

Academic Bowl Round 4

First Half

(1) **The first form of this instrument originated in the Renaissance and was called a sackbut. With sounds produced by embouchure [[AHM-beh-shur]], this instrument is often presented in sheet music written in either bass or tenor clef. Found in the (*) brass family and famously played by Glenn Miller, for ten points, what is this instrument using a telescoping slide mechanism?**

ANSWER: **Trombone**

(bonus) A three-finger picking style for this instrument was named for expert Earl Scruggs. For ten points each,

* Name this typically five-stringed instrument common in folk and bluegrass music.

ANSWER: **Banjo**

* The banjo is mentioned in this folk song, the singer of which comes from Alabama with a banjo on his knee.

ANSWER: **"Oh! Susanna"**

* "Oh! Susanna" was written by this man who is also known for such songs as "Hard Times Come Again No More" and "Camptown Races."

ANSWER: Stephen **Foster** (or Stephen Collins **Foster**)

(2) **This country, partly divided by the Gulf of Tadjoura, contains Camp Lemonnier, the only permanent United States Military Base in Africa. This country was formerly known as French Somaliland, and its Afar Triangle (*) contains the world's lowest point outside of Asia, Lake Assal. For ten points, name this country on the Horn of Africa, sandwiched between Eritrea, Somalia, and Ethiopia.**

ANSWER: Republic of **Djibouti** (accept Republique de **Djibouti**; accept Jumhuriyat **Jibuti**; accept **French Somaliland** before mentioned)

(bonus) An island archipelago, historically named for this good, lies east of Sulawesi and experienced mass depopulation due to Portuguese-Dutch conflicts. For ten points each,

* Name this highly demanded good in Medieval and Renaissance Europe. These items used for flavoring include cumin, nutmeg, and cinnamon.

ANSWER: **Spices** (accept **Spice** Island)

* This most expensive spice in the world comes from the plant *crocus sativus*. Alexander the Great popularized the use of this Iranian spice for infused baths.

ANSWER: **Saffron**

* Today, the Spice Islands are known by this name which may be taken from the Arabic for "Country of the Kings."

ANSWER: **Maluku** Islands (accept **Moluccas**)

(3) **The epidermis of these structures contains guard cells that mediate turgor pressure. Both palisade and spongy tissue layers make up the mesophyll found in these structures. A waxy cuticle surrounds the outside of these structures, which (*) control gas exchange through small pores called stomata on their undersides. Photosynthesis occurs in, for ten points, what structures that change color and fall to the ground in autumn?**

ANSWER: **Leaves** (or **Leaf**)

(bonus) Thirteen proteins are coded by the namesake DNA of this organelle which is usually passed down maternally in multicellular organisms. For ten points each,

* Name this "powerhouse of the cell."

ANSWER: **Mitochondrion** (accept **Mitochondria**)

* A majority of a cell's supply of this compound is produced in the mitochondrion. It is considered the "energy currency" of the cell.

ANSWER: **ATP** (or **Adenosine triphosphate**)

* ATP is released as free energy as part of the glycolysis process, the end product of which is this simplest alpha-keto acid.

ANSWER: **Pyruvic** acid (or **Pyruvate**)

(4) **This former country's last flag was the "Blood Stained Banner," and its motto was *Deo Vindice* [[win-DEE-keh]]. A secret society meant to expand this country as far south as the Orinoco Delta and Lake Maracaibo was known as The Knights of the (*) Golden Circle. Divided in two at the Battle of Vicksburg, for ten points, what is this former country that had its capital at Richmond and was led by Jefferson Davis?**

ANSWER: **Confederate** States of America (accept **CSA**; accept the **Confederacy**; accept **Dixie**; accept answers indicating the **Southern US** States; prompt on "the South" alone)

(bonus) A member of this maritime profession captained the *Queen Anne's Revenge*. For ten points each,

* Name this criminal occupation of Blackbeard. Port Royal in Jamaica and Tortuga in Haiti were seaports used as havens for this occupation.

ANSWER: **Piracy** (accept word forms)

* Blackbeard died in battle against Robert Maynard at Ocracoke island in the capes of what is today what U.S. state?

ANSWER: **North Carolina**

* In this country, the island of New Providence was the base of operations for Blackbeard. The "Republic of Pirates" was a confederacy in this country led by the Flying Gang.

ANSWER: Commonwealth of the **Bahamas**

(5) **In this author's first novel, Pecola is made to feel like she is ugly, leading to her desiring *The Bluest Eye*. This writer won the 1988 Pulitzer for Fiction for a work based on the tragic true story of escaped enslaved person Margaret Fuller, (*) who is given the name Sethe [[SEE-thee]] in that work. For ten points, name this winner of the 1993 Nobel Prize in Literature, the author of *Beloved*.**

ANSWER: Toni **Morrison** (or Chloe Anthony Wofford **Morrison**; or Chloe Ardelia **Wofford**)

(bonus) The life of former star athlete Swede Levov is chronicled in this author's Pulitzer Prize-winning novel *American Pastoral*. For ten points each,

* Name this American author who also wrote *Goodbye, Columbus*.

ANSWER: Philip **Roth** (or Philip Milton **Roth**)

* In *American Pastoral*, Swede Levov attended high school in this U.S. state's city of Newark. This state is named after one of the Channel Islands.

ANSWER: **New Jersey**

* *American Pastoral* takes place during the political turmoil the U.S. suffered during this man's presidency in the mid-1960's.

ANSWER: Lyndon B(aines) **Johnson** (accept **LBJ**)

(6) **This event resulted in the death of Gregor Strasser, who opposed his political party's alliance with capitalists. The death of Ernst Röhm, who led the Brownshirts, occurred during this event. This event, also dubbed "Operation Hummingbird," (*)** was urged by Hermann Goering and led to the rise of the SS. For ten points, name this 1934 event in which a large group of Nazi leaders were purged by fellow party members.

ANSWER: **Night of the Long Knives** (prompt on partial answers; accept **Nacht der langen Messer**; accept **Röhm Purge** before "Röhm" is mentioned; accept **Operation Hummingbird** before mentioned)

(bonus) The Raetic writing system, which predated the rise of the Latin alphabet, may have inspired this northern writing system. For ten points each,

* Name this Germanic writing system which was often found written on namesake "Stones" in Northern Europe. Old Norse was most often written in this form.

ANSWER: **Runes** (accept **Futhark**; accept **Rune** stones)

* These Germanic people, who displaced the original Celtic people of Britain in the 5th and 6th century CE, made use of runes until French became the *lingua franca* after the Norman conquest.

ANSWER: **Anglo-Saxon** (Prompt on partial answers)

* Another possible hypothesis is these people, which were split into "Visi-" and "Ostro" branches, brought Runic writing to northern Germany.

ANSWER: **Goths** (accept **Gothic**; accept **Ostrogoths**; accept **Visigoths**)

(7) **William Nierenberg selected scientists to study this phenomenon and draft a report on it during U.S. president Ronald Reagan's administration. This phenomenon is caused by emissions of sulfur dioxide and nitrogen oxide (*)** reacting with the water molecules in the atmosphere. For ten points, name this form of precipitation with elevated levels of hydrogen ions, with a pH ranging from four to five.

ANSWER: **Acid rain** (prompt on partial answers; accept descriptive answers involving **acid** in **rain**)

(bonus) In the acronym ROYGBIV [[ROY-G-BIV]], this is what the "I" stands for. For ten points each,

* Name this color that approximates the primary color blue.

ANSWER: **Indigo**

* The acronym ROYGBIV is often used to describe the colors of these features that are visible during and immediately after precipitation.

ANSWER: **Rainbow**

* The wave nature of light was first indicated by supernumerary rainbows, and its theory was established by this British polymath and Egyptologist, known as "The Last Man Who Knew Everything"?

ANSWER: Thomas **Young**

(8) **This once and future president of his country lost his leg fighting in the Pastry War. After a decade fighting for the Crown against rebels in his home country, this person joined the rebels' successful cause in 1821. This person served as president (*) of his country on eleven non-consecutive occasions. For ten points, name this person who lost the Battles of San Jacinto and Buena Vista.**

ANSWER: Antonio López de **Santa Anna**

(bonus) The Aztecs developed a rich mythology after arriving in the Anahuac [[ah-NAH-hwak]] valley, the last of the Nahuatl [[nah-HWAH-till]] people to arrive in the region. For ten points each,

* The Aztec believed they had found their new home when they saw one of these large birds eating a snake, a vision that is symbolized today on the flag of Mexico.

ANSWER: **Eagle**

* That prophecy-fulfilling eagle was seen on an island in Lake Texcoco, where they built this capital city.

ANSWER: Mexico-**Tenochtitlan** [[teh-nohch-TEET-lahn]]

* The Aztecs believed they were guided by this deity whose name means "Left-handed hummingbird."

ANSWER: **Huitzilopochtli** [[hweet-see-loh-"POACH"-tlee]] (be lenient on pronunciation)

Halftime

The categories are:

1. Romantic Music
2. World War Two
3. Scientific Hoaxes & Frauds

Romantic Music

Concerning the Romantic period of Classical music, name the...

- (1) Continent on which the period originated in countries such as France.

ANSWER: **Europe**

- (2) Nation in which composers such as Tchaikovsky and Mussorgsky contributed to the period.

ANSWER: **Russian** Empire (accept Imperial **Russia**; do not accept or prompt on "Soviet Union")

- (3) Type of quartet for which Mendelssohn often wrote, including a cello and a viola.

ANSWER: **String** quartet

- (4) Last name of Clara and Robert, married German composers of the era.

ANSWER: **Schumann** (accept Clara Josephine **Schumann**; accept Robert **Schumann**)

- (5) Italian violinist, known for his *24 Caprices for Solo Violin*.

ANSWER: Niccolò **Paganini**

- (6) Norwegian composer of the *Peer Gynt* Suite.

ANSWER: Edvard **Grieg** (or Edvard Hagerup **Grieg**)

World War Two

The countries involved in World War Two permanently shaped the face of European geopolitics. For ten points each, name the...

(1) Country invaded by Germany to begin the war, governed from Warsaw.

ANSWER: **Poland** (accept Second **Polish** Republic; or **Rzeczpospolita**; or II Rzeczpospolita **Polska**)

(2) Last German offensive campaign, named for the shape the German line took on war maps.

ANSWER: Battle of the **Bulge** (accept **Ardennes** Offensive)

(3) Former country where Tito's partisans ambushed Axis forces.

ANSWER: Kingdom of **Yugoslavia** (accept Democratic Federal **Yugoslavia**; accept Kraljevina **Jugoslavija**; accept Demokratska Federativna **Jugoslavija**; accept Demokratična federativna **Jugoslavija**)

(4) War fought after the Soviet Union invaded Finland in a namesake season.

ANSWER: **Winter War** (accept **Talvisota**; accept **Vinterkriget**; accept **Zimnyaya Volya**)

(5) Country that sought to regain Transylvania from Romania through a German alliance.

ANSWER: Kingdom of **Hungary** (accept **Magyar** Királyság; or **Magyarország**)

(6) Country Bulgaria seized parts of, such as Drama and Kavala, after initially declaring neutrality.

ANSWER: **Greece** (or **Hellenic Republic**; or **Elliniki Dimokratia**; or **Ellas**; or **Ellada**)

Scientific Hoaxes & Frauds

Name the...

(1) Precious metal, with symbol AU, which the "seawater electrolysis" machine supposedly extracted.

ANSWER: **Gold**

(2) Light-hair color gene which a BBC news report claimed would become extinct, leaving only brunettes.

ANSWER: **Blonde** hair

(3) Technique Hwang Woo-suk claims to have used to create a cow in much the same way as Dolly the Sheep was created.

ANSWER: **Cloning** (accept **Clone**; accept **Somatic cell nuclear transfer**; accept **SCNT**)

(4) Supposed invention of Charles Redheffer, a machine capable of continuous rotation.

ANSWER: **Perpetual motion** machine (accept **Perpetuum mobile**)

(5) 1912 "missing link" fossil from England, made by combining human and orangutan bones.

ANSWER: **Pitldown** Man

(6) Skeptic and stage magician who outed many psychic and paranormal frauds like Uri Geller.

ANSWER: James **Randi** (or The Amazing **Randi**)

Second Half

(1) **One suite of pieces for this instrument is Maurice Ravel's *Gaspard de la nuit* [[gah-SPAHRD deh lah NWEE]]. Ravel was inspired by a notoriously difficult piece for this instrument, an "Oriental Fantasy" by Mily Balakirev [[bah-lah-KEE-ref]]. Sergei Rachmaninoff (*) broke out of a serious bout of depression by writing his second concerto for this instrument. For ten points, Rachmaninoff was a virtuoso of what instrument for which he wrote large chords spanning black and white keys?**

ANSWER: **Piano**forte

(bonus) Spanish virtuoso Andrés Segovia was a master on this instrument which is commonly used today in pop music. For ten points each,

* What is this instrument of which an electric six-string version has been played by performers such as Eddie Van Halen and Jimi Hendrix?

ANSWER: **Guitar** (accept Classical **Guitar**)

* In his early years, Segovia developed his guitar skills playing this style of Spanish music which developed among the *gitano* people of Andalusia.

ANSWER: **Flamenco**

* Heitor Villa-Lobos [[VEE-yah-LOH-bohss]], a noted composer from this South American country, dedicated his *Doze estudos*, or Twelve Études, to Segovia.

ANSWER: Federative Republic of **Brazil** (or Republica Federativa do **Brasil**)

(2) **In Abenaki myth, one of these specific objects named *Glooskap* could expand to hold an army and then shrink to fit in the palm of one's hand. The Preserver of Life is one of these specific objects created by Utnapishtim to host (*) craftspeople, animals, and various seeds. Noah built , for ten points, what type of object at God's command to survive a devastating flood?**

ANSWER: **Boat** (accept **Ark**; accept **Barge**; accept other synonymous answers)

(bonus) Echidna [[eh-KID-nah]] and Typhon were the parents of this being who is sometimes referred to as the "hound of Hades." For ten points each,

* Name this many-headed dog who guards the entrance to the Greek underworld.

ANSWER: **Cerberus**

* This Roman Stoic philosopher and playwright of *Medea* described Cerberus as having a mane of snakes and a snake tail.

ANSWER: **Seneca** the Younger (or Lucius Annaeus **Seneca** the Younger)

* In one legend, when a frightened Cerberus is first brought into the daylight, this hero, who earlier slew the Minotaur, helps drag him into the underworld.

ANSWER: **Theseus**

(3) **This word is the name of a construct formulated by Marius Lie [[LEE]] that is a vector space coupled with a Lie Bracket. Rings, groups, and field are studied in an “abstract” type of this branch of mathematics, while matrices [[MAY-trih-sees]] (*) are studied in the “linear” form. The fundamental theorem of this branch of mathematics guarantees solutions to polynomials. For ten points, name this branch of mathematics involving variables and expressions.**

ANSWER: **Algebra** (accept Lie **algebras**; accept Abstract **algebra**; accept Linear **algebra**; accept Fundamental theorem of **algebra**)

(bonus) This shape is the simplest non-orientable surface. For ten points each,

* Name this one-sided surface formed by half-twisting a rectangular length of paper and connecting its two ends together.

ANSWER: **Möbius strip** (accept **Band** or **Loop** in place of **Strip**)

* Two Möbius strips are glued together to form a different 3D non-orientable surface named for this German mathematician. That surface is called this man's namesake "bottle."

ANSWER: Felix **Klein** (or Christian Felix **Klein**; accept **Klein** bottle)

* The Klein bottle and Möbius strip have an Euler [[OY-ler]] characteristic of this value, which is also the number of dimensions occupied by a point.

ANSWER: **Zero** (accept synonyms such as "nil," "nought," or "none")

(4) **Showcasing this work's theme of faith, this literary work begins with an epigraph from Romans 12:19: “Vengeance is mine; I will repay.” The protagonist of this literary work commits suicide by jumping in front of a passing freight train. (*)** The suicide that ends Part Seven of this novel mirrors the earlier death of a railway worker when this novel's protagonist first met Count Vronsky. For ten points, name this novel by Leo Tolstoy about a titular female in Imperial Russia.

ANSWER: **Anna Karenina** [[kah-REN-ih-nah]] (accept either phonetic pronunciation or pronunciations similar to [[kah-RYEN-yee-nah]])

(bonus) In one work, this author wrote about an impresario who imposes a forty day limit on the length in which a "hunger artist" can fast. For ten points each,

* Name this author who wrote about Gregor Samsa who wakes one morning to find himself transformed.

ANSWER: Franz **Kafka**

* Gregor Samsa turns into a "gigantic insect" in this allegorical novella by Kafka.

ANSWER: *The **Metamorphosis*** (accept *Die **Verwandlung***)

* Frank Kafka was born in this European capital. Milan Kundera's *The Unbearable Lightness of Being* was set during a 1960s period of liberalization named for this city.

ANSWER: **Prague** (or **Praga**; or **Praha**; accept **Prague** Spring)

(5) **This ruler was succeeded by his advisor Ay [["EYE"]]. One disproved theory regarding this ruler claims their death was caused by a blow to the head. This man reversed the monotheistic religious policies of his father, Akhenaten. (*)** Lord Carnarvon sponsored the expedition that discovered this man's supposedly cursed resting place in the Valley of the Kings. Howard Carter discovered the tomb of, for ten points, what Egyptian pharaoh?

ANSWER: **Tut**ankhamun (or King **Tut**)

(bonus) An uprising led by this man was described by Voltaire as "the only just war in history". For ten points each,

* Name this gladiator who waged the Third Servile War against Rome.

ANSWER: **Spartacus** (or **Spartakos**)

* Spartacus and a number of his co-conspirators were executed in this fashion. It was a fate that commonly met early Christian saints.

ANSWER: **Crucifixion** (accept descriptions like Being **Nailed** to a **Cross**; prompt on answers like "being tied to a stake")

* Spartacus was born in Thrace in what is now this country. The first empire named for this region began with a treaty between Khan Asparukh and the Byzantines.

ANSWER: Republic of **Bulgaria** (or Republika **Bulgaria**; accept First **Bulgarian** Empire)

(6) **This integer is the only pronic prime number, and any number that is one less than a power of this integer and is also prime is considered a Mersenne prime. The first known irrational number is the square (*) root of this integer.** In Euclidean space a line can be determined by, for ten points, what number of points?

ANSWER: **Two**

(bonus) This thinker claimed that infinitely small substances called "monads" made up the universe. For ten points each,

* Name this German philosopher who wrote a *Discourse on Metaphysics* in the late seventeenth century.

ANSWER: Gottfried Wilhelm von **Leibniz**

* Leibniz names a type of notation used in this branch of mathematics, which he claimed to have invented.

ANSWER: **Calculus** (accept Differential **calculus**; accept Integral **calculus**)

* Leibniz was the first to describe the "pinwheel" variety of this instrument used to perform basic mathematical calculations.

ANSWER: **Calculator** (accept Pinwheel **calculator**; accept Mechanical **calculator**)

(7) **This philosopher asserted that "when fighting monsters" people should avoid becoming one and described "staring into the abyss" in *Twilight of the Idols*. This philosopher included the chapters "Why I Am So Wise" and "Why I Am So Clever" in his autobiography, (*) *Ecce Homo* [[EH-keh HOH-moh]].** For ten points, name this German philosopher, the author of *Beyond Good and Evil* and *The Gay Science*, in which he declared, "God is dead."

ANSWER: Friedrich **Nietzsche** (or Friedrich Wilhelm **Nietzsche**)

(bonus) This figure is referred to as *Elohim*, a word so sacred that ancient writers could only write it once before getting rid of their stylus. For ten points each,

* Name this Old Testament figure who appears as a burning bush to Moses and initially commands Abraham to kill Isaac.

ANSWER: **God** (accept **Yahweh**; accept **Jehovah**)

* God takes both the wealth and family of this namesake of an Old Testament book after Satan claims this man will turn away from God if he lost everything.

ANSWER: **Job** (accept Book of **Job**)

* According to the Talmud, Job, Balaam, and this Midianite father-in-law of Moses advised Pharaoh prior to the Exodus.

ANSWER: **Jethro** (or **Reuel**; or **Raguel**)

(8) **After getting cheated out of an inheritance left by Dan Cody, this literary character builds a fortune by bootlegging with Meyer Wolfsheim. This character is murdered in his pool by George and is introduced when (*)** Nick sees him staring at a green light on Daisy Buchanan's dock. For ten points, name this West Egg resident, the title character of a novel by F. Scott Fitzgerald.

ANSWER: Jay **Gatsby** (or James **Gatz**; accept *The Great **Gatsby***)

(bonus) In the premiere of this play cycle, Alice Brady and Alla Nazimova starred as Lavinia and Christine Mannon. For ten points each,

* Name this play cycle based on the ancient Greek trilogy *Oresteia*.

ANSWER: **Mourning Becomes Electra**

* *Mourning Becomes Electra* was written by this American playwright of *Long Day's Journey into Night*.

ANSWER: Eugene **O'Neill** (or Eugene Gladstone **O'Neill**)

* Eugene O'Neill was a member of a group of playwrights known as the Provincetown Players based in this U.S. state. The poem "Paul Revere's Ride" is set in this state.

ANSWER: **Massachusetts**

Extra Question

(1) **This method of creating images goes back as far as man, but Hans Bol and Albrecht Dürer popularized its modern use in Germany. *The Birds of America* paintings by John James Audubon were created using this method, and the (*) diffuse colors common to this method are seen in the works of John Singer Sargent. For ten points, what is this method in which paints are thinned using H₂O?**

ANSWER: **Watercolor** painting

(bonus) Name some things about the Bedouin [[BEH-doo-in]] tribes of Arabia. For ten points each,

* The Bedouin offered "security" to those undertaking this holy pilgrimage to Mecca, basically extorting caravans for protection money.

ANSWER: **Haji** (or **Hadji**)

* The Bedouins' primary mode of transport was this pack animal known for their tolerance of harsh, arid climates.

ANSWER: Arabian **camel** (or **Dromedary** camel; or One-humped **camel**)

* This British agent diplomatically swayed the Bedouin to assist the British and Saud allies in their fight with the Ottomans during World War One.

ANSWER: T.E. **Lawrence** (or Thomas Edward **Lawrence**; accept **Lawrence** of Arabia)