

PRISON BOWL IX

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Round 06

Tossups

1. In one work by this man, the page Isolier is mistaken for Adele by Count Ory. This man adapted Voltaire's tragedies *Semiramide* and *Tancredi* into operas, and included the crossing of the Red Sea in *Moise et Pharaon*. In another opera by this man, Ninetta sings the prayer "Deh, tu reggi in tal momento" after she is accused of stealing Lucia's silver. In a work by this composer of *The Thieving Magpie*, a protagonist sings his own name multiple times. That aria, "Largo al Factotum," is sung by Figaro. This man also composed an opera where a Swiss hero attempts to shoot an apple off his son's head. For 10 points, name this composer of *The Barber of Seville* and *William Tell*.

ANSWER: Gioachino (Antonio) Rossini <AT>

2. One poet from this country wrote about the "Dark Night of the Soul," and a book written by an author from this country ends with a eulogy given by a dog. A lost Shakespeare play, *Cardenio*, is based on a work by an author from this country, and the protagonist of that work frees a group of galley slaves. In one play from this country, Leonardo and the Groom murder each other for the love of the Bride; that play, *Blood Wedding*, is part of a trilogy which includes *The House of Bernarda Alba*. For 10 points, name this country, home to Federico Garcia Lorca and Miguel Cervantes.

ANSWER: Spain (accept España) <CC>

3. The first member of this ethnic group to be knighted was opposed by the Atkinson government and was named James Carroll. One member of this group said, "If dogs were to be taxed, men would be next," criticizing the Hokianga City Council. This people's *rohe* ("ROW-hay") changed during a conflict sparked by Hongi Hika, the Musket Wars. William Hobson negotiated an agreement that gave this people property rights, the Treaty of Waitangi. Encountered by explorers like Abel Tasman, for 10 points, name this indigenous people of New Zealand.

ANSWER: Maori <CL>

4. A doctor in this play is called a "cheap old quack." One character in this play loves fog but hates foghorns, and at the end of this play's second act, another character shouts, "You *know*!" Characters in this play continuously water down whiskey to disguise their drinking, and this play begins at 8:30 a.m. and ends at midnight. In this play Edmund has tuberculosis but asks his mother to "promise not to worry yourself sick and to take care of yourself," alluding to her morphine addiction. Featuring the Tyrone family, for 10 points, name this semi-autobiographical play about an aging actor by Eugene O'Neill, which takes place over 24 hours.

ANSWER: Long Day's Journey Into Night <AG>

5. One archaeologist said it took "millions of hours" to make namesake terraces along these mountains. The Islands of the Sun and the Moon are within one lake in this region, which had a "vertical archipelago" trading system. The Aymara people live along part of this mountain range, whose earlier residents invented freeze-drying. In the northern part of this region, the Magdalena River runs through the capital of what used to be New Granada. Lake Titicaca lies in the Altiplano, which is next to this mountain range that contains the world's highest volcanoes. For 10 points, name this mountain range running along the west coast of South America.

ANSWER: Andes <DM>

6. Mandelstam variables are comprised of the squared sum or difference of two values of this quantity. A partial differential equation formulated by Cauchy describes the transport of this quantity in a continuum. It's not viscosity, but that equation can be used to derive the Navier-Stokes equation corresponding to this value. This quantity of a particle is found by multiplying \hbar by k . For both elastic and inelastic collisions, this quantity is always conserved unless there is a net external force. The change in this quantity of an object is equal to force times time, and is known as impulse. For 10 points, name this quantity equal to mass times velocity.

ANSWER: linear momentum (accept translational momentum, do not accept "angular momentum") <AT>

7. The Sanation movement occurred in this country following the Second World War. Another movement that originated in this modern-day nation was a form of positivism known as the organic work movement. The Curzon line was once this country's eastern border. An advance on this country's Modlin Fortress preceded the Miracle at the Vistula. Nicholas I once said that people living in this country "must be made happy in spite of themselves." The Potsdam Conference gave most of Silesia to this modern-day country, and it was partitioned by the Prussians, Russians, and Austrians three times. This country was invaded by Hitler in 1939 to begin World War II. For 10 points, name this nation with a capital at Warsaw.

ANSWER: Poland; do not accept "Poland-Lithuania"

8. A series of Youtube videos feature Ryan and Dorkman fighting with these objects. The material phrik is notably resistant to these objects, and Barriss Offee and Luminara Unduli were buried in a cave containing crucial parts for them, the Kyber crystal. In one film, a character uses one of these objects to destroy a chair, which scares away two reporting officers. Samuel L. Jackson requested that one of his characters have a purple one of these things, and one of them with a cross guard is owned by Kylo Ren. Luke Skywalker and Darth Vader battle using these weapons, which are used by Jedi. For 10 points, name these plasma swords from the *Star Wars* universe.

ANSWER: lightsabers (prompt on *Star Wars* laser swords or any descriptions) <AT>

9. A figure in this work introduces the question, “Is justice better than injustice?” and “Will an unjust man fare better than a just man?” In this work, the analogy of the divided line is used to contrast conjecture, belief, thought, and understanding, and the sun is called “the child of the good” because we can see what it illuminates it but not view it directly. In a dialogue with Glaucon, a figure in this work argues that one should seek justice within a city, rather than an individual man, which gives the work its title. A group of prisoners watching shadows on the wall appear in the Allegory of the Cave from, for 10 points, what Socratic dialogue written by Plato?

ANSWER: The Republic [accept *De Republica* or *Politeia*]

10. This man included references to ragtime in the third movement of his *Concerto in F* for piano, and wrote a 20th-century retelling of *Pagliacci*, his opera *Blue Monday*. This composer wrote a piece with a distinct chord progression pattern called “rhythm changes,” “I Got Rhythm.” Another of his works features songs like “I Got Plenty o’ Nuttin” and “It Ain’t Necessarily So.” This composer utilized taxi horns in a symphonic poem meant to evoke French streets. His most famous work was inspired by a train ride between Boston and New York; that work opens with a clarinet glissando. For 10 points, name this composer of *An American in Paris* and *Rhapsody in Blue*.

ANSWER: George Gershwin [accept Jacob Gershwin] <RY>

11. John Fitzpatrick was a Bourbon Democrat who was mayor of this city in the 1890s. This city also houses the “Old Regular” Democrats. In 1809, this city accepted over 10,000 refugees from Haiti via Cuba. The Slaughterhouse Cases concerned this city’s streets. Albert Baldwin Wood built a screw pump to improve this city’s dike and levee system. After the Separate Car Act was passed, Homer Plessy tested it by boarding a whites-only train in this city. An 1815 battle between the British and Andrew Jackson and Jean Lafitte (“zhon luh-FIT”) fought in this city was the last battle in the War of 1812. For 10 points, name this capital of the Louisiana Territory.

ANSWER: New Orleans

12. The narrator of this work urges, “Now Albert’s coming back, make yourself a bit smart,” and shouts, “You were with me in the ships at Mylae!” Part V of this work is titled “What the Thunder Said.” The line “HURRY UP PLEASE ITS TIME” is repeated in Part II, “A Game of Chess.” One figure in this work is “the wisest woman in Europe” despite her cold and is named Madame Sosostris, and this work is set in an “Unreal city.” The author of this work ended it with the Sanskrit words “Shantih shantih shantih” and it is dedicated to Ezra Pound. The line “April is the cruellest month,” begins, for 10 points, what long poem by T. S. Eliot?

ANSWER: The Waste Land <CL>

13. A form of this tissue transports molecules via the polymer trap mechanism. This tissue’s cells are loaded and unloaded, which causes a diffusion gradient. The pressure flow hypothesis describes how it transports solutes via translocation, and it’s removed in girdling. This tissue develops on the exterior of the cambium in trees, and it contains companion cells and sieve tube elements. For 10 points, name this living plant tissue that carries nutrients throughout the organism, contrasted with xylem.

ANSWER: phloem <AT>

14. This document resulted in the conversion of the Fordow facility into a research center. Supporters of this document pointed to its extension of the “breakout time” from two to three months to over a year. A partial creator of this document was Abbas Araghchi, and another man said it was “worse than anything [he] could’ve ever imagined.” That man was John Boehner. This document was discussed in Lausanne by P5+1 and the European Union, and it placed limits on centrifuges and other aspects of uranium enrichment. For 10 points, identify this 2015 agreement named for a country with capital at Tehran.

ANSWER: Iran Nuclear Deal framework [accept Joint Comprehensive Plan of Action or JCPOA; accept obvious equivalents for “agreement to the;” prompt on partial answer] <CL/R>

15. The Dormido Mission preceded the Whitehall Conference that accepted these people during Cromwell’s rule. The War Raw Materials Board was founded by one of them, and Vienna’s “Christian socialists” segregated them. Their “Marrano” type had to wear *sambenitos* because of Tomas de Torquemada. “Purity of the blood” laws targeted their converts. These people allegedly conducted “Blood Libel” and poisoned Swiss wells during the Bubonic Plague. The Alhambra Decree expelled them from one country in 1492. Alfred Dreyfus (“DRY-fuss”) was an army officer of this religion, which has Sephardic and Ashkenazi types. For 10 points, name these people, whose major religious text is the Torah.

ANSWER: Jewish people; accept any answer with “Jew” or Hebrew in it

16. Doric friezes frequently featured depictions of these animals known as bucrania, and Pablo Picasso used the parts of a bicycle to create a sculpture depicting the head of this animal. It's not an ape, but Arturo di Modica drove one statue of this animal downtown and planted it under a 60-foot tall Christmas tree in an act of "guerrilla art." Wilder animals of this type are depicted in a 33-print Goya series, *La Tauromaquia*, and one of them stands over a grieving mother in the far left of *Guernica*. A famous bronze sculpture in Wall Street depicts, for 10 points, what animal which was frequently depicted with gilded horns in Minoan frescoes at Knossos?

ANSWER: bulls [prompt on cows] <GA>

17. Any positive integer can be written as the sum of non consecutive ones of these numbers, as stated by Zeckendorf's theorem. The uniqueness of some of these numbers' divisors is proven by Carmichael's theorem. These numbers are calculated by Binet's formula, which includes the term one plus the square root of five over two all raised to the power of n. The progression of these numbers can be modeled by the growth of a rabbit population, and as this series of numbers gets larger, the ratio of consecutive numbers approaches the golden ratio. For 10 points, name this set whose terms are generated by adding the previous two numbers, starting with 1, 1, 2, 3, 5.

ANSWER: Fibonacci numbers [accept Fibonacci sequence] <AG>

18. In one section of this work, a fisherman and a merman share a name, and another section of this work is called "The Three Apples." One character in this work befriends a king by saving his horse from an underwater horse, and another is a Chinese comedian, "The Hunchback." Yet another character in this work says, "Open Sesame." The basis of this work, which includes a character who made seven voyages and is named Sinbad, is a Sasanian king's demand for virgins to execute being thwarted by the stories of Scheherazade. For 10 points, name this collection of Middle Eastern and South Asian folk tales, including "Aladdin's Wonderful Lamp" and "Ali Baba and the Forty Thieves."

ANSWER: One Thousand and One Nights [accept The Thousand and One Nights; accept A Thousand and One Nights; accept Arabian Nights; accept The Arabian Nights' Entertainment] <CL>

19. Baldwin's rules govern the formation of these entities, while Bredt's rule concerns the configurations of bonds at their bridgeheads. These items will have special properties if they have $4n+2$ pi-electrons, as theorized by Erich Huckel. Functional groups located on these elements of unsaturation are given prefixes like para or ortho. Cholesterol contains four of these entities, and if these molecular components experience resonance, their molecules will be aromatic. The prefix "cyclo" denotes, for 10 points, which structures comprised of atoms connected in a loop, exemplified by benzene?

ANSWER: molecular rings (accept cyclic compounds or ring compounds, prompt on aromatic molecules or aromatic compounds before mention) <AT>

20. This deity was associated with the ritual Imiut fetish, a headless feline or bull skin tethered to a pole. Along with his consort Anput, this god had a daughter named Kebechet, whose name means "cooling water." The Romans conflated Hermes with this god due to his role as a "psychopomp", and he controls the feeding of Ammit. This deity performs the Opening of the Mouth ceremony and ushers souls into the Duat, where he weighs their hearts against the Feather of Truth, or Ma'at. For 10 points, name this Egyptian god associated with embalming, who is often shown with the head of a jackal.

ANSWER: Anubis

TB. This ruler crossed the Dog River to go north into Amurru, and defeated the Lukka and Shekelesh peoples during a battle that also defeated the Shardana pirates. The warriors of the Shasu tribes were chased to the Dead Sea by this man's son, Amun-her-khepeshef. This builder of a "Sistine Chapel of Ancient Egypt" brokered a treaty with Hattusili III, and built a temple at Abu Simbel for his wife Nefertari. This ruler, alternately known as Ozymandias in Greek, defeated Muwatallis II in the largest chariot battle in history. For 10 points, name this pharaoh who won the Battle of Kadesh.

ANSWER: Ramesses the Great [or Ramesses II; or replace Ramesses with Ramses; accept Usermaatre Setepenre; accept Ozymandias; prompt on Ramses or Ramesses]

Bonuses

1. It is also known as *Letters to Piso*. For 10 points each:

[10] Name this earliest known treatise on writing in verse, written in the first century BCE and translated into English by Ben Jonson. Its author tells writers to look for honest criticism, be precise, and read wisely.

ANSWER: Ars Poetica [accept The Art of Poetry]

[10] This writer of *Ars Poetica* under the emperor Octavian wrote *Odes* and used hexameter in *Sermones* and *Epistles*, as well as caustic iambic pentameter in *Epodes*. He also wrote the collection *Satires*.

ANSWER: Horace [accept Quintus Horatius Flaccus]

[10] The term "ars poetica" can refer more generally to poetry about poetry. This writer's *Essay on Criticism*, written in heroic couplets, is the most important example of ars poetica from the Enlightenment, but he's more famous for *The Rape of the Lock*.

ANSWER: Alexander Pope <CL>

2. The Sacred Congregation of the Holy Office presided over the Roman Inquisition under Cardinal Caraffa during this period. For 10 points each:

[10] Name this period during which the Ursulines, Carmelites, and Jesuits arose.

ANSWER: **Counter-** or **Catholic Reformation** [do not accept or prompt on “Reformation”]

[10] The Tridentine Decrees were passed at this ecumenical council from 1545 to 1563, which condemned Martin Luther and the Reformation. The Counter-Reformation began at this council in north Italy.

ANSWER: **Trent**

[10] Inquisitions and Reformations prompted these events, whose targets stole communion wafers, met at sabbaths, or had animal “familiar”. Subjects were often “pricked” to find painless spots.

ANSWER: **witch** hunts or panics [accept word forms and descriptions]

3. This man’s paradox concerns whether a set can contain itself or not. For 10 points:

[10] Name this English logician and philosopher. He would later elaborate upon some of his ideas on set theory in his three-volume *Principia Mathematica*.

ANSWER: Bertrand **Russell**

[10] This analogy coined by Russell, concerning a certain cosmic object, states that it is nonsensical for someone to declare something as true just because it cannot be proven wrong. It is frequently mentioned as a defense of atheism.

ANSWER: Russell’s **teapot** (accept celestial **teapot** or cosmic **teapot**)

[10] This essay by Russell introduced many key principles in descriptivism, such as the idea of a definite and indefinite description. It also characterized proper names as “disguised” or “abbreviated” definite descriptions.

ANSWER: **“On Denoting”** <AT>

4. This pastel drawing’s artist, Jane Rosenberg, defended her actions by saying “I tend to grab on to certain lines and I don’t flatter people.” For 10 points:

[10] Name this piece of artwork that received much media scrutiny for the poor depiction of its intended subject. Internet memes photoshopped the subject of this work onto the faces of E.T. Note: description acceptable.

ANSWER: **Tom Brady courtroom drawing** (accept obvious equivalents like **Tom Brady courtroom sketch**, prompt on **Tom Brady drawing**)

[10] The infamous Tom Brady courtroom drawing was created during a congressional hearing concerning this scandal. It involved the alleged tampering of footballs to make them easier to catch during a game.

ANSWER: **Deflategate** (accept **Ballghazi**)

[10] The footballs involved in Deflategate were used in the 2014 AFC Championship Game between the New England Patriots and this team. This team’s starting quarterback is Andrew Luck.

ANSWER: Indianapolis **Colts** <RY>

5. The narrator of this story employs two men known as Nippers and Turkey. For 10 points,

[10] Name this short story, whose title character is hired to copy legal documents, but who replies to every request with the phrase, “I would prefer not to.” At the end of the story, he starves to death because he preferred not to eat.

ANSWER: **Bartleby, the Scrivener**

[10] “Bartleby, the Scrivener” is a short story by this American author of *Billy Budd* and *Moby Dick*.

ANSWER: Herman **Melville**

[10] This other Melville story tells about the ship *San Dominick*. At the end of this story, the narrator realizes that the title character, the ship’s captain, was actually under the control of his African slave, Babo.

ANSWER: **Benito Cereno** <CC>

6. Try not to get spooked by these questions! For 10 points, name some things about scary skeletons in art.

[10] This double portrait is notable for featuring an anamorphic skull in its bottom portion, which can only be rendered accurately from certain perspectives.

ANSWER: **The Ambassadors**

[10] This German artist painted a “Self-portrait With Skeleton Arm,” but he’s better known for a painting featuring a bald figure with an agonized expression, his *The Scream*.

ANSWER: Edvard **Munch**

[10] This genre of still life frequently featured skulls and decaying fruits and plants, indicating the futility of life. It was particularly prevalent in 16th and 17th century Flanders.

ANSWER: **vanitas** <AT>

7. Trying to solve a second-order nonlinear differential equation in order to relate a pendulum's angular displacement and time? No problem, just perform this action. For 10 points:

[10] Name this approximation that assumes a pendulum to have infinitely tiny amplitude. This mathematical process simplifies both $\sin \theta$ and $\tan \theta$ to just θ .

ANSWER: **small-angle** approximation

[10] The small-angle approximation is used to simplify a pendulum to one of these devices, exemplified by a block on a spring. They undergo sinusoidal displacement and have a restoring force proportional to said displacement.

ANSWER: simple **harmonic oscillator** (accept damped **harmonic oscillator**, but don't reveal this alternate answer line unless given by player)

[10] In this process, a harmonic oscillator's amplitude will either abruptly or gradually approach zero as it loses energy. An example is a pendulum swinging slower and slower until it stops swinging altogether.

ANSWER: **damping** (accept word forms, like **damped**) <AT>

8. The idea that a language is this concept "with an army and a navy" is attributed to Max Weinrich. For 10 points each:

[10] Identify this term for a variety of a language among speakers of a common cultural group. English language examples include Cockney and African-American Vernacular English.

ANSWER: **dialect** [accept **sociolect** or **ethnolect**]

[10] This type of language, similar to a dialect, develops as a means of communication between two groups who do *not* have a language in common. Stable versions of these language types become known as creole languages.

ANSWER: **pidgin** language [accept **jargon**]

[10] "Pidgin" originally referred to a combination of English and this language developed to facilitate trade from the 17th to 19th centuries. "Long time no see" is a phrase that likely originated in the pidgin of English and this language.

ANSWER: **Chinese** or **Cantonese** [do not accept "Mandarin"]

9. One of this opera's title characters names a dissonant chord consisting of an augmented fourth, augmented sixth, and augmented ninth. For 10 points:

[10] Name this opera about an orphan who falls in love with a princess set to marry Lord Marke. The finale of this opera is titled "Liebestod," or "Love-Death."

ANSWER: **Tristan and Isolde**

[10] *Tristan and Isolde* is an opera by this German composer, who included an iconic "Ride of the Valkyries" in his nineteen-hour *Ring Cycle*.

ANSWER: (Wilhelm) Richard **Wagner** (VAUGH-ner)

[10] *Tristan and Isolde* features many of these musical phrases, which are used to represent a person or an idea in a composition. Wagner used a great variety of these phrases in the *Ring Cycle*, including ones for the dragon, the river, and the wanderer.

ANSWER: **leitmotif** ("LIGHT-moh-teef") [or **leitmotiv**; accept **leading motif** or **guiding motif**; prompt on **motif**; do not accept "theme"] <GA>

10. General Howe occupied Philadelphia after this battle and forced Washington's army to winter at Valley Forge. For 10 points each:

[10] Name this British victory and largest battle of the Revolutionary War. It took place along a namesake creek which is a branch of the Christina River.

ANSWER: Battle of **Brandywine**

[10] This American artillery commander was present at Brandywine. He is most famous for hauling cannons from Fort Ticonderoga to an early siege in the war and being the first Secretary of War.

ANSWER: Henry **Knox**

[10] Knox was hauling cannons to this Massachusetts city's siege. During its siege, the Battle of Bunker Hill occurred outside this city.

ANSWER: **Boston** <LT>

11. Frankly, my dear, I don't give a damn... if you thirty this bonus or not. But I'm sure you do! For 10 points each:

[10] Name this winner of the 1940 Academy Award for Best Picture, which details an epic romance during the Civil War. It is based on the book of the same name by Margaret Mitchell and features Vivien Leigh as Scarlett O'Hara.

ANSWER: **Gone with the Wind**

[10] This actor, nicknamed "The King of Hollywood," portrayed Rhett Butler in *Gone with the Wind*. He snagged a Best Actor Oscar for his role as reporter Peter Warne in *It Happened One Night*.

ANSWER: Clark **Gable**

[10] When Scarlett O'Hara does this after arguing with Rhett, she suffers a miscarriage. This action is also common in slapstick, and Jack does it in *The Shining* after Wendy hits him with a baseball bat.

ANSWER: **falling down a flight of stairs** [accept clear knowledge equivalents; prompt on partial] <CL>

12. Name some stuff about the later labors of Hercules, for 10 points each:

[10] Hercules's 10th labor involved retrieving the red cattle guarded by this demon. This resident of Erytheia had three human heads and three sets of weapons and armor, but was ultimately defeated by a poisoned arrow.

ANSWER: **Geryon**

[10] After slaying Geryon, Hercules retrieved these fruits from the Hesperides nymphs. One of these fruits was guarded by Ladon, and was feuded over by Hera, Athena, and Aphrodite.

ANSWER: golden **apples**

[10] As his twelfth and last labor, Hercules kidnapped this three-headed guard dog of the underworld, who was supposedly so scary that Eurystheus had to hide in a large jar. Hercules wrestles and chains this creature unarmed.

ANSWER: **Cerberus**

13. The two main characters in this work argue about the difference between "light the kettle" and "put on the kettle." For 10 points each:

[10] Identify this one-act play featuring the never seen crime boss Wilson and the hit-men Ben and Gus, set in the basement of a café.

ANSWER: ***The Dumb Waiter***

[10] *The Dumb Waiter* is a work by this British playwright of *Betrayal* and *The Homecoming*. He also adapted many works for the screen.

ANSWER: Harold **Pinter**

[10] In this Pinter play, Goldberg and McCann search for the piano player Stanley Webber at the title event. In this play, Stanley probably tries to rape Lulu.

ANSWER: ***The Birthday Party*** <CL>

14. It was first used by Harry Towbin at the Friedrich Miescher Institute. For 10 points each:

[10] Identify this technique, used to detect specific proteins in a tissue. The name of this technique is a play on a method of DNA detection developed by Edwin Southern.

ANSWER: **Western blot** [prompt on **blot**, accept **protein immunoblot**]

[10] This technique is used in the Western blot to deal with the cross-reactivity of antibodies, and more generally, is used to separate macromolecules like DNA into bands based on their size and charge, often using agarose.

ANSWER: **gel electrophoresis** [prompt on partial]

[10] A gel condition named for this process causes analytes to unfold into a linear chain, limiting the factors affecting macromolecules' mobility. This process causes proteins and nucleic acids to return to their primary folding configurations.

ANSWER: **denaturation** <CL>

15. In this work, Astolfo has to take a hippogriff to Ethiopia to try to cure the title character's madness. For 10 points each:

[10] Name this epic poem which employs ottava rima and follows the title Christian knight and paladin. Another plotline details the love of Bradamante and Ruggiero.

ANSWER: ***Orlando Furioso*** [accept *The Frenzy of Orlando*; accept ***Raging Roland***; do not accept "The Song of Roland"]

[10] *Orlando Furioso*, written by Ludovico Ariosto, is an important work of literature from this country, whose other writers include the author of *The Name of the Rose*, Umberto Eco.

ANSWER: **Italy** [accept **Italian Republic** or **Repubblica Italiana**]

[10] *Orlando Furioso* is written in 46 of these poetic divisions, which also title a long, unfinished work by Ezra Pound including 120 of them.

ANSWER: **cantos** [accept *The Cantos*] <CL>

16. The roofs of these structures are made of concentric rings to separate men, women, and children. For 10 points each:

[10] Name these structures which are used to prevent the corruption of earth and fire by exposing the dead to vultures.

Answer: **Towers of Silence** (or **Tower of Silence**)

[10] Towers of Silence are a practice of this religion, whose main text is the Avesta. They believe in the conflict between *asha* and *druj*, or truth and evil.

Answer: **Zoroastrianism**

[10] The main deity of Zoroastrianism is this proponent of *asha* who prevails against Ahriman to cause the cycle of rebirth and the renewal of the universe.

Answer: **Ahura Mazda** (also accept **Ohrmazd**, **Harzoo**, or **Hurmuz**) <JK>

17. A manic Walter White has just tasked you with separating a mixture's solid phase from its liquid phase. What do? For 10 points each:

[10] You could use this technique, which involves passing the mixture through a semipermeable membrane with holes small enough for only the liquid molecules. A common way to perform this action uses coffee paper.

ANSWER: **filtration**

[10] Another way to perform filtration involves using a Buchner funnel, which uses this medium to draw liquids through a membrane. The interior of a cathode ray tube is composed of this medium.

ANSWER: **vacuum**

[10] To model the flow of fluid through your porous membrane, you could use this equation, modeled by its namesake while observing water passing through beds of sand. It states that its namesake flux divided by porosity equals flow velocity.

ANSWER: **Darcy's** law <AT>

18. Prime Minister Pierre Trudeau (true-DOE) proposed a "just society" for native peoples in this country. For 10 points each:

[10] Name this country inhabited from near Newfoundland, where Leif Erikson's "skraelings" ("SCREE-lings") lived, to the Bella Coola in British Columbia.

ANSWER: **Canada**

[10] Canada's native peoples started calling themselves this two-word phrase in the 1970s. A 1982 Assembly that was created under Pierre Trudeau's administration represents them today.

ANSWER: **First Nations**

[10] Trudeau was assisted by Jean Chretien ("zhon shreh-tee-AN"), a Minister of Indian Affairs, when he wrote a 1969 White Paper. Both men were Prime Ministers affiliated with this Canadian party, which is currently in power.

ANSWER: **Liberal** Party

19. These waves notably do not travel through the outer core of the earth, and Love waves are formed when many of them interfere with each other. For 10 points:

[10] Name these transverse waves.

ANSWER: **S-waves** (accept **secondary waves** or **shear waves**)

[10] S-waves and their longitudinal P-wave counterparts travel through the Earth during these events. The Richter scale measures the energy released by these events, while the damage they cause is assessed by the Mercalli scale.

ANSWER: **earthquakes**

[10] By measuring S and P waves, seismologists can find this point in an earthquake, the point on the Earth's surface directly above where the quake originates. The most damage in an earthquake usually occurs at this location.

ANSWER: **epicenter** (accept **epicentrum**) <AT>

20. This general ordered the Talcott Line to be built outside Richmond. For 10 points each:

[10] Name this senior Confederate general of the Army of Northern Virginia. He had a horse named Traveler and lost the Battle of Gettysburg.

ANSWER: Robert E. **Lee**

[10] In this 1862 campaign, Robert E. Lee stopped the forces of Union general George McClellan from reaching the Confederate capital in a series of daring aggressive maneuvers near Richmond. It contained the Seven Days' Battles.

ANSWER: **Peninsula(r)** Campaign

[10] This Joseph Anderson-owned ironworks in Richmond produced the iron plates on the *CSS Virginia*. After the Overland Campaign, it was almost destroyed in the Evacuation Fire of 1865.

ANSWER: **Tredegar** <LT>

TB. Although the background of this work suggests that it's a sunny day, this work features many people holding umbrellas, even those in the shade. For 10 points each:

[10] Identify this painting in which a woman has a monkey on a leash and various people fish by the water or recline in the glass.

ANSWER: A **Sunday Afternoon on the Island of la Grande Jatte** [accept **Un dimanche apres-midi a l'Île de la Grande Jatte**]

[10] A *Sunday Afternoon on the Island of la Grande Jatte* is a work by this pointillist painter of *Young Woman Powdering Herself*.

ANSWER: Georges(-Pierre) **Seurat**

[10] *Sunday Afternoon* is the exact same size as this other major Seurat work, which features three red-headed boys in orange swim trunks.

ANSWER: **Bathers at Asnieres** <CL>