

2020 US Academic Bowl National Championships

Round 7

First Half

(Tossup 1) **This hero lived disguised as a girl on Skyros, the site of Theseus's death. This hero regrets killing Penthesilea after falling in love with her dead body. Ajax the Greater and Odysseus fought over this hero's armor. This hero gained his power when his mother Thetis dipped (*) him in the River Styx. This hero was motivated by the death of Patroclus, which led him to drag Hector's dead body in a chariot for days. For ten points, name this hero who died from an arrow to the heel in the Trojan War.**

ANSWER: **Achilles**

(Bonus 1) This god retrieves the Amrita from the Asuras while in the form of the woman Mohini. For ten points each,

Part 1: Name this "Preserver" of the Hindu Trimurti. Avatars of this god include Krishna and Rama.

ANSWER: **Vishnu**

Part 2: Vishnu's wife was this member of the Tridevi. This goddess associated with the lotus flower is honored on the third day of Diwali.

ANSWER: **Lakshmi**

Part 3: Vishnu's mount Shesha takes the form of one of these animals. One of these animals named Vasuki was used to churn the ocean of milk.

ANSWER: **naga** (accept **serpent**, accept **snake**)

(Tossup 2) **In one work by this playwright, Ann Deever plans to marry Chris because his brother, Larry, is missing in action. In a play by this author, Joe Keller causes the death of twenty-one pilots by selling faulty airplane parts. (*) Giles Corey is crushed to death with rocks and John Proctor is hanged in another play by this author that represents McCarthyism with the Salem Witch Trials. For ten points, name this playwright who created *All My Sons* and *The Crucible*.**

Answer: **Arthur Miller** (accept Arthur Asher Miller)

(Bonus 2) This author wrote about a bizarre mist that prevents people in Anglo-Saxon England from having memories in his most recent novel, *The Buried Giant*. For ten points each,

Part 1: Name this contemporary author best known for the books *Never Let Me Go* and *The Remains of the Day*.

Answer: Kazuo **Ishiguro**

Part 2: In 2017, Ishiguro won one of these usually-annual literary awards named for a Swedish inventor.

Answer: Nobel Prize in Literature

Part 3: *The Remains of the Day* won this literary award for the best novel written in English, which for many years only considered entries from Commonwealth nations.

Answer: Man Booker Prize

(Tossup 3) **This country's city of Iquitos is one of the most isolated in the world, being most accessible by airplane. This country's Moche Valley is home to the ruins of the pre-Columbian city of Chan Chan. This country's ancient inhabitants built the still visible (*) Nazca Lines. This country contains the ruins of Incan cities such as Machu Picchu. For ten points, name this Andean country in South America, whose capital is Lima.**

Answer: Peru

(Bonus 3) This province is the site of Sable Island, a locale 180 miles off the coast of the mainland home to a sub-species of wild horses. For ten points each:

Part 1: Name this Canadian province, to which many Scottish immigrants moved, that is administered from the capital of Halifax.

Answer: Nova Scotia

Part 2: In the north of Nova Scotia is this large island with a name referencing Northwestern France. This island is the site of the wrongly named Bras d'Or (BRA-door) Lake which in actuality is an inland sea.

Answer: Cape Breton Island

Part 3: Nova Scotia is separated from this smallest Canadian province by the Northumberland Strait. It is the setting of *Anne of Green Gables*.

Answer: Prince Edward Island [Accept PEI]

(Tossup 4) **In this city, wool workers carried out the Ciompi (CHOM-pee) Revolt. A family in this city was targeted by the Pazzi conspiracy which was likely supported by Sixtus IV [the fourth]. Girolamo Savonarola ordered the burning of books in this (*) city as part of the Bonfire of the Vanities. Lorenzo the Magnificent led, for ten points, what city in Italy that was ruled by the Medici family?**

Answer: Florence

(Bonus 4) Operation Searchlight was initiated to stamp out nationalist sentiment in this nation. For ten points each,

Part 1: Name this country where the Mukti Bahini operated. This country is currently led by the Awami League.

Answer: People's Republic of Bangladesh

Part 2: Bangladesh was formerly the "eastern" part of this nation, which was first led by Muhammad Ali Jinnah. This mainly Islamic nation is governed from Islamabad.

Answer: Islamic Republic of Pakistan

Part 3: This leader of India supported Bangladesh's independence movement. This prime minister used domestic unrest to initiate a 21-month period of martial law known as "The Emergency."

Answer: Indira Gandhi (prompt on "Gandhi")

(Tossup 5) **This dynasty's Kangxi Emperor put down the Revolt of the Three Feudatories. This dynasty came to power after being allowed to move through the Shanhai Pass. This dynasty was forced to sign unequal treaties following the (*) Opium Wars with Great Britain. This dynasty was the most recent to be ruled by the Manchus and this dynasty's final ruler was Puyi. For ten points each, name this final Chinese dynasty which succeeded the Ming.**

Answer: Qing Dynasty

(Bonus 5) This ruler ordered the execution of his sons Bayezid and Mustafa, leading Selim II to succeed him after his 1566 death. For ten points each,

Part 1: What ruler defeated Louis II of Hungary at the Battle of Mohacs (MOE-hotch) and drove the Knights Hospitallers from Rhodes?

Answer: Suleiman the Magnificent (accept Suleiman I or Suleiman the Lawgiver or Suleiman Kanuni)

Part 2: Suleyman ruled this empire for over forty years. This empire based in Turkey lasted until its dissolution in the wake of World War One.

Answer: Ottoman Empire

Part 3: Suleyman held this title, which derives from an Arabic word meaning "strength" or "authority." Holders of this title did not claim the same religious mandate as the caliphs.

Answer: sultan

(Tossup 6) **This organ empties its contents into the small intestine when stimulated by cholecystokinin, while a disease affecting this organ causes its surface to look like a strawberry. This organ holds a substance that is produced in the (*) liver and used to digest fats. Though it's not the kidneys, namesake stones composed of cholesterol can form in this organ. For ten points, name this organ in the digestive system which houses bile.**

Answer: gallbladder [accept strawberry gallbladder or gallbladder stones]

(Bonus 6) Rosemary and Peter Grant spend six months every year on the island Daphne Major to tag and study these animals, for ten points each:

Part 1: Name these specific animals native to a Pacific archipelago whose beak sizes and shapes were found to vary based on their habitat and diet.

ANSWER: **Darwin's finches** (accept |Galapagos finch|es; prompt on partial answers)

Part 2: Studies of finches in the Galapagos led Darwin to propose his theory of evolution based on this mechanism, which is often summarized as "survival of the fittest."

ANSWER: natural **selection**

Part 3: This form of natural selection occurs when animals are able to select mates, and there is competition between males for the chance to reproduce.

ANSWER: **sexual** selection

(Tossup 7) ***Las 21 Divisiones* is a colonial variety of this faith popular in the 18th century which worshipped Belie Belcan and Anaisa Pye, analogues of Archangel Michael and St. Anne. Papa Doc would tell others he was a practicing priest in this (*) faith in an attempt to scare political opponents. This faith's loa of Papa Legba is seen akin to a trickster figure in his native West Africa. For ten points, name this predominantly Haitian faith that combines aspects of the Yoruba faith with Roman Catholicism.**

Answer: Voodoo [Accept Vodou]

(Bonus 7) A tale from this holiday chronicles how Prahlad survived the trials of a demon king. For ten points each,

Part 1: Name this Hindu festival in which people cover each other with dye. The Color Run has been accused of appropriating this festival for financial gain.

ANSWER: **Holi**

Part 2: Holi originates from this country, the largest predominantly Hindu country in the world. Many of this country's Muslim residents were forced to leave during the Partition.

ANSWER: **India**

Part 3: Holi also celebrates the beginning of spring, similar to this Persian holiday. Although this holiday has Zoroastrian origin, it is commonly celebrated by Kurds and other ethnic groups.

ANSWER: **Nowruz**

(Tossup 8) In 1893, reporter Michael Ahern admitted that he had fabricated the origins of one of these events, which was spread due to anti-Irish Catholic sentiment. After one of these events, Robert Hooke designed a monument that blamed it on "a Popist faction." Following one of these events, (*) Christopher Wren was tasked with rebuilding a European capital city. According to legend, one of these disasters was started by Mrs. O'Leary's cow. For ten points, name these disasters, one of which destroyed Chicago in 1871 and one of which destroyed London in 1666.

Answer: fire (accept equivalents like blazes, conflagrations, or infernos)

(Bonus 8) A group of Native Americans led by Richard Oakes occupied this location for 19 months starting in 1969. For ten points each,

Part 1: Name this prison off the coast of San Francisco. Six prisoners attempted to escape from this prison in a namesake 1946 "battle".

Answer: Alcatraz Federal Penitentiary/Island

Part 2: This Chicago crime boss spent five years at Alcatraz after being convicted of tax evasion. This man, who was nicknamed "Scarface," gained notoriety for killing seven members of Bugs Moran's gang in the Saint Valentine's Day Massacre.

Answer: Al Capone

Part 3: Robert Stroud, another inhabitant of Alcatraz, was known for his work with this general group of animals. During his time at Leavenworth Penitentiary, Stroud wrote a book titled *Diseases of Canaries*.

Answer: birds

Category Rounds

The categories are...

1. A Weak Acid
2. The 9/11 Attacks
3. A Christmas Carol

A Weak Acid...

Part 1: typically has a value below 7 for what quantity which measures the acidity of a solution on a scale from 0 to 14?

ANSWER: **pH** [accept **power** of **hydrogen**; accept **potential** of **hydrogen**]

Part 2: can be neutralized by a base to form water and what type of ionic compound exemplified by sodium chloride?

ANSWER: **salt** [accept table **salt**]

Part 3: can have its concentration measured using a burette and a pH indicator in what common laboratory technique?

ANSWER: **titration** [accept acid-base **titration**]

Part 4: will disassociate less due to the common ion effect, an example of what principle describing stresses on equilibrium concentrations named after a French chemist?

ANSWER: **Le Chatelier's** principle

Part 5: will form its conjugate base by donating what species to solution according to the Arrhenius and Bronsted-Lowry definitions of acids?

ANSWER: **protons** [accept **hydrogen cation**; accept **H⁺**; accept **hydronium** ion; do not accept or prompt on "hydride ion" or "hydrogen anion"]

Part 6: mixes with its conjugate base to form what kind of solution which resists changes in pH and is exemplified by the carbonic acid system in the blood?

ANSWER: **buffer** solutions

The 9/11 attacks

Name the...

Part 1: City where the World Trade Center towers were brought down by intentional plane crashes.

Answer: **New York** City (accept NYC)

Part 2: Surname of the president who was in power in 2001 at the time of the attacks.

Answer: **Bush** (accept George W. Bush)

Part 3: Headquarters of the Department of Defense that was targeted by one aircraft in the attacks.

Answer: The **Pentagon**

Part 4: Country where the mastermind of the attacks, Osama bin Laden, was killed by U.S. Navy SEALs in Abbottabad.

Answer: **Pakistan**

Part 5: Number of the United Airlines flight that crashed in Pennsylvania after passengers and crew tried to regain control of the aircraft.

Answer: **93**

Part 6: Person arrested in Minnesota who was given a life sentence for supposedly being a replacement for the "20th Hijacker" in the attacks.

Answer: Zacarias Moussaoui

A Christmas Carol

Name the following characters who appear in the Charles Dickens novella *A Christmas Carol*.

Part 1: The book's grumpy protagonist, who learns to care about the people around him at Christmastime.

Answer: Ebenezer Scrooge (accept either underlined name)

Part 2: The protagonist's dead business partner, who appears to him as a chained-up ghost.

Answer: Jacob Marley (accept either underlined name)

Part 3: Bob Cratchit's young, sick son, whose death is predicted by the Ghost of Christmas Yet to Come.

Answer: Tiny Tim Cratchit (prompt on "Cratchit")

Part 4: The ghost that appears to the protagonist as a strange, shifting shape wearing a candle snuffer as a hat.

Answer: Ghost of Christmas Past

Part 5: The protagonist's former boss, whose party he sees with the help of a ghost.

Answer: Mr. Fezziwig

Part 6: The protagonist's former fiancée, who the protagonist abandons to become a lonely businessman.

Answer: Belle

Second Half

(Tossup 9) **The strength of these interactions is given by the lattice energy. Hard acids and bases usually form these sorts of interactions. Large differences on the Pauling scale can indicate that this type of bond will be formed. (*)** Salts are held together with this type of bond. For ten points, name these types of bonds that are contrasted with covalent bonds and occur when electrons are transferred from one atom to another.

Answer: ionic bonds

(Bonus 9) This behavior is described by the Ising model, for ten points each:

Part 1: Name this permanent form of magnetism exhibited by elements like cobalt, nickel, and iron.

ANSWER: ferromagnetism

Part 2: Ferromagnetism disappears above a temperature named for a scientist with this last name. Radium and polonium were discovered by the first ever female Nobel laureate, who also had this last name.

ANSWER: **Curie** (accept Marie Curie; accept Pierre Curie)

Part 3: The Ising model describes ferromagnetism with a lattice of values for this quantity, which can be either +1 or -1. Bosons have integer values for this quantity.

ANSWER: **spin** (prompt on “angular momentum”; do not accept or prompt on momentum)

(Tossup 10) **The books *The Fire Within* and *Icerefire* are the first two in a series of novels written by Chris D'Lacey titled for the "last" one of these creatures. *The Inheritance Cycle* focuses on a boy named Eragon who befriends these creatures. In (*) *The Hobbit*, one of these creatures is named Smaug. For ten points, name these mythical creatures, a magical one of which named Puff lives by the sea.**

Answer: **dragon**

(Bonus 10) Three characters in this play predict that the title character will not be defeated until Birnam Wood comes to Dunsinane Castle. For ten points each,

Part 1: Name this Shakespeare play, in which the Weird Sisters predict that the title Thane of Cawdor will become king.

Answer: **Macbeth** (accept The Tragedy of Macbeth)

Part 2: Macbeth becomes king by murdering this man, his predecessor.

Answer: King **Duncan**

Part 3: Macbeth and Duncan rule this European country. According to theater tradition, it is unlucky to use the title *Macbeth*; instead, it is commonly referred to as a play from this country.

Answer: **Scotland** (accept the Scottish play, do not accept Britain, UK, etc.)

(Tossup 11) **A subspecies of this animal found in the Bili Forest uncharacteristically build ground nests for their young. This species, scientifically known as *Pan troglodytes*, has a relative named the bonobo, which likely speciated due to populations being separated by the Congo River. The first reported use of (*) tools by this species was using a twig to attract termites for consumption, later being observed using stones to crack open nuts. For ten points, name this ape that, with the extinction of the Neanderthals, is the closest related species to Humans.**

Answer: **Chimpanzee** [Accept Pan troglodytes]

(Bonus 11) French Enlightenment thinker Baron d'Holbach served as an early supporter of this position to be adopted by the state, as outlined in his work *The System of Nature*. For ten points each:

Part 1: Name this state religion of the USSR and Revolutionary France, the belief that there is no higher power.

Answer: **Atheism** [Accept being Atheist; Accept The Cult of Reason]

Part 2: This British member of the "Four Horsemen of the Non-Apocalypse," a leader of New Atheism, coined the word "meme" in his book *The Selfish Gene*.

Answer: Richard **Dawkins**

Part 3: Many philosophers of the Enlightenment adopted this outlook on the existence of a Supreme Being but they do not intercede on a human's behalf, simply observing the happenings on Earth.

ANSWER: **Deism** [Accept Deist]

(Tossup 12) **Stirling's formula can be used to approximate this operation. Wilson's theorem states that this function of n minus one is congruent to negative one mod n if and only if n is a prime number. The gamma function extends this function. This function of n is the number of (*) permutations when all entities are distinct. For ten points, name this function that multiplies integers less than or equal to the input together, symbolized with an exclamation mark.**

Answer: **factorial**

(Bonus 12) Pell numbers approximate this value. For ten points each:

Part 1: Name this value, approximately 1.414, which can be proved to be irrational by infinite descent.

ANSWER: the **square root of two** [or **root two**]

Part 2: Followers of this man discovered that the square root of two is irrational, which was legendarily kept a secret. This man names the formula that for right triangles, a squared plus b squared equals c squared.

ANSWER: **Pythagoras** of Samos

Part 3: Notably, there are many of these statements regarding the Pythagorean theorem, including an algebraic one put forth by President James Garfield and one "by dissection" by Albert Einstein.

ANSWER: **proofs**

(Tossup 13) **Wassily Kandinsky was enlisted to create the stage design for this composition, creating a synaesthetic concept that matched color and form to what was happening in this suite. This suite is dedicated to artist Viktor Hartmann, a Russian-Jewish artist who died an early death from an aneurysm. Fellow composer (*) Maurice Ravel orchestrated a 1922 iteration of this suite, which has movements "The Bogatyr Gates" and "Promenade." For ten points, name this suite of ten pieces by Modest Mussorgsky.**

Answer: Pictures at an Exhibition

(Bonus 13) This type of piece influenced by the "madrigal" was revived by Gabriel Faure and Claude Debussy in the 19th century. For ten points each:

Part 1: Name this polyphonic, lyric driven piece of music of Medieval France. The Burgundian type of this piece combines it with the motet.

Answer: Chanson [prompt on "Song"]

Part 2: An oft performed chanson concerned this lieutenant of Charlemagne who blew the oliphant and sacrificed himself to stop the Saracen horde.

Answer: Roland [Accept Orlando]

Part 3: Composers like Johannes Ockeghem continued composing chansons during this period of the early modern period that takes its name for the French word for "rebirth."

Answer: Renaissance

(Tossup 14) **A painting by this artist shows Chelsea Church behind a boat underneath the Battersea Bridge. John Ruskin claimed that this artist asked for "two hundred guineas for flinging a pot of paint in the public's face" for his picture of a fireworks display that led this artist to sue Ruskin for libel. This artist called several of his paintings (*) "Nocturnes." For ten points, what artist depicted an elderly woman in a white head covering and a long black dress in his iconic portrait of his mother?**

Answer: James McNeill Whistler

(Bonus 14) For ten points each, answer the following about 21st-Century foreign films that have fared well at the Academy Awards:

Part 1: In 2020, this Korean film directed by Bong Joon Ho about a family of servants who live in a basement became the first foreign-language film to win the Best Picture Oscar.

Answer: Parasite

Part 2: Three directors from this country- Alfonso Cuarón, Guillermo del Toro, and Alejandro González Iñárritu- have won a staggering five Academy Awards for Best Director in the 2010s.

Answer: Mexico

Part 3: This woman won Best Actress for her portrayal of Edith Piaf in the 2007 film *La Vie en Rose*, becoming to date the only woman to win the award for a French-language performance.

Answer: Marion Cotillard

(Tossup 15) **The Mogi model predicts deformation due to pressure changes in certain areas that store this substance, though it's also stored in mush zones where it contains a significant amount of crystals. Plutons form from the cooling of this substance, and depending on the concentration of its silica content, it can be classified (*) as felsic or mafic.** For ten points, name this substance stored underground until it erupts from volcanoes as lava.

Answer: magma [do not accept "lava"]

(Bonus 15) A growler is a small one of these features. For 10 points each:

Part 1: Name these features that are only about 10% above the sea surface. These objects are formed from glaciers and one is suspected to have sunk the *Titanic*.

Answer: icebergs

Part 2: This is the process by which icebergs are formed from glaciers. This process is a form of ablation.

Answer: ice/glacier calving

Part 3 Glaciers may also form these depositional features, which form from debris carried by a glacier. These features can be classified as lateral, medial, and terminal.

Answer: moraines

(Tossup 16) **In one section of this novel, the protagonist tries to explain the concept of sight to a group of aliens that lack eyes. That protagonist's father is trapped on the dystopian planet of Camazotz, which is ruled by a giant brain named (*) IT.** This novel also features the three sisters Mrs. Whatsit, Mrs. Who, and Mrs. Which. For ten points, name this sci-fi fantasy novel about Meg Murray, written by Madeleine L'Engle.

Answer: A Wrinkle in Time

(Bonus 16)The story "The Duel" notes that everyone who comes to this city must duel with this city to forge their future. For ten points each,

Part 1: The early 20th-Century population of what city inspired the title of the short story collection *The Four Million*?

Answer: New York City

Part 2: This author wrote "The Duel" and *The Four Million*. This author known for his twist endings names an award given for short fiction published in the Americas.

Answer: O. Henry (or William Sydney Porter)

Part 3: In this O. Henry story that appeared in *The Four Million*, Della sells her hair to buy a watch chain for her husband Jim, unaware that her husband has sold his pocket watch to buy her a set of combs.

Answer: *The Gift of the Magi*

Tiebreaker

(Tossup 17) A poem written and set during this war describes an "ecstasy of fumbling" during an aerial attack in this conflict. In the *Sun Also Rises*, Lady Brett Ashley and Jake Barnes have a complex romantic entanglement due to Jake's injury during this war. Siegfried Sassoon, a writer and soldier during this period, described it in the poem (*) "Suicide in the Trenches." Wilfred Owen wrote "Dulce Decorum Est" during, for ten points, what deadly European war of the 1910s?

Answer: World War I [Accept The Great War]

(Bonus 17) Two cities of the Greek world fought a decades-long war in the fifth century BCE. For ten points each:

Part 1: What war pitted city states allied with Athens against city states allied with Sparta?

Answer: Peloponnesian War

Part 2: The war pitted the Sparta-led Peloponnesian League combat this league, led by Athens, named for the island on which it originally housed its treasury.

Answer: Delian League

Part 3: Pericles, leader of Athens, gave a famous address at one of these public events after the first year of the war.

Answer: funeral