Category Round

American Literature: Name these Pulitzer Prize-winning authors.

Team A: The only writer to have won both the Pulitzer Prize for Poetry and the Novel is what author of *All the King's Men*?

ANSWER: Robert Penn **Warren**

Team B: What poet of "Miniver Cheevy" won three Pulitzer Prizes for Poetry, one of which was for his Arthurian poem *Tristram*.

ANSWER: Edwin Arlington **Robinson**

Tossup: This Pulitzer Prize winner's only novella is set in a place called the Mecca and describes Maud Martha's experiences in Chicago. This author wrote a poetic sequence that describes Chicago in *A Street in Bronzeville* before becoming Poet Laureate of Illinois. One of her poems describes "this old yellow pair" for whom "dinner is a casual affair." In addition to penning "The Bean Eaters," this author created a poem which describes "seven at the golden shovel" that "lurk late," "sing sin," "jazz june" and "die soon." Name this African-American author who wrote "We Real Cool."

ANSWER: Gwendolyn Elizabeth **Brooks**

Mathematics: Pencil and paper ready. Give the following related to matrices (MAY-trih-seez). You will have 30 seconds for each team question.

Team B: What is the determinant of a two by two matrix whose first row consists of "1, 3" ("one comma three") and whose second row is "6, 6" ("six comma six")?

ANSWER: **-12** or **negative twelve** or **minus twelve**

Team A: What is the determinant of a two by two matrix whose first row consists of "4, 2" ("four comma two") and whose second row is "5, 6" ("five comma six")?

ANSWER: **14** or **fourteen**

Tossup: **Pencil and paper will not be necessary.** Jacobi's theorem states that for odd square matrices with the "skew" type of this property, its determinant is equal to zero. Generally speaking, these matrices equal their own transpose. In set theory, a relation has this property if for every element "B" and element "A", if "A" relates to "B" then it must be the case that "B" relates to "A". An equivalence relation requires this property along with transitivity (trans-ih-TIV-ih-tee) and reflexivity. What is this mathematical property that in geometry refers to the ability to fold a shape onto itself?

ANSWER: **symmetry** [accept word forms, such as **symmetric**]

World History: Name these European conflicts.

Team A: The release of the Ems Dispatch by Otto von Bismarck helped lead to this 1870 to 1871 war which ended shortly after the capture of Emperor Napoleon III (the third) at the Battle of Sedan.

ANSWER: **Franco-Prussian** War [accept **Franco-German** War]

Team B: Giuseppe Garibaldi (joo-ZEP-pee gar-uh-BAWL-dee) led troops in all three of this 19th century series of wars which culminated in the unification of a certain nation under the rule of Victor Emmanuel II (the second).

ANSWER: Wars of **Italian Independence** [accept Wars for the **Independence** of **Italy** or other equivalents; prompt on partial answers]

Tossup: A manuscript known as the Codex Gigas was plundered at the end of this conflict, during which two participants cemented their alliance with the Treaty of Barwalde. Ferdinand II's (the second's) succession of Matthias as Holy Roman Emperor intensified a part of this conflict that ended after the Battle of White Mountain. During its Battle of Breitenfeld, the Count of Tilly was defeated by a Swedish leader who was later killed at the Battle of Lutzen, Gustavus Adolphus. This war, which began after the Defenestration of Prague, was ended by the Peace of Westphalia in 1648. Name this 17th century religious war which lasted three decades.

ANSWER: **Thirty Years**' War

Fine Arts: Name these Russian composers.

Team B: This composer's *String Quartet No. 2* features a famous nocturne. He also composed *In the Steppes of Central Asia* and the *Polovtsian Dances*.

ANSWER: Alexander Porfiryevich **Borodin** (bor-uh-DEEN)

Team A: This man used a recurring motif played by the violin to represent the title storyteller in *Scheherazade* (shuh-"HAIR"-uh-zahd). Among the work he did on other composers' music was an orchestration of Mussorgsky's *Night on Bald Mountain*.

ANSWER: Nikolai Andreyevich **Rimsky-Korsakov** (RIM-skee-KOR-suh-koff) [prompt on partial answer]

Tossup: A tone poem by this composer uses a rhythm in 5/8 ("five" "eight") time to depict rowing and was inspired by an Arnold Bocklin (BEK-lin) painting of the same name. A solo piano work by this composer opens with the notes A, G sharp, C sharp. He went through a depression that only ended after hypnotherapy and the success of a concerto that opens with eight crescendoing (cruh-SHEN-doh-ing) chords. This composer of *Isle of the Dead* inverted the theme for the eighteenth variation in a piece based off the twenty-fourth caprice of an Italian violin virtuoso. Name this composer, whose output includes four piano concertos, "Prelude in C sharp minor," and *Rhapsody on a Theme of Paganini*.

ANSWER: Sergei Vasilyevich **Rachmaninoff** (rock-MAHN-ih-nahff)

Life Science: Answer the following about viruses.

Team A: This outer layer of a virus surrounds its genetic material. It is made up of proteins, sometimes arranged in shapes such as icosahedrons or cylinders.

ANSWER: **capsid**

Team B: Viruses that infect bacteria are specifically known by this term.

ANSWER: bacterio**phage**s

Tossup: This virus attaches to host cells using the surface glyco·protein gp120. Genes essential to this virus's function and replication are *tat* and *rev*. People resistant to this virus are known as long term non·progressors, since they fail to show the most severe symptoms it causes. Drugs used to combat this virus include Combivir, which includes the molecule AzT. This virus's *pol* gene encodes for an integrase and reverse transcriptase. This lenti·virus causes low levels of helper T cells, which in turn severely weakens the body's immune response. Name this retrovirus that is the causative agent of AIDS.

ANSWER: **HIV** or **h**uman **i**mmunodeficiency **v**irus [do not accept or prompt on "AIDS"]

English / World Literature: Name these authors who wrote about large beasts.

Team B: What soldier, prisoner, and author wrote about the "questing beast" in his compilation of Arthurian myth, *Le Morte Darthur* (luh mort DAR-thur)?

ANSWER: Thomas **Mallory**

Team A: What author wrote about a giant bear who is exposed to the politics of the Beklan Empire in *Shardik*? A rabbit named Hazel is the protagonist of his novel *Watership Down*.

ANSWER: Richard George **Adams**

Tossup: In one work this author wrote about Calidore (CAL-ih-door), a knight whose mission is to slay the Blatant Beast. In that poem by this author, the recurring character of Colin Clout plays songs on his bagpipe. This man's love for Elizabeth Boyle inspired his sonnet sequence *Amoretti* (ah-moh-RET-ee). Holiness, Temperance, Chastity, Friendship, Justice, and Courtesy are the themes of his masterpiece, which makes use of the ABABBCBCC ("A-B-A-B-B-C-B-C-C") rhyme scheme and idealizes Queen Elizabeth as the title figure. Name this 16th century author of the epic poem *The Faerie Queene*.

ANSWER: Edmund **Spenser**

American Government / Economics: These questions will involve the economics of society's ability to make goods.

Team A: What diagrams depict two goods, such as guns and butter, and a society's ability to make them? They are generally used to illustrate the tradeoffs between making said two goods.

ANSWER: **production possibility frontier** [or **ppf**, accept **production possibilities frontier** or **production possibility diagram** or **production possibilities diagram**]

Team B: The production possibilities frontier illustrates this type of cost of making a good, which is defined as the alternatives one foregoes to engage in an activity.

ANSWER: **opportunity** cost

Tossup: In agreement with the views of the libertarian Richard Cobden, this economist argued that England's ability to make technological advances were hampered by its desire to keep import duties high. He extended Ferdinand Lasalle's (LUH-"Sal's") argument that payments to laborers would, in the long run, tend toward the level necessary for subsistence, which became known as his iron law of wages. Name this British economist who wrote *Principles of Political Economy* and *Taxation and Rent* in addition to developing a theory of international trade.

ANSWER: David **Ricardo**

Physics: Answer the following related to James Clerk Maxwell.

Team B: What scientist names the one of Maxwell's equations that states that the divergence of a magnetic field must equal zero?

ANSWER: Johann Carl Friedrich **Gauss** (gowss)

Team A: This French scientist's namesake law, which Maxwell re-derived, relates the current passing through a circuit to the strength of the magnetic field in the circuit.

ANSWER: Andre-Marie **Ampere** (am-PEER)

Tossup: Along with James Clerk Maxwell, Wilhelm Wien (veen) names a type of this device that is unusually used to measure inductance. A Kelvin-Varley divider is an analog of this device that is used to split a circuit's voltage. They were invented by Samuel Christie and rely on Kirchoff's (KEER-coffz) laws to measure an unknown quantity. They are similar to a potentiometer (poh-TEN-"she"-om-ih-tur) and are used to measure the electrical resistance of an unknown component. Name these diamond-shaped configurations that consist of four resistors and are a type of bridge circuit.

ANSWER: **Wheatstone** bridge [prompt on "bridge" or "bridge circuits"]

Geography: Name these American rivers.

Team A: The cities of Laredo and El Paso lie along the banks of this river which forms the border between Texas and Mexico.

ANSWER: Rio **Grande** [or Rio **Bravo** del Norte]

Team B: The Shenandoah and Anacostia Rivers are tributary to this waterway that empties into Chesapeake Bay and separates Arlington County, Virginia from Washington D.C.

ANSWER: **Potomac** (puh-TOH-mik) River

Tossup: The shipwreck of the *Peter Iredale* is visible near the mouth of this river, which forms the southern and eastern borders of the Colville Indian Reservation. This river receives flow from the Multnomah Falls just downstream from the Bonneville Dam within its namesake gorge. The cities of The Dalles and Astoria border this river, on which the Franklin D. Roosevelt Lake is located. The Snake River is this river's largest tributary, and it is harnessed for hydroelectric power by the Grand Coulee Dam. Name this chief river of the Pacific Northwest which forms much of the border between Oregon and Washington.

ANSWER: **Columbia** River

American History: Name these military generals.

Team B: The American Expeditionary Forces during World War I were commanded by this general, nicknamed "Black Jack," who also led the Punitive Expedition that sought to capture Mexican revolutionary Pancho Villa (PAHN-choh VEE-yah).

ANSWER: John Joseph **Pershing**

Team A: This general, who was called upon by Herbert Hoover to intervene against the Bonus Army in 1932, was commander of the U.N. forces that took part in the Korean War until being controversially replaced by Matthew Ridgway.

ANSWER: Douglas **MacArthur**

Tossup: Early in his military career, this man served as an aide on the Braddock Expedition. This commander was victorious at the Battle of Jumonville Glen, which led directly to an attack against him and his ultimate surrender at the Battle of Fort Necessity. The Conway Cabal became opposed to this commander after he lost a series of battles, including Brandywine, during the Philadelphia Campaign. This leader encamped his troops at Valley Forge a year after surprising Hessian troops at the Battle of Trenton. Name this commander-in-chief of the Continental Army during the Revolutionary War who went on to become the first U.S. President.

ANSWER: George **Washington**

1. Hyperbolic and Parabolic are two types of these trajectories; the Hohmann transfer is used to move between two different types of these trajectories.

2. This author of *The Life You Save May Be Your Own* is perhaps better known for writing about a serial killer called the Misfit in her story "A Good Man is Hard to Find."

3. Figure from Greek mythology who was the first wife of Paris before being abandoned in favor of Helen of Troy.

4. Santa Fe, New Mexico contains a museum dedicated to this American artist best known for paintings of flowers and images related to the American west.

5. Constellation which contains the stars Alnilam, Alnitak, and Mintaka.

6. British general who led troops to victory at the Battle of Bloody Marsh during the War of Jenkins' Ear.

7. **(MULTI-WORD ANSWER)** – This "Hermetic" group's leaders included Evelyn Underhill and Aleister Crowley. The hierarchy within this movement features so-called Secret Chiefs.

8. *The Black Box* is one of many novels by what contemporary Israeli novelist, born with the surname Klausner, who is a perennial frontrunner for the literature Nobel Prize?

9. This philosophical argument, which is presented in St. Anselm's *Proslogium*, uses "levels of conception" to argue that God must exist.

10. Woodwind instrument to which orchestras often tune to.

11. German term for the policy that was launched by Willy Brandt in 1969 to improve relations between East and West Germany.

12. Body of water whose northernmost arm is the Shelikhov Gulf.

13. In arthropods, the individual unit of a compound eye.

14. This sort of creature is the culprit that committed the crimes in the first story of ratiocination about C. Auguste Dupin, "Murders in the Rue Morgue."

15. This man, who authored *Journeys and Explorations in the Cotton Kingdom*, was the landscape architect who designed much of Central Park in New York City.

16. **(TWO WORD ANSWER)** – 19th century route through the American west that connected Independence, Missouri to the Willamette Valley.

17. This gorge in Tanzania was inhabited by *Homo Habilis* a million years ago. Louis and Mary Leakey discovered some of the most notable human fossils here.

18. **(TWO WORD ANSWER)** – Field of study focusing on carbon compounds and their reactions.

19. **(MULTI-WORD ANSWER)** – The line "Do I wake or sleep" ends this John Keats poem about a bird.

20. 1898 battle in which British general Herbert Kitchener defeated Sudanese troops outside the city of Khartoum.

Alphabet Round – Letter O Answers

1. **orbits**

2. Mary Flannery **O'Connor**

3. **Oenone** (oh-NOH-nee)

4. Georgia Totto **O'Keeffe**

5. **Orion**

6. James Edward **Oglethorpe**

7. Hermetic **Order of the Golden Dawn** (MULTI-WORD ANSWER)

8. Amos **Oz**

9. **ontological** argument

10. **oboe**

11. **ostpolitik**

12. Sea of **Okhotsk**

13. **ommatidium** or **ommatidia**

14. **orangutang**

15. Frederick Law **Olmstead**

16. **Oregon Trail** (TWO WORD ANSWER)

17. **Olduvai** Gorge

18. **organic chemistry** (TWO WORD ANSWER)

19. "**Ode to a Nightingale**" (MULTI-WORD ANSWER)

20. Battle of **Omdurman**

1. After first being issued, these items were stored in an object created by Oholiab (oh-HOH-lee-ab) and Bezalel (BEZ-uh-lel). The man who first delivered these items used a veil to block the radiance coming from his face. A golden calf created by Aaron was observed when these items were first brought down from Mount Sinai on stone tablets. The Ark of the Covenant housed what Biblical rules, which were revealed to Moses and included such decrees as "honor thy father and mother" and "thou shalt not kill"?
ANSWER: **Ten Commandments** or **Decalogue** [prompt on "Commandments"]

2. In part of an equation named after this man, the volume is subtracted by a constant denoting the volume taken up by a mole of gas particles. That equation is a modification of the ideal gas law for real gases. Induced and permanent dipole interactions, as well as London dispersion forces, are types of intermolecular forces named after this scientist. Name this Dutch scientist.
ANSWER: Johannes Diderik **van der Waals**

3. One provision of this legislation was proposed by Illinois Senator Jesse Thomas. It was passed shortly after the failure of the Tallmadge Amendment, and its repeal prompted Abraham Lincoln to give the "Peoria Speech." Maine was admitted as a state by this legislation, which prohibited slavery in western U.S. territories north of latitude 36 degrees 30 minutes. Name this (*) 1820 legislation that admitted a Midwestern state whose capital is Jefferson City?
ANSWER: **Missouri Compromise** [prompt on "Compromise of 1820" before (*)]

4. One character in this story authored a treatise on hunting snow leopards in Tibet. This story, which takes place on Ship-Trap Island, ends with the main character deciding that he had never slept on a better bed. During the title activity, its narrator makes a Ugandan knife trap to kill Ivan and a Burmese tiger-pit to trap Count Zaroff's hounds. Name this Richard Connell story in which Sanger Rainsford is hunted during the title "game."
ANSWER: "The **Most Dangerous Game**"

5. One region in the southeast part of this nation is home to a unique type of limestone hut known as a trullo. The ruins of the city of Stabiae (STAY-bee-"eye") are within this nation, which contains Lake Como near its northern border. This nation is on the western side of the Strait of Otranto. The Apennine Mountains are in this nation, which the Strait of Messina separates from its largest island, Sicily. Name this boot-shaped European nation whose capital is Rome.
ANSWER: **Italy** [or **Italian Republic** or **Italia** or **Repubblica Italiana**]

6. Examples of these objects include the chaotic Lorenz strange attractor as well as the Menger (mayn-JER) Sponge. These objects always have a Hausdorff ("house"-DOORF) dimension that is greater than their topological dimension, and they include the Cantor set, which is nowhere dense. The first paper to propose these objects considered the coastline of England and was authored by Benoit Mandelbroit (BAYN-wah MAN-duhl-BRAH). Name these mathematical self-similar shapes.
ANSWER: **fractal**s

7. This artist depicted the title figure being tied up and stripped of a red garment prior to his crucifixion in the painting *The Disrobing of Christ*. In another of his paintings, the title figure, Don Gonzalo Ruiz, is held in the hands of Saints Stephen and Augustine while Christ opens the heavens above. A third work depicts the Castle of San Servando and other buildings of the title, Spanish city. Name this Cretan-born painter of *The Burial of the Count of Orgaz* and *View of Toledo* (toh-LAY-doh).
ANSWER: **El Greco** (GREH-koh) [or Domenikos **Theotokopoulos** (doh-MEN-ih-kohs THAY-oh-toh-KOH-poh-lus)]

8. This kingdom may have been briefly ruled by members the Abydos (AB-ih-"dose") Dynasty. The Turin King List documented many of the early rulers of this kingdom, which constructed the Karnak Temple Complex. The Ptolemaic (TOL-uh-mey-ik) Dynasty was the last to rule this kingdom, which buried many of its rulers in the Valley of the Kings; in 1922, Howard Carter discovered the tomb of one of those rulers, Tutankhamun (TOO-tan-kah-men). Name this ancient African civilization ruled by pharaohs.
ANSWER: ancient **Egypt** [or **Egypt**ian civilization]

9. One character in this novel, Monsieur Noirtier (muh-SYUR nor-TEE-ay), communicates through blinking. Another character is betrayed by Caderousse (CAH-duh-roose) and rides off into the sunset with Haydee (high-day) at the end of

the novel. Earlier, that character is imprisoned in the Chateau D'if (shaa-TOH deef), where he meets the Abbe Faria (uh-BAY fuh-REE-uh), who informs him of a secret cache of treasure on the title island. Edmond Dantes extracts revenge against his enemies in what novel written by Alexander Dumas (DEW-mah)?
ANSWER: The **Count of Monte Cristo** [*Le* **Comte de Monte-Cristo**]

10. This thinker observed a war between the Kasekala (KAH-say-kall-uh) and the Kahama (kuh-HAHM-uh) from 1974 to 1978. This thinker first travelled to Africa to do fieldwork after reading *The Story of Dr. Doolittle* by Hugh Lofting, as related in her memoir *Through a Window*. This social scientist established a namesake institute to do field work in Gombe (GAHM-bay) National Park, where she first observed a certain type of primate. Name this British female anthropologist best known for her work on chimpanzees.
ANSWER: Dame Valerie Jane Morris **Goodall** [that war was actually a war between two rivaling groups of chimpanzees]

11. When this goddess does not return from one task, her attendant Ninshubur seeks out Enki for help. She removes a piece of clothing after passing through each of seven gates and reaching the underworld, where her sister Ereshkigal (eh-RESH-kih-gall) inflicts her with sixty diseases. Tammuz (tah-MOOZ) was married to this goddess, who sends the Bull of Heaven to attack Gilgamesh after he rejects her. Name the Mesopotamian goddess of love.
ANSWER: **Ishtar** [or **Inanna** or **Astarte** or **Ashtoreth**]

12. To measure the angle of a ligament near this bone, one can draw the Blumensaat line. On the posterior side of this bone, muscles such as the adductor magnus are bound to a long ridge called the linea aspera. The greater and lesser trochanters (troh-KAN-turz) are found near the head of this bone. It joins the patella and tibia at its bottom, while its top is connected to the pelvis. Name the longest bone in the human body.
ANSWER: **femur** (FEE-mur) [or **thigh** bone]

13. This leader's father and predecessor narrowly avoided death in the Borki train disaster. During a celebration honoring his rise to power, over 1,000 people were inadvertently killed in the Khodynka (kah-DEEN-kah) Tragedy. Father Gapon (gah-POHN) led protesters in a march against this ruler that culminated in Bloody Sunday, which helped lead to his issuance of the October Manifesto in 1905. Grigory Rasputin advised this leader, who was executed alongside his family in 1918. Name this final Russian czar.
ANSWER: **Nicholas II** (the second) of Russia [or **Nikolay II**; prompt on "Nicholas" or "Nikolay"]

14. A melody in the first movement of this symphony is taken from the song "Swing Low, Sweet Chariot." The most famous melody from this symphony is first played by the English horn in D flat major. That melody, found in its Largo second movement, was used as the melody for the spiritual "Goin' Home." Name this symphony that was written while in the United States by Antonin Dvorak (ahn-toh-NEEN d'VOR-zhahk)
ANSWER: Symphony No. **9** in E minor, "From the **New World**" [accept either underlined portion; accept ***New World** Symphony* or ***Z noveho sveta***]

15. The protagonist of one of this author's novels grew up in Kellynch (KELL-inch) Hall, which is run by Sir Walter, who believes that his daughter Anne Elliot is too good for Captain Frederick Wentworth. Another of this author's characters, John Willoughby (will-OH-bee), marries Sophia Grey even though he rescued Marianne from a rainstorm at the novel's opening. Name this British author of *Persuasion* who wrote about the Dashwood sisters in *Sense and Sensibility*.
ANSWER: Jane **Austen**

16. Description acceptable. One theory about this object was that it is currently in Pyongyang, at the request of Kim Jong Il. This object is the subject of the so-called "phantom cell phone hypothesis." The loss of this object was formalized in a speech given by Prime Minister Najib Razak. Its loss of life was superseded just a few months later, when pro-separatist Ukrainians shot down a different object of the same type. A multinational search has failed to find what vehicle that disappeared on March 8th, 2014 in southeast Asia?
ANSWER: the missing **Malaysian** Airlines air**plane** [accept **Malaysian Air**lines **Flight 370**; accept equivalent answers that mention "Malaysia(n)" and "(air)plane"; prompt on partial answer]

17. The Dingley Act raised U.S. tariffs during the presidency of this man, who nominated his Attorney General, Joseph McKenna, to serve in the Supreme Court. Garret Hobart served as vice president under this man, who became president by utilizing a front porch campaign organized by Mark Hanna. At the Pan-American Exposition held in Buffalo, he was

shot by Leon Czolgosz (CHOHL-"gosh"). Name this president who served from 1897 to 1901 and was succeeded by Theodore Roosevelt.
ANSWER: William **McKinley**

18. Nikolai Basov used a xenon (ZEE-non) dimer to create one of these devices by creating fake particles called excimers (EGGS-ih-merz). A solid-state example of these devices is sometimes made by achieving optical pumping by using a ruby rod as an amplification medium. They work by (*) stimulating the emission of radiation to produce an optical amplification of light, and their color is often given in wavelengths. Name these devices that are sometimes used as pen-sized pointers.
ANSWER: **laser**s [accept **Light Amplification by Stimulated Emission of Radiation** before (*)]

19. This novel's narrator plays billiards with Count Greffi, a nobleman who speculates that Italy will win the war in which it is embroiled. Its main character fights in the Battle of Caporetto and later rows to Switzerland, where his lover gives birth to a stillborn child shortly before dying herself. It was inspired by its author's experiences as an ambulance driver in World War 1. Catherine Barkley and Frederic Henry are the protagonists of what novel by Ernest Hemingway?
ANSWER: *A **Farewell to Arms***

20. During World War 2, this work of art was protected by Deane Keller, who documented how a brick dome was constructed to protect it from incendiary bombs. It was supposed to stand on top of Florence Cathedral, but it was placed outside of the Palazzo della Signoria (puh-LATS-oh DELL-uh SEEN-yor-ee-uh) instead. It currently stands in the Galleria dell'Accademia [GAL-err-ee-uh dell ACK-uh-deem-ee-uh) and depicts a youth standing in a contrapposto pose. Name this marble sculpture of a nude Biblical hero that was created by Michelangelo.
ANSWER: *David*