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Toss Ups:

1. Eve Sussman's film *89 Seconds at Alcázar* imagines the brief period of time leading up to the formation of the scene depicted in this painting. In the background of this painting, reproductions of two Peter Paul Rubens scenes from Ovid's *Metamorphoses* can be seen above a doorway. A figure on the left side of this painting who holds an easel had a royal insignia added to his chest after the death of this painting's artist. In addition to a self (*) portrait of the artist painting on the left, King Philip IV of Spain can be seen in the reflection of a mirror in this painting's background. A young girl in this painting's foreground has a butterfly-shaped hairpin and stands next to the Infanta Margarita. For 10 points, name this Diego Velazquez painting.

ANSWER: *Las Meninas* [or *The Maids of Honor*] <Chandler/Ed. TH>

2. Tosca and Knut are this type of animal in a novel titled for their "Memoirs" by Japanese-German author Yoko Tawada. The US intervention in the Russian Civil War involved a 5000 man unit named for these animals landing in Arkhangelsk, Russia. Donald Tovey famously described Sibelius's Violin Concerto as a (*) polonaise for these animals. The coat of arms for Greenland has one of these animals on it. Nanook is the Inuit god of these animals, which often feed on walruses, arctic foxes, and seals. For 10 points, name this arctic predator whose population is dwindling due to loss of hunting ground as a result of climate change.

ANSWER: polar bear [accept *Ursus maritimus*; prompt on bear] <Taylor/Ed. TH>

3. The Greeks apocryphally defeated a force from this city in Himera on the same day they defeated a Persian fleet at Salamis in 480 BCE. This city's highest constitutional authority was a tribunal called the "Hundred and Four," and it had two judges called "Suffetts." Gods like Malquart could be found on this city's currency Shekel, along with scenes such as a man riding an elephant. The ruins of the Sanctuary of Tanit reveal that (*) child sacrifice in a tophet was prevalent in this city. This capital city, whose name translates to "New City" in Phoenician, had its fields sown with salt at the end of the Third Punic War. For 10 points, name this ancient city which names a North African civilization which rivaled Rome.

ANSWER: Carthage [accept *Carthago*; accept *Qart-badašt* from speakers of Phoenician] <Peter/Ed. PT>

4. In a variation on one of this man's ideas, James Tobin asserted that long-term changes in consumption are related to short-term changes in a nation's wealth. This man's most famous work advocates burying bottles of money and hiring people to dig them up to lower unemployment. One of this economist's ideas uses a 45-degree line diagram to illustrate that equilibrium is reached when total national output equals (*) aggregate demand. A school known for adapting this man's ideas included John Hicks and Paul Samuelson, and that school broke from this man's belief that fiscal policy is vastly more important than monetary policy. The absolute income hypothesis and a namesake "cross" were formulated by—for 10 points—which British economist who wrote *The General Theory of Employment, Interest, and Money*?

ANSWER: John Maynard Keynes [accept Neo-Keynesian School] <Tracy/Ed. AS>

5. In a novel named for this person, Roger Bevins III and Hans Vollman refuse to acknowledge they are dead and refer to coffins as "sick boxes." That novel depicts *this man* "in the Bardo" and was written by George Saunders. In a poem, this speaker describes how this man "cannot sleep upon the hillside now" and "[brings] long peace to Cornland, Alp and Sea." That poem by (*) Vachel Lindsay is called *this man* "walks at midnight." A long poem commemorating this man's death features images of a western star drooping in the sky, and the yearly return of the title flower. For 10 points, Walt Whitman's "When Lilacs Last in the Dooryard Bloom'd" is about what U.S. president?

ANSWER: Abraham Lincoln [accept Willie or William Lincoln until "hillside" because of ambiguities about the title of that novel] <Taylor/Ed. AS>

6. In the opera *Rusalka*, the title water nymph describes her love for the Prince in a “Song to” this entity. In *Norma*, this entity is addressed by the title character in the aria “*Casta Diva*.” A movement named for this entity is marked *andante très expressif*, and is the third movement of the *Suite* (*) *Bergamasque* by Debussy. An instruction to play the entire first movement with the sustain pedal depressed appears in a piece Ludwig Rellstab described as evoking this entity’s reflection on Lake Lucerne. For 10 points, name this celestial body that appears in the nickname of Beethoven’s Piano Sonata 14.

ANSWER: the moon [accept clair de lune; accept moonlight] <Yonathan/Ed. TH>

7. In a famous photograph, Marcel Duchamp can be seen in front of his sculpture *Bride Stripped Bare by Her Bachelors*, Even performing this activity with Eve Babitz, who is completely naked. A set of 12th century objects used in this activity are named for either Uig (EW-ig) or Lewis and were found in the Scottish Shetland Islands. Objects used in this activity from India often feature sculptured figures of soldiers riding (*) camels and elephants. In the film *The Seventh Seal*, Max von Sydow’s character performs this activity with a personification of death. For 10 points, name this leisure activity that involves the use of an eight by eight board and pieces called bishops, knights, and pawns.

ANSWER: playing chess <Taylor/Ed. TH>

8. In Daoism, during Duanwu, realgar or cinnabar is added to this substance, and this substance is a common sacrifice at Daoist funerals. In 1st Timothy, Paul instructs Timothy to drink this substance for stomach aches. Jews traditionally drink four cups of this substance at Passover. Noah declared a curse on Canaan after consuming a large (*) amount of this substance. Jesus’s first recorded miracle was turning water into this substance at the wedding at Cana and Catholics teach that this substance becomes Jesus’s blood through transubstantiation. For 10 points, name this alcoholic beverage made from fermented grapes.

ANSWER: wine [prompt on alcohol; prompt on drinks or beverages] <Brad/Ed. TH>

9. The Cauchy-Schwarz inequality states that the magnitude of a generalized form of this operation on u and v is less than or equal to the product of the magnitudes of u and v . For orthonormal vectors e_{-sub-i} and e_{-sub-j} , this operation is equal to the Kronecker delta of i and j . The inner (*) product generalizes this operation, and the square root of this operation of a vector with itself is the Euclidean norm. This operation equals zero for orthogonal vectors, and, for vectors a and b , this operation is equal to the magnitude of a times the magnitude of b times the (emphasize) *cosine* of the angle between a and b . For 10 points, name this operation that, by summing the products of their components, converts two vectors into a scalar, unlike the cross product.

ANSWER: dot product [accept scalar product; accept inner product before mentioned] <Jonathen/Ed. JS>

10. In one play by this man, a character carries a “Diana Trophy” that she won in an intercollegiate archery championship. In that play by this author, a pro football player commits suicide, and yet another character in that play often complains of a (*) spastic colon. In another of this man’s plays, the protagonist’s husband commits suicide when his homosexuality is discovered, and that protagonist loses Belle Reve, prompting her to visit her sister Stella. For 10 points, name this playwright who created characters like “Big Daddy” Pollitt and Blanche Dubois in *Cat on a Hot Tin Roof* and *A Streetcar Named Desire*.

ANSWER: (Thomas Lanier) Tennessee Williams (III) <Alex/Ed. AS>

11. The technique by which formations on this structure are removed through the use of ultrasound energy and aspiration is phaco-emulsification. This structure is flattened and thickened in the process of accommodation, which is accompanied by compression or dilation of Cloquet’s canal. Mutations in fibrillin lead to the dislocation of this structure because fibrillin is contained in the zonule of (*) Zinn, which connects the capsule part of this structure to the ciliary body. The hardening and yellowing of this structure causes nuclear sclerosis, which is the most common type of age-related cataract. It’s not the cornea, but light is focused onto the retina by—for 10 points—what biconvex structure in the eye?

ANSWER: crystalline lens [accept aquula; prompt on eye before mentioned] <Jonathen/Ed. JS>

12. An early leader who died at Lake George in this conflict earlier claimed that the “Covenant Chain” between a European power and confederacy was broken. The first battle of this conflict saw the defeat of a British militia and Mingo warriors led by a “Half-King” at Jumonville Glen. A namesake expedition in this conflict was ambushed at the Monongahela River by forces under Daniel Beaujeu, leading to the death of General (*) Braddock. That expedition to Fort Duquesne (du-CANE) included future generals Thomas Gage and the constructor of Fort Necessity, George Washington. For 10 points, name this North American theater of the Seven Years’ War which included extensive use of Native allies.

ANSWER: **French and Indian** War [prompt on Seven Years’ War before mentioned] <Peter/Ed. PT>

13. In a novel by this author, a character named Mr. Barbecue-Smith writes 1,500 publishable words per hour by tapping into his “subconscious.” In that novel, this author created an analogue to opposition leader H.H. Asquith with his character of Mr. Callamy, whom young ladies fear and refuse to accompany on car rides. This author included the characters Mark Rampion, who was based on D.H. Lawrence, and Maurice Spandrell, who was based on Charles Baudelaire, in his novel (*) *Point, Counterpoint*. In a novel by this author, Bernard Marx become jealous when Lenina Crowne sleeps with other men even though “everyone belongs to everyone else.” That novel by this author follows a man known as “the savage” who has only read the complete works of Shakespeare. For 10 points, name this British author of *Brave New World*.

ANSWER: Aldous **Huxley** <Peter/Ed. AS>

14. In drug design, hydrotrophy and solid dispersion are techniques developed to increase bioavailability and this property, which is modeled by the Hildebrand parameter. The difference in this property between two immiscible liquids in a mixture is given by the partition coefficient. Le Chatelier's principle explains why the common (*) ion effect increases the backward reaction rate, decreasing this property for a salt. Decompression sickness arises because this property of a gas varies linearly with the gas’ partial pressure above a liquid according to Henry’s law. Salts containing chloride, bromide, and iodide typically precipitate according to rules named after—for 10 points—what property that describes the ability of a solute to dissolve in a solvent?

ANSWER: **solubility** [accept water **solubility**; prompt on concentration] <Jonathen/Ed. JS>

15. This poet wrote “What deaf and viperous murder could crown / Life’s early cup with such a draught of woe” in a long poem that suggests the “poison” of critics killed the title character. That poem by this poet includes the image of its dedicatee “burning through the innermost veil of heaven” “like a star” and compares life to “a dome of many-color’d glass” staining “the white radiance of eternity.” Another poem by this author describes “the hand that mocked them, and the heart that fed” and the (*) “sneer of cold command” belonging to a half sunk shattered visage in the sand seen by a “a traveller from an antique land.” For 10 points, name this author of “Adonais” who wrote “look on my works, ye mighty, and despair” in “Ozymandias.”

ANSWER: Percy Bysshe **Shelley** <Katia/Ed. AS>

16. In one account, the purpose of this object is nearly revealed when Anticlus attempts to call out to who he believes to be his wife before another man clasps Anticlus’ mouth shut with his hand. The priest Laocoön was strangled by two sea snakes sent by Poseidon because of his warnings about this object. This Epeius-constructed object is accompanied by (*) Sinon, who informs the citizens of a certain city he was abandoned by his countrymen and this object was left behind as an offering from Athena. For 10 points, name this hollow wooden object, from which men like Neoptolemus and Odysseus emerge after it is brought through the gates of a namesake city.

ANSWER: The **Trojan Horse** [accept the **Wooden Horse** before “wooden”; prompt on horse] <Taylor/Ed. TH>

17. Derek Parfit's "Repugnant Conclusion" describes how adhering to the principles of this school of thought could lead to overpopulation. The founder of this school of philosophy described how a "felicific calculus" can be used to assess the morality of an action in *An Introduction to the Principles of Morals and Legislation*. Animal rights activist Peter Singer is generally considered to be a member of this school. The (*) "act" form of this philosophy is more widely practiced than the "rule" form. The founder of this school, who theorized a circular prison called the panopticon, was Jeremy Bentham. A John Stuart Mill treatise is titled after—for 10 points—what school of philosophy that promotes the greatest good for the greatest number of people?

ANSWER: utilitarianism <Alex/Ed. AS>

18. A synagogue on Creech Lane was built in this city after a 365-year ban on Jews in this city was lifted. President of the Continental Congress Henry Laurens was once held in a notorious prison in this city, which also held the Kray Twins just before its closing. Joseph Bazalgette designed a sewer system for this city which largely alleviated a series of (*) cholera outbreaks here. A coffee shop in this city owned by Edward Lloyd eventually became an internationally known insurance market. A 1666 fire in this city was documented in the diary of Samuel Pepys, while Daniel Defoe wrote his *Journal of the Plague Year* based on his experience in this city. For 10 points, name this national capital where Guy Fawkes tried to blow up the Houses of Parliament.

ANSWER: London, England <Taylor/Ed. TH>

19. Condon and Shortley introduced a factor equal to this constant raised to the magnetic quantum number in the formula for the spherical harmonics. Often used for rearrangement in thermal physics, the triple product rule or cyclic chain rule sets the product of three partial derivatives equal to this constant. Exchanging two (*) fermions results in their wavefunction being multiplied by this constant. Due to Lenz's law, this constant multiplies the time derivative of magnetic flux in Faraday's law, and this number multiplies the product of the spring constant and displacement in Hooke's law because the restoring force acts in the opposite direction of motion. For 10 points, give this constant equal to i squared and the cosine of pi.

ANSWER: negative one <Jonathen/Ed. JS>

20. A secessionist movement in this nation in South Kasai named Albert Kalonji "Mulopwe," the name given to leader of the Luba. CONAKAT leader Moise Tshombe handed over a former Prime Minister of this nation to John Gat, who executed that leader of the MNC. This nation's first president, Joseph Kasavubu, was ousted in a state of emergency by military leader (*) Mobutu Sese-Seko. This nation established independence during the Round Table Conference in Brussels, which was spurned by riots in Leopoldville. For 10 points, give this name of a nation once known as Zaire centered on Kinshasa.

ANSWER: Democratic Republic of Congo [accept **DRC**; Accept **Congo-Kinshasa** or **Zaire** before mentioned; prompt on Republic of Congo since that was its first name at the outset on independence before the Congo Crisis] <Peter/Ed. PT>

Bonuses:

1. This group of people sacked Hattusha, the capital of the Hittites, before attacking the Levant, including a city that would later be the site of a victory for Nebuchadnezzar II. For 10 points each:

[10] Name this confederation of raiders formed during the late Bronze Age Collapse who were defeated by Rameses III at the Battle of the Delta.

ANSWER: the **Sea People**

[10] One theorized member of the Sea Peoples are these people, who later established Pentapolis in the southern Levant. These rivals to Israelites were said to be decisively defeated after David killed their champion, Goliath.

ANSWER: the **Philistines** [accept **Philistia**]

[10] This civilization who wrote in Linear A is said to possibly be part of the Sea Peoples. This Aegean culture built a palace at Knossos and is named after a mythical king who ordered a king of Athens to send 14 young people to his domain at tribute.

ANSWER: **Minoan** civilization [or **Minoans**] <Peter/Ed. PT>

2. One response to this thought experiment is that the central figure should take action because a human life is intrinsically more valuable than property rights. For 10 points each:

[10] Name this thought experiment which asks whether the namesake man should steal medicine in order to save his wife.

ANSWER: **Heinz's** dilemma [accept equivalents for "dilemma"]

[10] Heinz's dilemma was proposed by this psychologist. Responses to Heinz's dilemma helped him classify people in his six-stage model of moral development.

ANSWER: Lawrence **Kohlberg**

[10] Kohlberg's model built on this Swiss psychologist's four-stage model of development, which includes sensorimotor and formal operational stages.

ANSWER: Jean **Piaget** <Alex/Ed. AS>

3. The second stanza of this poem opens with the instructions "Take from the dresser of deal, lacking the three glass knobs, that sheet." For 10 point each:

[10] Name this poem that describes a corpse by noting "If her horny feet protrude, they come to show how cold she is, and dumb." It closes "Let the lamp affix the beam," before mentioning the title figure.

ANSWER: "The **Emperor of Ice Cream**"

[10] "The Emperor of Ice Cream" is by this American lawyer-poet who also wrote "Disillusionment of Ten O'Clock" and "Thirteen Ways of Looking at a Blackbird."

ANSWER: Wallace **Stevens**

[10] In "Disillusionment of Ten O'Clock," an old sailor dreams of catching tigers in this color weather. In a poem by a different poet, an object of this color is described "Glazed with rain water beside the white chickens."

ANSWER: **red** <Taylor/Ed. AS>

4. Alexander Borodin may be most famous for his musical work, but he was also a successful chemist. For 10 points each:

[10] Borodin mainly researched these compounds, which form a silver mirror when reacted with silver nitrate and ammonia in Tollens' test. These compounds and ketones both contain carbonyl groups.

ANSWER: **aldehydes**

[10] In Heidelberg, Borodin worked under this chemist who formulated a rule stating that keto-enol tautomerization occurs when a hydroxyl group is attached to double bonded carbon. A piece of lab equipment named for this chemist is preferred to a beaker for recrystallization because it has a narrow neck.

ANSWER: Richard August Carl Emil **Erlenmeyer** [accept **Erlenmeyer** flask or **Erlenmeyer** rule]

[10] In Russia, the Hunsdiecker reaction, which forms halides from silver salts of these compounds, is referred to as the Borodin reaction. The Fischer esterification reacts one these compounds with an alcohol.

ANSWER: **carboxylic acid** [accept **carboxyl**] <Jonathen/Ed. JS>

5. This equation was formulated in 1961 by its namesake at SETI with the goal of stimulating scientific discussion, rather than finding a unique solution. For 10 points each:

[10] Name this equation, which attempts to calculate the number of alien civilizations in the Milky Way with factors such as the rate of star formations and the number of planets that can potentially support life.

ANSWER: **Drake** equation

[10] The lack of evidence for the existence of alien life is this scientist's namesake paradox. Formerly GLAST, NASA renamed a gamma-ray space telescope for this scientist.

ANSWER: Enrico **Fermi**

[10] This physicist claimed that aliens could be "vastly more powerful and may not see us as any more valuable than we see bacteria." This recently deceased physicist is better known for writing *A Brief History of Time*.

ANSWER: Stephen **Hawking** <Leo/Ed. JS>

6. It's not France, but one composer from this nation studied under Vincent D'Indy and Paul Dukas before returning to his home country and composing the *Yellow River Cantata*. For 10 points each:

[10] Name this home country of Sinn Sing Hoi and a film composer known for his scores to *Hero* and *Crouching Tiger, Hidden Dragon*, Tan Dun.

ANSWER: People's Republic of **China**

[10] This four stringed instrument that has been used in traditional Chinese music for two millennia is sometimes called the Chinese Lute. Wu Man is an internationally known virtuoso of this instrument.

ANSWER: **pipa** [accept *liuqin*]

[10] Much traditional Chinese music is composed using this type of scale with five notes. On a piano, one of these scales can be played by starting on C-Sharp and playing all black keys.

ANSWER: **pentatonic** scale <Taylor/Ed. TH>

7. Anne Conway's idea that there is one unified substance in the universe directly influenced this philosopher. For 10 points each:

[10] Name this philosopher who posited that monads are the simplest substance of the universe. Along with Isaac Newton, this man is considered one of the founders of calculus.

ANSWER: Gottfried **Leibniz**

[10] In the *Theodicy*, Leibniz used this phrase in an attempt to solve the problem of evil. A fictional analog of Leibniz, Dr. Pangloss, was known for saying this 5-word phrase when characters from the book were met with troubles.

ANSWER: We are living in the "**best of all possible worlds**" [accept obvious equivalent]

[10] In a book titled for this branch of philosophy, Leibniz claimed that "every type of perfection pertains to god in the highest degree." This branch of philosophy deals with studies of the fundamental structure of the universe.

ANSWER: **metaphysics** <Leo/Ed. AS>

8. Answer some questions about some people who claimed to be Jesus Christ or a reincarnation thereof, for 10 points each:

[10] This female founder of the Shaker religion is perhaps the first widely followed person to claim to be Christ. Her followers called her "Mother" referring to the belief that she was a female incarnation of Jesus.

ANSWER: Mother Ann **Lee**

[10] This leader of the People's Temple cult claimed to be a reincarnation of Jesus, the Buddha, Akhenaten and Vladimir Lenin among others. He is known for organizing a mass suicide via poisoned flavor aid in Guyana.

ANSWER: Jim **Jones**

[10] Another Christ claimant is the poet and essayist Jules Very, who in his saner years was a member of this movement of American writers and thinkers who praised individualism and self-reliance, known best for thinkers like Henry David Thoreau and Ralph Waldo Emerson.

ANSWER: **Transcendentalist** movement [or **Transcendentalism**; accept word forms] <Taylor/Ed. TH>

9. In the 1910s, this man edited the French Socialist paper “The Future of the Worker” and wrote the anti-clerical work *The Cardinal’s Mistress*. For 10 points each:

[10] Name this Italian dictator ousted by Victor Emmanuel III in 1943 who was later hung upside down outside an ESSO gas station.

ANSWER: Benito **Mussolini**

[10] After being ousted by the Grand Council of Fascism, Mussolini would flee and head this German puppet state in Italy centered on the title town.

ANSWER: **Salò** Republic [or **Italian Social Republic**]

[10] While in power, Mussolini was known by this title bestowed upon him by the Grand Council of Fascism. It can be translated to mean “leader” in Italian.

ANSWER: Il **Duce** <Peter/Ed. PT>

10. After being abused by the gym coach Kamoshida, Shiho attempts to commit suicide by jumping off of the roof of Shujin academy in this game. For 10 points each:

[10] Name this video game, where Joker teams up with Skull, Panther, Mona, and others as the Phantom Thieves in order to steal hearts of evil people in the Metaverse.

ANSWER: **Persona 5** [accept **ペルソナ 5** or **Perusona 5**]

[10] Skull’s persona Captain Kidd innately knows Zio, a skill that does this type of damage. In *Super Smash Bros.* for Wii U, Robin’s neutral special casts magic of this type while his side special does fire damage.

ANSWER: **electric** [accept **lightning**; accept **thunder**; accept other reasonable equivalents]

[10] In *Persona 5*, Mona is the codename of one of these animals who is able to turn into a bus in Mementos. In the *Sonic the Hedgehog* universe, Big is one of these animals who has a best friend named Froggy.

ANSWER: **cat** <Jonathen/Ed. TH>

11. Answer some questions about famous war photographers. For 10 points each:

[10] The “Falling Soldier” photograph showing the moment immediately after the death of a Spanish Civil War soldier was made by this Hungarian photojournalist who covered several early 20th century conflicts. He died after stepping on a mine in French Indochina.

ANSWER: Robert **Capa** [accept Endre **Friedmann**]

[10] Joe Rosenthal took an iconic image of five marines raising a flag on this Pacific Island during World War II. Clint Eastwood directed a film told from the Japanese perspective called *Letters from This place*.

ANSWER: **Iwo Jima**

[10] Yevgeny Khaldei took another World War II photo of a soldier raising this object over the Reichstag in Berlin. Khaldei reported that this object was made from three red tablecloths by his uncle.

ANSWER: The **Soviet Union Flag** [accept the **flag** of the **USSR**; accept **communist flag** or **hammer and sickle flag**] <Taylor/Ed. TH>

12. Amelia Sedley is forced to care for her infant child alone after George Osborne dies in this battle. For 10 points each:

[10] Name this battle survived by Rawdon Crawley and William Dobbin in *Vanity Fair*. In the same novel, Joseph Sedley is seen as a coward for fleeing this battle.

ANSWER: Battle of **Waterloo**

[10] *Vanity Fair* was written by this author, who fictionalized Andrew Robinson Stoney in his picaresque novel *The Luck of Barry Lyndon*.

ANSWER: William Makepeace **Thackeray**

[10] Fabrice Del Dongo visits the battlefield where Waterloo took place in this other author’s novel *The Charterhouse of Parma*. He also wrote a novel centering on the life of Julien Sorel.

ANSWER: **Stendhal** [accept Marie-Henri **Beyle**] <Alex/Ed. AS>

13. Name some African diasporic religions, for 10 points each:

[10] This religion has its origins in Haiti, where practitioners direct prayers at loa, who are intermediaries between people and the creator deity Bondye.

ANSWER: Haitian **Vodou** [or **Voodoo**]

[10] Lucumi, a variety of the Yoruban language, is used in this Caribbean religion which synchronizes the worship of Catholic saints with Orishas from the Yoruban religion.

ANSWER: **Santeria**

[10] Practitioners of this Brazilian syncretic religion also draw from the Yoruban religion, including honoring a supreme deity called Olodumare. The priesthood of this religion is organized into families that are headed by female Mae-de-santos or “mothers of the saints.”

ANSWER: **Candomble** [accept **Umbanda** or **Quimbanda** because these clues are more or less true of those too]
<Taylor/Ed. TH>

14. This critic describes his unusual reactions to falling in love in *Liber Amoris* and profiled men like Edmund Burke and Lord Eldon in his *Spirit of the Times*. For 10 points each:

[10] Name this 19th century English essayist, critic and philosopher, whose impressionist style is characterized as “table talk.” His collection *Winterslow* collects essays like “Why Distant Objects Please” and “Whether Actors Ought to Sit in the Boxes.”

ANSWER: William **Hazlitt**

[10] Hazlitt wrote a critical work analyzing characters in this man’s plays. Some of those characters include Prospero, Ophelia, and King Lear.

ANSWER: William **Shakespeare**

[10] Hazlitt’s book *Conversations with Northcote* consists of his discussion with someone of this profession, practiced by Hazlitt himself early in life. John Ruskin and Vasari both documented the lives of people with this profession.

ANSWER: **painter** [or **artist**] <Taylor/Ed. AS>

15. Frances Willard was the second president of an organization aimed at curbing this activity, and that organization also created a “Department for the Overthrow of the Tobacco Habit” later on. For 10 points each:

[10] Name this activity discouraged by the Anti-Saloon League and the Women’s Christian Temperance Movement.

ANSWER: **drinking** alcohol [accept reasonable equivalents like consuming **alcohol** or **getting drunk**]

[10] This person applauded the 1901 death of McKinley since he was allegedly a secret drinker. This radical member of the temperance movement was a hatchet-wielding lady who went into saloons and taverns to hamper people partaking in sin.

ANSWER: Carrie A. **Nation**

[10] Private donors provided these devices to support the temperance movement, as many men would drink alcohol when they did not have access to clean water. In Portland, Maine, they were known as Benson Bubblers after a lumberman who donated 10,000 dollars to install them.

ANSWER: Temperance **fountains** [accept water **fountains** or drinking **fountains**] <Peter/Ed. PT>

16. In this play, Face and Subtle insult a Spaniard because they think he doesn’t speak English. For 10 points each:

[10] Name this play that ends with Face begging the audience for their forgiveness.

ANSWER: *The* **Alchemist**

[10] The Alchemist was written by this British dramatist of *Epicene*, who was probably a collaborator on some of Shakespeare’s plays.

ANSWER: Ben **Jonson**

[10] In Jonson’s *Volpone*, the title character is often accompanied by this character, described as a “parasite,” whose name comes the Italian word for “fly.”

ANSWER: **Mosca** <Alex/Ed. AS>

17. The most commonly used variant of this enzyme in the laboratory is extracted from the T4 bacteriophage and cannot utilize NAD. For 10 points each:

[10] Name this enzyme that forms phosphodiester bonds between a three prime hydroxyl end and a five prime phosphate. This enzyme joins the Okazaki fragments and stitches together the DNA.

ANSWER: DNA **ligase**

[10] Because DNA polymerase can only attach nucleotides in the five prime to three prime direction, Okazaki fragments are formed on this strand of the DNA. This strand is joined with the leading strand at the replication fork.

ANSWER: **lagging** strand

[10] DNA ligase in this bacteria species uses NAD as a cofactor and does not ligate blunt ends well. The *lac* operon was discovered in this species of gram-negative bacteria, and strains of this bacteria that produce Shiga toxin, like O157:H7, cause food poisoning from consuming undercooked ground beef.

ANSWER: ***Escherichia coli*** <Leo/Ed. JS>

18. This painting depicts a group of 13 nude women resting on the shore of the Arc River. For 10 points each:

[10] Name this unfinished painting. Two groups of trees bend over to form a triangle at the center of this work.

ANSWER: ***The Large Bathers*** [or *Les Grandes Baigneuses*; or *The Bathers*; or *The Big Bathers*]

[10] *The Large Bathers* is a work of this French artist known for his many depictions of Mount St. Victoire. He also created several notable depictions of card players.

ANSWER: Paul **Cézanne**

[10] Cezanne's style is considered to be "post" this movement, whose practitioners included Claude Monet, Edgar Degas, and Pierre-Auguste Renoir.

ANSWER: post-**impressionism** <Alex/Ed. TH>

19. In May 2017 this man issued an apology to the Chobani Yogurt Company for his allegation that a plant of that company was involved in a child abuse ring and was responsible for rises in tuberculous cases. For 10 points each:

[10] Name this far right-wing radio host and conspiracy theorist, known for spreading his views through InfoWars.com. This man claims that Donald Trump personally called him the day after being elected to thank him for his campaign efforts.

ANSWER: Alex **Jones**

[10] Jones was largely responsible for popularizing the PizzaGate conspiracy theory, which claimed that this Washington D.C. pizza restaurant was running a child sex ring.

ANSWER: **Comet Ping Pong** Pizzeria

[10] One of Jones' earlier theories alleges that this man was largely responsible for the 9/11 terrorist attacks. This man was reading the picture book *The Pet Goat* to a room full of kindergartners when he was informed of the attacks.

ANSWER: George **W. Bush** [do not accept "George H. W. Bush" or "Bush Sr."; accept "**Bush** did 9/11"] <Taylor/Ed. TH>

20. Answer some questions related to the physics of a simple metal detector circuit. For ten points each:

[10] One way to build a metal detector is to connect a 555 timer to one of these circuit elements and a speaker. In that circuit, metal objects change the magnetic flux through one of these circuit elements, causing an audible change in output frequency.

ANSWER: **inductors**

[10] The sound produced by the circuit changes frequency because this property of the RLC circuit changes as the inductance changes. Reactance is the imaginary part of this quantity that equals $i\omega L$ for an inductor.

ANSWER: electric **impedance**

[10] The aforementioned metal detector circuit has one of these circuit elements in between pin 1 and pin 2 on the 555 timer. These circuit elements that come in a parallel plate variety are the "C" in an RLC circuit.

ANSWER: **capacitors** <Jonathen/Ed. JS>