

2014 Brookwood Invitational Scholars Bowl

Round 7

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1. **Kennedy's disease is one of this disorder's namesake "mimic diseases". Mutations in superoxide dismutase 1 are most often linked to this disease. Riluzole treats this disease. Guam's population was devastated by lytico, which has an appearance similar to this other disorder. This disorder, which comes in bulbar-onset and (\*) limb-onset forms, is distinguished from PMA and PLS because it kills both upper and lower motor neurons. This disease results in paralysis from atrophied muscle tissue. For 10 points, name this neurodegenerative disease that affects Stephen Hawking, and killed a Yankees baseball player.**

ANSWER: amyotrophic lateral sclerosis [or ALS; or Lou Gehrig's disease]

2. **One artist covered nude women with this color of paint and used them as human paintbrushes in his *Anthropometry* series. In Paul Gauguin's *Where do we come from? What are we? Where are we going?*, the "Beyond" is represented by an idol of this color. A shade of this color was created by Yves Klein. In a painting named after this color, the subject stands with his left hand on his (\*) hip and holds a feathered hat. That painting is thought to depict Jonathan Buttall. A man riding a white horse wears this color in a painting by Wassily Kandinsky. For 10 points, name this color describing the "boy" in a painting by Thomas Gainsborough.**

ANSWER: blue [or obvious equivalents]

3. **This man descends a ship's ladder in John Tenniel's caricature of his resignation, "Dropping the Pilot." This politician met Jules Favre to sign a treaty at the palace of Versailles. This leader explained that, "My idea was to bribe the working classes" with his introduction of the world's first welfare state. Fearful of papal infallibility, this politician launched an (\*) anti-Catholic crusade, until Pius IX died. This man hosted the conference that started the "Scramble for Africa." This man exclaimed that the "great questions of the time" would be resolved by blood and iron. For 10 points, name this victor of the Franco-Prussian War and unifier of Germany.**

ANSWER: Otto von Bismarck

4. **In a story titled for one of these creatures by Sylvia Townsend Warner, one completely destroys a zoo and all onlookers. A 2008 Mars lander between *Spirit* and *Opportunity*, and *Curiosity* was named for one of these animals. At the end of *Fahrenheit 451*, Granger compares humanity to one of these creatures. The Cherokee (\*) newspaper was named for one of these animals. One of these animals appears in the seal of the city of Atlanta. These animals constructed eggs of myrrh and brought their deceased parents to the city of Heliopolis, according to myth. The largest city in Arizona is named for, for 10 points, what birds which were reborn from their ashes?**

ANSWER: phoenixes

5. **This author wrote about an innkeeper whose mood can be read by how he smokes his pipe, named Nicholas Vedder. Another of his stories begins with the protagonist discovering a skull with a tomahawk wedged in its head. A different protagonist created by this author encounters the ghosts of Henry Hudson and his crew and meets some mountain men who play (\*) ninepins. In a story by this author, Brom Bones disguises himself as the Headless Horseman in order to chase away Ichabod Crane. For 10 points, name this author who wrote "The Devil and Tom Walker", "Rip Van Winkle", and "The Legend of Sleepy Hollow".**

ANSWER: Washington Irving

6. **The Ashrei [OSH-RAY] is written in this book of the Bible. This is the first book of the Bible to include the line, "My God, my God, why has thou forsaken me?" This book and Habakkuk contain *selahs*. A verse from this book promises that, "He will not let your foot slip--he who watches over you will not slumber." The most famous passage from this book ends, "I will dwell in the house of the Lord forever" and asserts that (\*) "though I walk through the Valley of the Shadow of Death, I will fear no evil." For 10 points, name this book attributed to David, whose 23rd poem begins "The Lord is my shepherd, I shall not want."**

ANSWER: Book of Psalms

7. Eleven years after this event, Michael Fortier was placed in Witness Protection. Jordanian Ibrahim Ahmed was falsely implicated in this event. This event took place on the anniversary of the Branch Davidian raid in Waco. A conspirator in this event was in police custody (\*) two hours after it for driving without a license plate. A co-conspirator in this event, Terry Nichols, was sentenced to life in prison. Its central perpetrator was a former soldier who left a Ryder truck full of explosives in a parking garage. For 10 points, name this 1995 bombing of the Alfred P. Murrah Federal Building in a Midwestern capital, a crime committed by Timothy McVeigh.

ANSWER: 1995 Oklahoma City bombing [accept bombing of Alfred P. Murrah Federal Building until mention]

8. A performer of this instrument included the song “El Bozo” on his album *My Spanish Heart*. This instrument, which was played by Chick Corea, opens Duke Ellington’s version of “Take the ‘A’ Train” with a two-measure solo. The writer of “Rockit” and “Watermelon Man” plays this instrument, and is Herbie Hancock. The song (\*) “Round Midnight” was written by a performer of this instrument. It was played by the composer of “Ain’t Misbehavin’,” Fats Waller. A blind performer of this instrument recorded “Georgia on My Mind.” For 10 points, name this instrument played by Thelonious Monk and Ray Charles.

ANSWER: pianoforte

9. PDEs solved using separation of variables assume that each side of the equation is equal to one of these terms. These terms make up the kernel of the linear differential operator. The difference between all the solutions plotted on a direction field is one of these terms. These terms appear in the numerator of partial fractions of linear terms. Boundary conditions and initial (\*) values are used to solve for these values, since one of them is generated each time you take an indefinite integral. If  $x$  and  $y$  vary inversely, then  $x$  times  $y$  is one of these. For 10 points, name these monomials which have degree 0, which, unlike variables, don’t change.

ANSWER: constants [or integration constants]

10. This novel’s chapter “The Fifth of October” contains the quote, “All human wisdom is contained in these words: Wait and hope!” While in Rome on Carnival, Albert is captured by bandits in this novel. Another of its characters, H  lo  se, gets addicted to poisoning people in order to inherit a fortune. This book’s protagonist saves Morrel from bankruptcy, and is accused of being a (\*) Bonapartist by Danglars. The Abb   Faria details an escape plan from the Ch  teau d’If after this novel’s protagonist is locked away from Merc  d  s. For 10 points, name this revenge novel about Edmond Dant  s, written by Alexandre Dumas.

ANSWER: *The* Count of Monte Cristo [or *Le* Comte de Monte-Cristo]

11. Soukous music, a variant of the rumba, arose around this river. Boma is an inland port on this body of water. The Inga hydroelectric dams on this river were linked by HVDC by the US to mineral fields in Katanga in the 80s. The Malebo pool in this body of water separates two national capitals. The western lowland (\*) gorilla lives in this river’s basin. The Livingstone Falls prevent access to the Atlantic from this river. Lake Tanganyika drains through the Lukuga into this body of water. Its basin is the second-largest rainforest after the Amazon in the world. Kinshasa lies on this river. For 10 points, name this massive river of Central Africa.

ANSWER: Congo River

12. Project Habakkuk was designed to construct one of these objects out of wood pulp and ice. Though 134 people died, John McCain survived a 1967 catastrophe when one of these objects caught fire. Jimmy Doolittle used one of these objects as a starting point for a series of raids on Japan. Classes of these objects include (\*) *Yorktown* and *Essex*, though the newest class of them is named for Gerald Ford. The *Hornet* and *Enterprise* were examples of them. Four of these objects belonging to Japan were destroyed, at the loss of one owned by the Americans, at the Battle of Midway. For 10 points, name these large ships from which planes can take off.

ANSWER: aircraft carriers [or specific types of carriers; prompt on ships or boats or similar answers]

13. This quantity is in the denominator of the coefficient of performance. A subscript “s” usually refers to the “shaft” form of this quantity. The product of surroundings temperature and entropy generation is the amount of this quantity that is “lost”. In a cyclic process for a gas, this non-state function is the area under a (\*) PV graph. The change in internal energy equals heat either plus or minus this quantity, depending on your formulation of the First Law. Efficiency equals heat divided by the net amount of this quantity extracted. For 10 points, name this quantity equal to force dot displacement, the mechanical energy supplied to a system.

ANSWER: work [or flow work; or shaft work; or thermodynamic work]

14. This novel's protagonist refuses to sign a world peace pledge given by MacCann. A governess named Dante spouts bonkers politics in this novel. A retreat honoring St. Xavier prompts Father Arnall to give a hellfire sermon in this book. Cranly befriends the narrator of this novel during his sensuous phase, which gives way to an aesthetic phase after the narrator sees a beautiful woman wading. Political conversations about Charles (\*) Parnell and a story about a "moocow" crossing the road occupy Stephen Dedalus' memory in this novel. For 10 points, name this stream-of-consciousness "portrait" written by James Joyce.

ANSWER: A Portrait of the Artist as a Young Man

15. In a work by this composer, the bass soloist who plays the archangel Raphael also sings the role of Adam. A set of six string quartets by this man is named for the object printed on the cover of its first publication. This composer signaled the need for a vacation to his patron Count Esterhazy in a work in which the performers (\*) blow out candles one-by-one. This composer of the oratorio *The Creation* and the "Sun" quartets wrote a symphony which gets its name from a sudden *fortissimo* chord in the second movement. For 10 points, name this "Father of the Symphony" who wrote over 100 works in the form, including the "Farewell" and the "Surprise."

ANSWER: Franz Joseph Haydn

16. The N2 Gateway housing project in this nation caused twenty thousand citizens to be evicted in 2010. Events in this country prompted a 1976 Summer Olympics boycott, because New Zealand *wasn't* banned from the Olympics. In 1995, this nation's president gave a trophy to Francois Pienaar and famously donned a (\*) green jersey with a gold number 6. A war in this country inspired Robert Baden-Powell to found the Boy Scouts. This country was called the rainbow nation by Desmond Tutu, one year before its Springboks won the Rugby World Cup. For 10 points, name this home to vuvuzelas, which hosted the 2010 World Cup after the end of apartheid.

ANSWER: Republic of South Africa [or RSA]

17. Pelops was taken to Olympus by this deity. Rhea confined this deity to the Telchines on Rhodes for upbringing. With Libya, this god fathered Agenor, the father of Europa and Cadmus. Aethra conceived Theseus after sleeping with both Aegeus and this god on the same night. This god raped Medusa in Athena's temple, making him the father of (\*) Pegasus. He sent Cetus to kill Andromeda, and lost the competition to become patron of Athens to Athena. After Odysseus kills Polyphemus, a son of this god, this deity becomes the main adversary of the *Odyssey*. For 10 points, name this Greek god of earthquakes, horses, and the sea.

ANSWER: Poseidon [do not accept or prompt on "Neptune"]

18. This author wrote that, "To die is different from what anyone supposed, and luckier" in a poem whose speaker says, "I tramp the perpetual journey." A child is told that the title object is the "beautiful uncut hair of graves" in a poem by this author. This poet wrote, "I too am untranslatable" and remarks that he will "sound [his] barbaric (\*) yawp over the roofs of the world" in a poem proclaiming that, "every atom belonging to me as good belongs to you." That poem ends, "I stop somewhere, waiting for you" in its 52nd and final section. For 10 points, name this poet who wrote "I celebrate myself, and sing myself" in an entry from *Leaves of Grass*.

ANSWER: Walt Whitman

19. The polydispersity index describes the weight distribution in these materials. These objects maximize their configurational entropy in the "random coil" conformation. Heating alkenes results in the formation of these materials in a radical addition mechanism. In chemical reactions, these materials are usually written with brackets subscripted with an "n". Curing causes the (\*) thermosetting class of these objects to have increased tensile strength when they form cross-links. Dehydration synthesis forms these substances. For 10 points, name these materials like Kevlar, nylon, and polyethylene, which are repeated units of monomers.

ANSWER: polymers [or specific types of polymers]

20. Jose Bejar committed sexual offenses against these people according to a report issued by Tom Coburn. Jeff Miller issued 2014 legislation to help these people. These people and their families receive TRICARE. An organization named for these people is currently led by an ex-CEO of Procter and Gamble. The practice of "zeroing out" (\*) controversially impacted these people, which prompted President Obama to say that he was "madder than hell." A facility in Arizona put these people onto a secret list, which led to the resignation of Cabinet Secretary Eric Shinseki. For 10 points, name these people scandalously affected by excessive waits for healthcare.

ANSWER: veterans [or ex-soldiers; or obvious equivalents]

**TB: Only organisms in this phylum have a stomatogastric nervous system. Terrestrial organisms in this phylum have convoluted tubules that enter the digestive tract at the interface between the hindgut and midgut. These organisms have segments called tagmata. Members of this phylum have (\*) hemocyanin, a copper-containing pigment, rather than hemoglobin, in an open circulatory system with a hemocoel. Malpighian tubules are found in this phylum. Chitin composes the exoskeleton of these animals. For 10 points, name this invertebrate phylum consisting of crustaceans, arachnids, and insects.**

**ANSWER: arthropods [or Arthropoda]**

1. Answer some questions about the wonderful world of film music, for 10 points each:

[10] This composer wrote scores for the films *Of Mice and Men* and *The Red Pony*. The soundtrack to Spike Lee's *He Got Game* is comprised mostly of this man's music, including excerpts from his ballet *Appalachian Spring*.

ANSWER: Aaron **Copland**

[10] Bernard Herrmann wrote the music for this 1960 film, one of many collaborations he had with its director. Herrmann used clashing discords in the strings to create the mood for this movie's shower scene.

ANSWER: **Psycho** [by Alfred Hitchcock]

[10] Elmer Bernstein wrote the theme to a movie in this genre called *The Magnificent Seven*. The film scores of many works in this genre were written by Ennio Morricone.

ANSWER: **Westerns** [accept more specific answers like **spaghetti Westerns**]

2. Can you be a meteorologist successfully? Show off your forecasting ability, for 10 points each:

[10] If this quantity drops suddenly, then there's a good chance that it's going to rain or storm soon. A simple device used to measure this quantity consists of a vertical tube suspended in a pool of mercury.

ANSWER: air **pressure** [or **barometric pressure**; or atmospheric **pressure**]

[10] You immediately recognize the alternating triangles and semicircles, pointing in the same direction, on the weather map as belonging to this type of front. They occur when a cold front catches up to a warm front.

ANSWER: **occluded** front

[10] You get fired from your job when you fail to predict one of these events. Don't worry: it's nearly impossible to foresee these funnel-shaped natural disasters, which can have winds at more than 300 mph.

ANSWER: **tornadoes**

3. Given a description of its rhyme scheme and meter, name the poem, for 10 points each:

[10] This epic poem, in 100 cantos of terza rima rhyme, is split into sections titled *Inferno*, *Purgatorio*, and *Paradiso*. It's by Dante.

ANSWER: the **Divine Comedy** [or **Divine Commedia**]

[10] This poem in iambic tetrameter has the odd, rhyme scheme of "aBaBccDDeFFeGG", where the a, c, and e are feminine rhymes and B, D, F, and G are masculine rhymes. Vikram Seth's *The Golden Gate* borrows its form.

ANSWER: **Eugene Onegin**

[10] This poem is usually rendered in 101 quatrains with an AABA scheme. The definitive translation of this eleventh century poem was given by Edward FitzGerald.

ANSWER: **Rubaiyat** of Omar Khayyam

4. Soldiers wielding these weapons were dismantled at Patay due to their inferior armor. For 10 points each:

[10] Name these weapons which the English used to great effect against the French at the Battle of Agincourt.

ANSWER: English **longbow** [or **longbowmen**; prompt on **bow** and arrows]

[10] The longbow was crucial for early English successes during this 14th century war between England and France that ended at the Battle of Castillon after a really long time.

ANSWER: **Hundred Years'** War

[10] The French won the war, largely due to the development of this other weapon by Jean Bureau, which was vital for success at Castillon. This weapon was effectively used by Mehmet II to conquer Constantinople.

ANSWER: **cannonry** [or **artillery**; or obvious equivalents; prompt on **gunpowder**]

5. This achievement is called "Golden" if it's accompanied by an Olympic gold medal; Steffi Graf managed that feat in 1988. For 10 points each:

[10] Name this accomplishment in tennis: winning the Australian, French, and US Opens, as well as Wimbledon, all in the same year. Those four tournaments are usually named for this feat.

ANSWER: winning the **Grand Slam**

[10] This Australian player won the Grand Slam in 1962 and 1969, though only 1969 is actually impressive since it happened during the Open Era. Center Court in Melbourne, Australia is named for him.

ANSWER: Rod **Laver** [or Rodney George **Laver**]

[10] The only male tennis players to achieve the career Golden Slam are Rafael Nadal and this man, who won the 1996 gold medal in Atlanta. Four of his eight Grand Slam victories came at the Australian Open.

ANSWER: Andre Kirk **Agassi**

6. On an exceptionally good day for this character, he manages to find a knife blade, eat well, and help build walls for a new power station. For 10 points each:

[10] Name this character who was shut up in a Soviet prison camp for ten years after being captured by the Germans during WWII. Alexander Solzhenitsyn wrote about one day “in the life of” this character.

ANSWER: **Ivan Denisovich** [or **Shukhov**]

[10] Solzhenitsyn’s work was censored under this Soviet politician. This real-life person was satirized as Number One in Arthur Koestler’s *Darkness at Noon* and as Napoleon in *Animal Farm*.

ANSWER: Josef **Stalin**

[10] At the novel’s conclusion, Shukhov has an optimistic conversation with a Baptist character by this name. This first name is also the nickname of Alexey Karamazov.

ANSWER: **Alyosha** the Baptist [or **Alyosha** Karamazov]

7. Name some countries which had elections in 2014, for 10 points each:

[10] Narendra Modi is the newest Prime Minister of this Asian nation, since he crushed Rahul Gandhi’s Congress Party in late May.

ANSWER: Republic of **India**

[10] Popular governor Joko Widodo, or Jokowi, won the presidential election in this other nation, which finally instituted real democracy in 1998 after the resignation of President Suharto.

ANSWER: Republic of **Indonesia**

[10] The Awami League triumphed in this nation’s January 2014 elections, which were boycotted by most opposition leaders. A garment factory collapsed in this country in April 2013, killing more than a thousand people.

ANSWER: People’s Republic of **Bangladesh**

8. A common joke among physicists is to assume that a cow has this shape. For 10 points each:

[10] Name this shape which minimizes moment of inertia for a given mass. The shell theorem states that gravitational force exerted by a planet with this shape is equivalent to the force exerted by a point mass at its center.

ANSWER: **sphere** [or **spherical**; or word forms]

[10] The shell theorem also applies to calculating electric fields from charge distributions, as a generalization of a law named for this German. This physicist lends his name to two of the Maxwell equations.

ANSWER: Carl Frederic **Gauss**

[10] Specifically, Gauss’ Law sets the electric flux through an imaginary surface equal to enclosed charge over this constant.  $4\pi$  times this constant equals one over Coulomb’s constant.

ANSWER: **vacuum permittivity** [or **permittivity of free space**; or **epsilon nought**; prompt on partial answer; don’t accept answers with “permeability” or “permissivity” in them]

9. The “collapse” at the end of this period ushered in the Greek Dark Ages. For 10 points each:

[10] Name this period during which writing developed, which occurred in between the Stone and Iron Ages. Its namesake material was first smelted from copper and tin ores.

ANSWER: **Bronze** Age

[10] During the Late Bronze Age, Egypt was under this prosperous kingdom composed of the Eighteenth, Nineteenth, and Twentieth Dynasties. Kings Tut and Akhenaten were in power during this period.

ANSWER: **New** Kingdom

[10] The peak of Egypt’s power during the New Kingdom occurred under the third pharaoh of this name in the Eighteenth Dynasty. This pharaoh was co-regent with his aunt Hatshepsut during his early reign.

ANSWER: **Thutmose** III

10. 24 stories explaining the importance of this virtue were outlined in the *Xiao Jing*. For 10 points each:

[10] Give the two-word English translation of this virtue, one of the most important in Chinese culture, which refers to honoring one’s parents and elders.

ANSWER: **filial piety** [prompt on partial answer]

[10] Filial piety is one of the most central tenets of the belief system formulated by this Chinese philosopher of the Zhou dynasty.

ANSWER: **Confucius** [or Master **Kong**; or **Kongzi**]

[10] This is the number of “Classics” which were written or edited by Confucius, and make up the main staple of the Confucian canon.

ANSWER: **five**

11. A woman wearing an ugly hat looks like she'd rather do anything than drink her glass in this painter's *L'Absinthe*. For 10 points each:

[10] Name this French Impressionist who really, really liked painting ballerinas.

ANSWER: Edgar **Degas**

[10] When he wasn't creeping around dance studios, Degas also frequently painted this American Impressionist. This artist frequently painted mothers and their children.

ANSWER: Mary **Cassatt**

[10] Unlike many other Impressionists, Degas did not practice this technique: the act of painting outside in natural lights. This term is usually given as a three-word French phrase.

ANSWER: **en plein air**

12. The central figure in this event called it the "noblest work of our whole lives" upon its completion. For 10 points each:

[10] Name this largest land acquisition in American history completed by Thomas Jefferson, which gave the US control of the port city New Orleans. Napoleon Bonaparte made this deal at the price of fifteen million dollars.

ANSWER: the **Louisiana Purchase** [or **Vente de la Louisiana**; or the **sale of Louisiana**]

[10] This American negotiated the Louisiana Purchase along with Robert Livingston. A city in Louisiana is named for this Secretary of State under James Madison.

ANSWER: James **Monroe**

[10] The US felt the need to make the Louisiana Purchase after Spain revoked this treaty named for a South Carolina politician, thus barring Americans from accessing the Mississippi River and the city of New Orleans.

ANSWER: **Pinckney's Treaty** [or the Treaty of **San Lorenzo**; or the Treaty of **Madrid**; or the Treaty of **Friendship, Limits, and Navigation Between Spain and the United States**]

13. During this period, enough firms can enter an industry to reduce economic profits to zero. For 10 points each:

[10] Name this nebulously defined period over which prices are no longer sticky and the four factors of production can vary. Returns to scale occur during this time period.

ANSWER: "the **long run**" [do not accept or prompt on any other answer; do not accept or prompt on "long term"]

[10] This economist asserted that, "In the long run, we're all dead" to argue for stimulus spending and other government intervention in the short run, to ease out of the Great Depression.

ANSWER: John Maynard **Keynes**

[10] Keynes argued that the Great Depression resulted in a large decrease in this quantity. This macroeconomic quantity is plotted on the y-axis of a Keynesian cross, and its curve has a downward slope on a price-quantity graph.

ANSWER: **aggregate demand** [or **effective demand**; prompt on **demand**]

14. Actin allows this substance to stream around cells. For 10 points each:

[10] Name this water-rich gel that fills the gaps between organelles inside of cells.

ANSWER: **cytoplasm** [or **cytosol**]

[10] The cytoplasm is equally divided between the two daughter cells in this process, which occurs after telophase at the end of mitosis. In animals, it results in formation of a cleavage furrow.

ANSWER: **cytokinesis**

[10] Cytokinesis that forms these cells, however, gives them nearly all the cytoplasm, in contrast to polar bodies, which get almost nothing. In urchins, these specialized cells have jelly coats around their membranes.

ANSWER: **egg** cells [or **ova**; or **oocytes**; prompt on **gametes** or **sex** cells]

15. This bonus has only short declarative sentences. For 10 points each:

[10] It is written in imitation of this American author. The "iceberg theory" describes the writing style of this author. This man wrote *The Nick Adams Stories*.

ANSWER: Ernest **Hemingway**

[10] Santiago goes fishing unsuccessfully for 84 days in this Hemingway novella. Unfortunately, the fish he eventually catches is eaten by sharks. Hemingway's Nobel Prize was awarded largely based on this book.

ANSWER: *The **Old Man and the Sea***

[10] At the end of *The Old Man and the Sea*, Santiago dreams about these animals on a beach. Wilson saves Francis Macomber from being killed by one of these animals in a Hemingway story.

ANSWER: lions

16. Immortality--not all it's cracked up to be. For 10 points each:

[10] This Mesopotamian hero spends much of a namesake ancient epic trying to become immortal after his friend Enkidu dies, but he fails.

ANSWER: Gilgamesh

[10] A woman named Niviane curses this mythical figure to live forever in an inescapable magical tomb. This character magically disguises Uther Pendragon to allow Uther to sleep with Igraine.

ANSWER: Merlin [or Merlyn]

[10] Christian folklore tells of this unnamed character who taunted Jesus on the way to the Crucifixion and was condemned to walk the Earth until the Second Coming.

ANSWER: the Wandering Jew [prompt on partial answer]

17. Only the first eight bars of this work's "Lacrymosa" section were written by its composer. For 10 points each:

[10] Name this mass which was completed by copyist Franz Süssmayr upon the death of its original Austrian composer in 1791. The stress from writing this work is believed by many to have directly led to its composer's death.

ANSWER: Mozart's Requiem [or Requiem Mass in D minor; or K. 626]

[10] Late in his life, Mozart wrote a concerto for this instrument for Anton Stadler. This instrument shares the melody with the oboe and the bassoon in the "Adagio" movement of Mozart's "Gran Partita" serenade.

ANSWER: clarinet

[10] One of Mozart's last public appearances was in September 1791, conducting this opera of his. In this work, Tamino saves Pamina through a series of trials with the help of the title instrument.

ANSWER: *The* Magic Flute [or *Die Zauberflöte*; or K. 620]

18. This chemist crystallized, then separated a racemic mixture of tartaric acid. For 10 points each:

[10] Name this French chemist whose experiments with broth disproved spontaneous generation. He also invented vaccination and a method of sterilizing milk.

ANSWER: Louis Pasteur

[10] Pasteur showed that different enantiomers of tartaric acid caused this thing, when it's plane-polarized, to rotate. It is normally circularly polarized.

ANSWER: light [or plane-polarized light]

[10] Pasteur also lends his name to a type of this laboratory tool which uses a rubber bulb and a long nose. They're often made of glass.

ANSWER: Pasteur pipettes [prompt on eye-droppers]

19. This poet wrote, "And may there be no moaning of the bar, When I put out to sea" in "Crossing the Bar." For 10 points each:

[10] Name this English poet best-known for writing about the "Noble six hundred" who charged into the "valley of Death" in his "The Charge of the Light Brigade."

ANSWER: Alfred, Lord Tennyson

[10] Tennyson wrote a poem about this mythical "idle king" which ends, "To strive, to seek, to find, and not to yield." An expedition led by this mythological character is the backdrop for Tennyson's poem "The Lotos-Eaters."

ANSWER: Ulysses [or Odysseus]

[10] Tennyson wrote his poem, "Tears, Idle Tears" upon visiting this landmark in England. This landmark inspired another poem which begins, "Five years have past; five summers, with the length of five long winters."

ANSWER: Tintern Abbey [prompt on partial answer]

20. This colony was founded by the First Fleet on January 26, 1788, and its first governor was Arthur Phillip. For 10 points each:

[10] Name this colony which originated around Port Jackson. Lachlan Macquarie was the final governor of this territory.

ANSWER: New South Wales [or NSW; prompt on Australia]



[10] Because Australia was a penal colony, most of its early settlers, including the First Fleet, consisted of these people, shipped over from Britain.

ANSWER: convicts [or prisoners; or obvious equivalents]

[10] This man was deposed as governor of New South Wales at the onset of the Rum Rebellion in 1808. In 1790, he was betrayed by Fletcher Christian.

ANSWER: William Bligh