## Round 2

## Tossups

(Tossup 1) The quote "Laws are like sausages- it is best not to see them being made." is often attributed to this man. This man edited and published a conversation between Count Vincent Benedetti and his nation's monarch, known as the Ems Dispatch. This man disliked Pope Pius IX and the doctrine of papal infallibility, implementing the May Laws as part of his Kulturkampf. Ftp, name this "Iron Chancellor" who unified Germany.

## ANSWER: Otto von Bismarck

(Tossup 2) After the inflationary epoch, an epoch named for these particles began. Mesons are composed of one of these particles and its antiparticle. Quantum chromodynamics explains the color charge of these particles which react via the strong force with gluons. These particles come in six different flavors including strange, charm, up and down. For the point, name this subatomic particle, three of which make up protons and neutrons.
ANSWER: quarks
(Tossup 3) In this work, patrons of the Try Pots are offered a choice between clam chowder and cod stew. A Biblically-named man in this novel lost part of one leg to the title character and later dips a newly-forged harpoon in the blood of Tashtego, Queequeg, and Daggoo. In a final confrontation, the Pequod is sunk and all of its crew is lost save one man, the narrator of this novel. For the point, name this Melville work about a title white whale.

## ANSWER: Moby Dick

(Tossup 4) The eigenvalues for one of these objects are the roots of its characteristic polynomial. These objects can be reduced using Gaussian elimination to find their rank. The product of one of these objects and its inverse yields the "identity" form of them, which has ones along its main diagonal and zeroes elsewhere. The determinant of a 2 -by- 2 one of these objects equals AD minus BC. For the point, name these rectangular arrays of numbers.
ANSWER: matrix (accept matrices)
(Tossup 5) A controversial structure at this location allegedly contains 666 glass panes. Numerous Egyptian artifacts can be found at this location's Sully Wing while its most well-known item is located in the Denon Wing. Famous sculptures at this location include the Winged Victory of Samothrace and the Venus de Milo. This former royal palace features an iconic structure designed by I.M Pei. For the point, name this Paris museum which features a glass pyramid and the Mona Lisa.
ANSWER: Louvre Museum
(Tossup 6) The Sook Ching Massacre occurred in this country. The Indian National Army was established in this country. After a collision in the Strait of Malacca, the USS John McCain sailed to this country's Changi Naval Base. For the point, name this Southeast Asian island city-state whose loss by the British to the Japanese in WWII was described by Winston Churchill as, "the worst disaster and largest capitulation in British history."
ANSWER: Republic of Singapore (accept Republic of Singapura)
(Tossup 7) The flow of bile and pancreatic juice is controlled by the sphincter of Oddi, part of the first section of this organ. That section, the duodenum, is linked to the jejunum and ileum, and all three comprise this organ. This organ's primary function is aided by small finger-like protrusions called villi. For the point, name this organ where most food absorption takes place and is found after the stomach in the digestive system.

## ANSWER: Small intestine

(Tossup 8) This deity gave her grandson a weapon called the "Grass-Cutting Sword". This deity sent delegates to convince Ookuninushi to hand over his lands to that grandson, Ninigi. In response to her brother throwing a skinned horse into a weaving room, this deity hid in a cave until she was lured out by Ameno-Uzume's dance. The Japanese Imperial family are said to be the descendants of, for the point, what Sun goddess of the Shinto tradition?
ANSWER: Amaterasu-Oomikami (accept Oohirume-no-Muchi)
(Tossup 9) A character in this play claims to receive a telegram from her old admirer Shep Huntleigh. A character in this play who resides in Elysian Fields throws a radio out of a window during Mitch's poker game. This play's protagonist states that she has "always depended on the kindness of strangers." Stanley assaults Stella Kowalski's sister in, for the point, what play about Blanche Dubois by Tennessee Williams?

## ANSWER: A Streetcar Named Desire

(Tossup 10) The Battle of Khasham in this country led to heavy casualties for the Wagner Group. Some foreign forces in this country are based at Khmeimim Air Base and the port of Tartus. The city of Raqqa in this country has recently been recaptured from a terrorist organization and this country's largest city was devastated in the Battle of Aleppo. For the point, name this country currently led by Bashar Al-Assad from Damascus.

## ANSWER: Syria

(Tossup 11) In one battle during this conflict, the winning side's soldiers were allegedly able to dodge slow-moving cannonballs. "Flying Artillery" was successfully used by one side in this conflict. The Thornton Affair led to the start of this conflict. Major American victories during this conflict include the Battles of Palo Alto and Cerro Gordo. This war ended with the Treaty of Guadalupe Hidalgo. For the point, name this 1846-1848 war between American and a southern neighbor.
ANSWER: Mexican-American War
(Tossup 12) In 1996, this company purchased Gorda Cay island which it renamed Castaway Cay. ESPN and National Geographic are both owned by this company which also owns the ABC Network. Subsidiaries of this company's film studios division include Lucasfilm, Marvel Studios and Pixar. This company is perhaps best known for its theme parks and resorts, the largest of which is located near Orlando. For the point, name this company which owns Mickey Mouse.

## ANSWER: Disney (Accept The Walt Disney Company)

(Tossup 13) The official headstream of this river is the Tearful River. A part of this river is known as the "River Passing Through Heaven" while another part of it is the Golden Sands River. A freshwater dolphin species known as the Baiji once lived in this river and is believed to be functionally extinct. This river enters the East China Sea near the city of Shanghai. The Three Gorges Dam are located on, for the point, what longest river in Asia?
ANSWER: Yangtze River
(Tossup 14) This metal can be produced through the Castner process or in a Downs cell. This metal's flame test results in an intense yellow color. A compound with one atom of this metal and three nitrogen atoms is used in airbags. This metal's hydroxide compound is known as lye, while its bicarbonate is used as baking soda. For the point, name this alkali metal with atomic number 11 that forms a compound with chlorine in table salt symbolized Na .
ANSWER: sodium (accept $\underline{\mathbf{N a} \text { before mention) }}$
(Tossup 15) Doomed characters in this poem are able to see clearly into the future until those events draw near in real time. Lovers in this work are swept by an eternal windstorm that symbolizes their own intemperate passion. A villain encountered at the lowest depths in this poem has three mouths which chew eternally on the bodies of the traitors Brutus, Cassius and Judas. For the point, what first part of Dante's trilogy The Divine Comedy is set in hell?

## ANSWER: Inferno

(Tossup 16) Artemas Ward ordered Israel Putnam to fortify this battle's namesake location. Joseph Warren was killed at this battle, and the winning forces at this battle, which were commanded by Thomas Gage, suffered heavy losses. According to legend, one of this battle's commanders ordered his men not to fire until they could see the whites of their enemies' eyes. For the point, name this battle of the American Revolutionary War which actually took place on Breed's Hill.
ANSWER: Battle of Bunker Hill
(Tossup 17) An opera by this composer was based on a poem about an aristocrat who spurns the love of Tatiana and kills his friend Lensky in a duel. This Russian came to despise his most famous orchestral piece, calling it "very loud and noisy and completely without artistic merit." That piece by this composer features La Marseillaise and the sound of cannon fire. For the point, what composer created the opera Eugene Onegin, the ballet Swan Lake, and the 1812 Overture?
ANSWER: Pyotr Ilyich Tchaikovsky
(Tossup 18) The most general solution for stationary types of these objects is known is the Kerr-Newman metric. Sagittarius A is likely to be the location of a 'supermassive' one of these entities. These entities are bounded by an event horizon, inside of which the escape velocity is greater than the speed of light. Ftp, name these astronomical entities whose gravitational pull is so strong that light cannot escape them.

## ANSWER: Black holes

(Tossup 19) This mountain range got its name from a tribe the Narvaez expedition discovered near Tallahassee. Until the late 19th century, this range's modern name was not popular, instead being referred to as the Allegheny Mountains. The Blue Ridge mountains and its highest peak, Mount Mitchell, are part of this range. For the point, name this eastern mountain range which also contains its namesake Trail, which extends from Maine to Georgia.

## ANSWER: Appalachian Mountains

(Tossup 20) In this novel, Wemmick lives with his father, Aged P, in an unusual home that features a moat and a drawbridge. The protagonist of this work is apprenticed to a village blacksmith before he receives a small fortune from an unknown benefactor. That character in this work is offered advice by his friend, Herbert Pocket. For the point, what Charles Dickens novel traces the rise of young Pip, his crush on the cruel Estella, and the fiery death of Miss Havisham?

ANSWER: Great Expectations
(Tossup 21) According to Ovid, this god was conceived when the goddess Flora touched his mother's belly with a magic flower. In some myths, this god's consort was Nerio. Augustus dedicated a temple to this god's "Ultor" or "Avenger" form. Along with Quirinus and Jupiter, this god formed the Capitoline Triad. This god had a famous affair with the goddess Venus. With Rhea Silvia, this god fathered the twins Remus and Romulus. For the point, name this Roman god of war,
ANSWER: Mars
(Tossup 22) A false positive Mantoux test can result from an attenuated form of these items called BCG. Adjuvants such as aluminum salts increase the efficacy of these objects. Recombinant capsids allow one of them called Gardasil to target a cervical cancer-causing agent. One of these items called DTaP is in part specific to tetanus and requires a booster dose every ten years. For ten points, name these items often given as injections to provide immunity against disease.
ANSWER: vaccines (accept vaccinations; accept inoculations; prompt on shots) [Science Bee Regionals]
(Tossup 23) In this novel, one character employs Fauchelevent after rescuing him from being pushed from a cart. In this novel, the Friends of the ABC , whose members include Gavroche and Marius, construct barricades. This novel's protagonist tells Fantine that he will adopt her daughter Cosette. At this novel's end, Inspector Javert jumps into the Seine River after pursuing a reformed criminal. For the point, identify this Victor Hugo novel about Jean Valjean.
ANSWER: Les Miserables [or The Miserable Ones; or The Miserables; prompt on Les Mis]
(Tossup 24) This man founded Tolstoy Farm with Herman Kallenbach. Churchill called this man a "seditious middle temple lawyer" after a meeting this man had with Lord Irwin at the Round Table Conference. This man marched to Dandi in protest of a salt tax and promoted homespun cloth called "khadi". Nathuram Godse of the RSS shot this man for his support of a 1947 partition. For the point, name this Indian independence leader nicknamed "Mahatma".
ANSWER: Mohandas Karamchand Gandhi (or Mahatma Gandhi)
(Tossup 25) This group was expelled to Clay County after its leader tried to establish an outpost in Jackson County. After constructing the Nauvoo Temple, this religious group's leader established the Council of Fifty. After the death of its leader and his brother Hyrum, Brigham Young assumed leadership of this group. For the point, name this religious group led by Joseph Smith, also known as followers of the Church of Latter Day Saints.
ANSWER: Mormons
(Tossup 26) This painter depicted his wife in The Woman in the Green Dress and painted her on her deathbed in a later work. This husband of Camille made over thirty paintings of a cathedral in Normandy and also created multiple works featuring the Palace of Westminster. This artist's most famous work depicts an early morning at the port of Le Havre. The Rouen Cathedral and London Parliament series were by, for the point, what artist of Impression, Sunrise?

## ANSWER: Oscar-Claude Monet

(Tossup 27) Marius Sophus Lie names a type of this field which uses his namesake brackets. Lattices, rings, and groups are structures in this field. The study of vector spaces and matrices are used in the "linear" type of this field. In this field, the quadratic formula can be used to solve degree two polynomials. For the point, name this field of mathematics that involve variables, such as when you are trying to solve x plus 3 equals 7 .
ANSWER: algebra
(Tossup 28) The Toba catastrophe theory discusses an event caused by one of these entities, which are capable of producing events that can be classified into Hawaiian and Strombolian, while the strongest types are called Plinian. The power of what these entities can unleash is measured by the VEI scale, with side effects including pyroclastic flows and ash rain. For the point, name these fiery mountains whose eruptions spew out lava.

## ANSWER: Volcanoes

(Tossup 29) This work's author claimed that he wrote this book "to vex the world rather than divert it." In the first part, the title character finds himself caught between enemies who fight over which end of an egg should be cracked first. In another land, he encounters civilized horses who rule over the savage Yahoos. For the point, in what Jonathan Swift work does the title character encounter the tiny Lilliputians and gigantic Brobdingnagians. [Brob-ding-NAG-ee-uns]
ANSWER: Gulliver's Travels
(Tossup 30) One military operation during this man's presidency featured the landing of Brigade 2506 at Playa Giron. Texas Governor John Connolly was in the same car with this president at the time of his death as seen in the Zapruder Film. This president resolved the Cuban Missile Crisis and oversaw the failed Bay of Pigs invasion. For ten points, name this US president from 1961-1963 who was assassinated by Lee Harvey Oswald.
ANSWER: John Fitzgerald Kennedy (accept JFK)

## Backups

(Tossup 31) A profilometer can utilize the coefficient of this force to quantify asperities. It's not electric force, but this force is used by Coulomb damping to convert kinetic energy into thermal energy. Amonton's laws describe one variant of this force, which is proportional to the normal force. For 10 points, name this force that resists motion when two objects slide against each other.
ANSWER: friction

