of Ipsus by giving Seleucus I 500 elephants, and his advisor (*) Chanakya wrote the Arthashastra. Another ruler of this empire included a ban on hunting deer in the edicts that he inscribed on his namesake pillars. The Kalinga campaign shocked that ruler of this empire into converting to Buddhism. For 10 points, name this empire founded by Chandragupta and ruled by Ashoka.

Answer: Mauryan Empire (accept Mauryan Dynasty)

14. In this work, the magician Corsablis and Falsaron join Aelroth’s army. In this work, the emir of Babylon, Baligant, dies after while trying to help King of Sargossa, King Marsilla. Thierry wins a duel against Pinabel, which signals that Ganelon did commit treason. In this work, (*) Oliver encourages the title character of this epic poem to blow the Oliphant horn, which causes the title character’s temples to burst. For 10 points, identify this work about about the Battle of Roncevaux Pass, a French epic poem named for the title soldier of Charlemagne.

Answer: Song of Roland

15. This leader signed onto the world’s largest construction project with Gazprom oil. He once tried on one of Robert Kraft’s Super Bowl rings, and then proceeded to steal it. The Krasnaya Polyana Highway Project commissioned by this leader as infrastructure for the (*) Olympics. This person used the term “shearing a pig” when discussing extraditing Edward Snowden from his country. This leader was removed from the G8 group due to his role in using military forces in the annexation of Crimea from Ukraine. For 10 points, name this former Prime Minister and current President of Russia.

Answer: Vladimir Vladimirovich Putin

16. Adherents of this religion are initiated through the navjote ceremony. The third savior of this religion is the virgin-born Saoshyant. The spirit of truth in this religion is called “asha,” which opposes “Druj”, part of this faith’s Amesha Spenta. The (*) Vendidad is a section of this religion’s holy text, the Avesta. The evil Ahriman will eventually lose to the creator god Ahura Mazda. For 10 points, name this dualistic Persian religion founded by Zarathustra.

Answer: Zoroastrianism (accept Mazdaism until Ahura-Mazda is mentioned and accept Zarathustraism until Zarathustra is read)

17. **The McMillan Plan advocated creating a core for this city as a focal point for expansion. This city was once home to its own prime meridian which ran through the Old Naval Observatory. George Frederick Bodley designed a cathedral in this city which is home to a structure that was tipped with aluminium has a show of wealth. Another building in this city was designed by (*) James Hoban and was made out of painted sandstone. L'Enfant's plan for this city contained a canal that flowed to the Potomac river. It also included plans for numerous avenues, such as one named for Pennsylvania. For 10 Points, name this city the capital city of The United States.**

Answer: Washington, D.C (accept District of Columbia)

18. **This man defeated Miguel de la Torre's forces at the Battle of Carabobo, and also scored a victory at the Battle of Boyaca. This man's first campaign, the "Admirable Campaign" failed, and he was often assisted by General Soublette. This man was aided in many victories by (*) Jose de Sucre. At the Guayaquil Conference, this man met with Jose de San Martin. This ruler was the first President of Gran Colombia. For 10 points, name this man known as "El Libertador" for freeing many Spanish colonies, and is the namesake of a country with capitals at La Paz and Sucre.**

Answer: Simón Bolívar

19. **One of this composer's title characters is raised by Mime [MEE-muh], whose brother lays a curse that will lead to the death of Fasolt. In another of his works, "Heda! Heda hedo!" is sung by the baritone Donner, the god of (*) thunder. This composer built the Bayreuth [bye-ROYT] Festival Theater to premiere a set of works including *Gotterdammerung*, *Das Rheingold*, and one centered around Siegfried, who loves the helmeted soprano Brünnhilde. For ten points, name this German composer who included "The Ride of the Valkyries" in his gargantuan four-opera *Ring* cycle.**

Answer: Richard Wagner

20. **The linearization of a function at x equals a is guaranteed to have this property at x equals a , because the linearization process creates a line with the same position and slope as the original function. The question of finding a line with this property with respect to a given function led to (*) differential calculus. A line with this property for a circle will be perpendicular to the radius that ends at the intersection point. For 10 points, give this term that describes two geometric figures that touch at a single point, usually contrasted with a figure that "cuts through" another figure, called a secant.**

Answer: tangent (accept word forms and elaborations like "tangent line")

Bonuses

1. In this work, the dead swear they have not committed any of the 42 sins. For 10 points each,

[10] Name this collection of Egyptian writings which describes the weighing of hearts against Ma'at's feather.

Answer: **Book of the Dead** (accept: **Book of Coming Forth by Day**)

[10] If a heart did not balance with Ma'at's feather, it would be eaten by this demon. It's body is part crocodile, part lion, and part hippopotamus.

Answer: **Ammit**

[10] Whether not Ammit eats the heart is recorded by this god who served as a scribe. This god, the husband of Ma'at, also served as a mediator between the gods.

Answer: **Thoth** (Accept **Djehuti**, **Tahuti**, **Zehuti**, **Techu**, or **Tetu**) .

2. This man along with Pompey and Crassus formed the First Triumvirate. For 10 points each,

[10] Name this general who won the Gallic Wars for Rome. After becoming dictator, he was assassinated on the Ides of March.

Answer: Gaius Julius **Caesar**

[10] During the Gallic Wars, Julius Caesar fought this Arverni Chieftain. Despite uniting Gaul this man was captured and strangled to death.

Answer: **Vercingetorix**

[10] Vercingetorix was captured after this battle. During this battle, due to fortifications built by Caesar, Vercingetorix was forced to expel civilians from his besieged city in order to save food.

Answer: Battle (or Siege) of **Alesia**

3. After the success of this revolt, a small store of ritual oil miraculously burned for eight nights. For 10 points each, [10] Name this 2nd century BC Judean rebellion against the Seleucid Empire which began after Antiochus IV banned the practice of Judaism.

Answer: **Maccabean Revolt** (or **Revolt of the Maccabees**)

[10] This eight-day Jewish holiday celebrates the Maccabee revolt and miracle of the oil. Celebrations during this holiday include lighting a candle for each successive day and playing dreidel.

Answer: **Chanukkah**

[10] The candles for Hanukkah are held in a nine-branched candelabrum, called this. Its center branch, the shamash, holds a primary candle often used to light the other candles.

Answer: **menorah** (or **chanukiah**)

4. This author wrote a two book biographical work describing the lives of 24 historical figures in the first book, and 12 religious figures in the second book. For 10 points each,

[10] Identify this Italian author who wrote about Scipio Africanus in the epic poem "Africa," and described his personal philosophy in "A letter to Posterity."

Answer: **Petrarch** (accept Francesco **Petrarca**)

[10] Petrarch names a type of this kind of fourteen line poem. William Shakespeare also names a type of this fourteen line poetic style, which often feature three quatrains and one couplet.

Answer: **Sonnet**

[10] Petrarch wrote many of the sonnets of *//* Canonize, for this love of his

Answer: **Laura**

5. This man designed the Bank of China Tower. For 10 points each,

[10] Name this Chinese-American architect who used a glass pyramid to cover the underground entrance to The Louvre

Answer: I(eoh) M(ing) **Pei**

[10] Pei also used a glass pyramid for his design of this building in Cleveland, Ohio. After the completion of this building, Bruce Springsteen, among others, performed for a large crowd.

Answer: **Rock and Roll Hall of Fame**

[10] Pei stepped away from his glass pyramid motif for the design of this Boston skyscraper. This skyscraper suffered many design flaws and has required constant maintenance.

Answer: **John Hancock Tower** (accept **Hancock Place**, do not accept "John Hancock Building")

6. Consider the function f of x equals absolute value of x . For 10 points each,

[10] This is the slope of f of x at any positive value of x .

Answer: **1**

[10] f of x is continuous everywhere, but it lacks this property at x equals zero due to the sharp corner, indicating the instantaneous switch from the slope of negative 1 to the slope of 1.

Answer: **differentiability** (accept word forms, such as "it lacks a **derivative** at the point)

[10] This function with a Latin-derived name is the derivative of the absolute value function. It serves as an indicator of positivity or negativity.

Answer: **signum** function (or **sign** function or **sgn(x)**)

7. This country's independence was won by Jose de San Martin. For 10 points each,

[10] Name this country which saw great expansion under a former governor of Buenos Aires, Juan Manuel de Rosas,

Answer: **Argentina**

[10] Due to the support of the shirtless ones, this man was elected president of Argentina three times. After the death of his wife Eva, this man married Isabel Martinez.

Answer: Juan Domingo **Peron**

[10] After Juan Peron's death, and his succession by Isabel, Argentina entered this period of oppression, during which political opponents and socialists were targeted by the Argentine government.

Answer: The **Dirty War**

8. Flowers come to life dancing to this piece in Disney's Fantasia, though it's dancing candy canes in the original work. For 10 points each,

[10] Name this "Russian dance" -- really based on Ukrainian music -- from an 1892 ballet by Peter Tchaikovsky.

Answer: **Trepak**

[10] "Trepak" is perhaps the most famous piece from this Tchaikovsky ballet, whose title character is a toy given to Clara. Another candidate for "most famous selection" is its "Dance of the Sugar Plum Fairy."

Answer: The **Nutcracker**

[10] The "Dance of the Sugar Plum Fairy" heavily features this keyboard instrument, whose keys activate hammers on metal plates. It produces a softer sound than the similar glockenspiel.

Answer: **celesta** or **celeste**

9. This short story first appeared in *The Sketch Book of Geoffrey Crayon*. For 10 points each,

[10] Identify this short story, whose title character sleeps for twenty years in the Catskills Mountains.

Answer: **Rip van Winkle**

B) This author wrote "Rip van Winkle." He also wrote about the schoolteacher Ichabod Crane and the Headless Horseman in "The Legend of Sleepy Hollow."

Answer: Washington **Irving**

[10] The guide Mateo Ximenes appears in this Washington Irving collection. This collection was inspired by Irving's time spent as ambassador to Spain.

Answer: **Tales of the Alhambra**

10. This city's Old Town portion is known as Kota. For 10 points each,

[10] Name this populous Southeast Asian city that is home to Merdeka Square and is known as "The Big Durian."

Answer: **Jakarta**

[10] Jakarta is the capital of this former Dutch colony. This island nation was lead to independent by its first president, Sukarno.

Answer: Republic of **Indonesia**

[10] Jakarta is located on this Indonesian island which is now known worldwide for its coffee production.

Answer: **Java** (or **Jawa**)

11. This king was forced to sign a document at Runnymede . For 10 points each,

[10] Name this English king, the successor of Richard I, who was forced to sign the Magna Carta. His loss at the Battle of Bouvines caused England to lose control of Normandy .

Answer: **John** of England (accept **John I**; accept **John Lackland**; accept **John Softsword**)

[10] The Magna Carta was annulled by this pope. This pope refused John I's [John the first's] appointment for Archbishop of Canterbury, and excommunicated John.

Answer: **Innocence III**

[10] After Henry III [the third] tried to reassert royal power, he was forced to agree to a set of provisions named for this city. This city is widely renowned for its University and was often the site of parliaments.

Answer: **Oxford**

12. Two laws named for Amontons deal with this force, which decreases with an increase in velocity in the Stribeck effect. For 10 points each:

[10] Name this motion-opposing force that arises when an object rubs against a surface. This force transfers charge in the triboelectric effect.

Answer: **frictional** force [accept more specific answers, I guess]

[10] The force of friction equals its namesake coefficient times this force, which is always perpendicular to a surface. For an object on a ramp, this force equals mass times the gravitational constant times the cosine of the ramp angle.

Answer: **normal** force

[10] For an object on a ramp, the coefficient of static friction equals this function of the ramp angle. This can be derived by splitting gravity into its x and y components, and noting that the coefficient is the ratio of the two.

Answer: **tangent**

13. One of this type of poem, translated to English, is "an ancient pond/a frog jumps in/ the splash of water." For 10 points each,

[10] Identify this type of poem that consists of 17 total syllables, divided into three lines with five, seven, and five syllables each.

Answer: **Haiku** (accept **Hokku**)

[10] This Japanese Edo period poet wrote many Haikus, and various anthologies like *The Seashell Game* and *Winter Days*.

Answer: Matsuo **Basho** (or Matsuo **Kinsaku**)

[10] Basho wrote this work, a haibun that combined prose and haiku. He spent nearly half a year traveling while writing this travelogue.

Answer: The **Narrow Road to the Deep North** (accept The **Narrow Road to the Interior** or **Oku no Hosomichi**)

14. It has been described as the front page of the internet. For 10 points each,

[10] Name this website based in San Francisco, which allows its users to make their own subsections. The "Ask Me Anything" subsection of this website generated so much traffic after a post by Barack Obama that it crashed.

Answer: **Reddit**

[10] Another subreddit is this one which allows users to posts interesting facts that they've learned in the past 24 hours.

Answer: **TIL** (or **Today I Learned**)

[10] This artist is known as Here_Comes_The_King on reddit. His most upvoted post of all time is "fo shizzle" and he is a moderator on /r/trees.

Answer: **Snoop Dogg** (accept **Snoop Lion** or Calvin **Broadus** Jr)

15. The opening chapter of this work tells of a ritual in which a slave who broke a branch off a certain tree to could fight the priest and, if victorious, become the new "King of the Wood." For 10 points each,

[10] Name this "Study in Magic and Religion" by James Frazer.

Answer: The **Golden Bough**

[10] *The Golden Bough*'s title refers to an object used by Aeneas to enter Hades in *The Aeneid*, written by this Roman poet.

Answer: Publius **Vergilius** Maro

[10] This other scholar of comparative mythology studied the monomyth, a universal structure underlying many mythical adventure stories, in *The Hero with a Thousand Faces*.

Answer: Joseph **Campbell**

16. The pyloric sphincter connects the stomach to this long organ, which is the site of Peyer's patches. For 10 points each:

[10] Name this digestive organ where the majority of absorption takes place. It is comprised of the duodenum, jejunum and ileum.

Answer: **small intestine**

[10] The small intestine's surface is comprised of villi, which contain these lymphatic capillaries that are used in lipid absorption.

Answer: **lacteals**

[10] Lacteals are able to absorb this four ringed lipid-based molecule, which is a precursor to steroid hormones. Levels of this molecule can also be lowered with statins.

Answer: **cholesterol**

17. Harry Daugherty's failure to act during this scandal led to the case McGrain v. Daugherty. For 10 points each,

[10] Name this scandal, in which Albert Fall illegally leased land to companies in exchange for bribes. This scandal is named for one of those leased lands, an oil field in Wyoming.

Answer: **Teapot Dome** Scandal

[10] In addition to Teapot Dome, oil fields in this California location were also leased out. Edward Doheny's bribe for this location was key in convicting Albert Fall of corruption.

Answer: **Elk Hills**

-[10] The Teapot Dome Scandal took place during the administration of this President. This President promised a "return to normalcy" and was succeeded by Calvin Coolidge.

Answer: Warren G(amaliel) **Harding**

18. The van't Hoff factor corrects for the number of particles dissolved in a solvent, which is important when considering these. For 10 points each,

[10] Name these properties that only depend on the number of solute particles. They include boiling point elevation and freezing point depression.

Answer: **colligative** properties

[10] One such colligative property is the increase of this property, symbolized π , with an increase of solute particles. It is the pressure required to stop movement across a semipermeable membrane.

Answer: **osmotic** pressure

[10] Vapor pressure, another colligative property, can be quantified by this law. For liquids, this law is used to determine the overall vapor pressure given the partial vapor pressure of the compounds in the solution.

Answer: **Raoult's** law

19. In this novel, Edward Casaubon owns Lowick, and is working on “The Key to All Mythologies.” For 10 points each,

[10] Identify this novel in which Will Ladislaw marries Dorothea Brooke. It is subtitled “A Study in Provincial Life.”

Answer: **Middlemarch**: A Study in Provincial Life

[10] This author of *Middlemarch* wrote about William Dane and the title weaver in *Silas Marner*.

Answer: George **Eliot** (or Mary Anne **Evans**)

[10] In this George Eliot novel, Stephen Guest courts Maggie Tulliver. Maggie and her brother die in a flood at this novel’s conclusion.

Answer: The **Mill on the Floss**

20. A boy with two pistols stands next to the title figure in this painting. For 10 points each,

[10] Name this painting in which the title figure holds a musket in one hand, and the French flag in another.

Answer: **Liberty Leading the People** or **La Liberté Guidant Le Peuple**

[10] This French artist painted *Liberty Leading the People*. He depicted the title king laying in bed while women are murdered in *Death of Sardanapalus*.

Answer: Eugene **Delacroix**

[10] Delacroix also painted this painting, which on its right depicts an Ottoman soldier on a rearing horse. In this painting, other Ottoman soldiers appear during the slayings on the title Greek island.

Answer: The **Massacre at Chios**