



NASAT 2016
Round 15

1. As an ethos emphasizing content rather than form for artists working with this material, Harvey Littleton coined the slogan "technique is cheap". The colorful, spiraling public sculpture *The Sun* was made using this medium by an eyepatch-wearing artist. St. Matthew's Church in Jersey is extensively decorated with artworks made of this material, created by a man who made hood ornaments like *Spirit of the Wind*. The usage of this material in sculptures was promoted by the members of the "studio" movement, such as Dale Chihuly (chih-HOO-lee). A form of this material called "favrile" was trademarked by an American Art Nouveau contemporary of René Lalique who made many lamps. For 10 points, name this artistic material blown by Louis Comfort Tiffany.

ANSWER: studio glass [or specific types of glass, such as stained glass] <Gupta>

2. A poem set at this place uses the recurring image of a man "who looked so wistfully at the day". A man living here wrote that Christ "ranks with the poets" and that he doesn't "regret for a single moment having lived for pleasure". A poem set at this place was inspired by the death of Charles Thomas Wooldridge, a former member of the Royal Horse Guards. A poem set here notes that "some do it with a bitter look, some with a flattering word", while cowards use a kiss. While residing at this place, a man wrote a spiritually themed letter addressed to "Bosie", the son of the Marquess of Queensbury. A poem set at this place notes that "each man kills the thing he loves". For 10 points, name this place where *De Profundis* was written, the prison that Oscar Wilde wrote a "ballad" about.

ANSWER: Reading Gaol (RED-ing JAIL) [or HM Prison Reading] <Cheyne>

3. Zweigenhaft and Domhoff wrote about how the presence of women and minorities in this group has failed to change its values in a book about "Diversity" in this group. Robert Dahl argued against the existence of this group in a book examining "dispersed inequalities" in New Haven politics. This group enforces its "crackpot definitions upon world reality" according to a chapter on the "Higher Immorality". The "Metropolitan 400" and the "Warlords" are parts of this group, according to a book that places it at the top of a pyramid above "the middle level" and the "masses". That book titled for this group argues that it is made up of the overlapping factions of political, business, and military leaders. For 10 points, name this group that governs America, according to a 1957 book by C. Wright Mills.

ANSWER: the power elite [prompt on the elite] <Brownstein>

4. In the columns of Jack Anderson, this man was dubbed an "anti-poverty czar" and was alleged to spend thousands to redecorate his office. Milton Friedman claimed that Ronald Reagan's biggest mistake was not choosing this man for his Vice President. When describing people looting vases from a museum, this man noted "stuff happens" and that "freedom's untidy". When answering a reporter's question, he mused "there are known knowns". During the Halloween Massacre, this man went from being Chief of Staff to holding a Cabinet level post. Under the Ford presidency, he became the youngest man to hold his Cabinet position, a post he returned to in the 2000s and later resigned after the Abu Ghraib prisoner abuse scandal. For 10 points, name this man, George W. Bush's first Secretary of Defense.

ANSWER: Donald Henry **Rumsfeld** <Cheyne>

5. Endo- and exocytosis can be analyzed using the ratiometric and supercliptic pH-sensitive types of this protein called pHluorin (FLOOR-in). A biosensor for the glutathione redox potential and thus ROS production is the "Mito-Ro" mutant of this protein. Some mutants of this protein can't be deprotonated at a specific site because the HBI tripeptide that is normally ionized after cyclization has its phenol replaced with an indole. That mutation in this protein has a substitution for tryptophan at tyrosine-66. This protein was discovered at Friday Harbor labs by Shimomura Osamu, who shared a Nobel Prize with Chalfie and Tsien for their research on this beta-barrel protein. For 10 points, name this fluorophore with a major emission peak at 509 nanometers derived from the bioluminescent *Aequorea* jellyfish.

ANSWER: **GFP** [or **green fluorescent protein**] <Smart>

6. Saint Pachomius the Great supposedly introduced the Eastern Orthodox equivalent of these objects to replace tossing pebbles into bowls, and Saint Anthony the Great standardized the use of seven crosses per knot to prevent demonic interference. These objects are called mala in Sanskrit, and are known by this name in some Buddhist, Sikh, and Hindu traditions. Though rejected by the Ahmadiyya, these objects are known as misbaha in Islam and used to practice tasbeeh; they likely were imported into Catholicism by crusaders encountering misbaha. Bahá'í employ these objects in their daily repetition of the Alláh-u-Abhá, and Catholics use them to track repetitions of the Lord's Prayer, Hail Mary, and other prayers. For 10 points, give this type of ritual object used to keep track of devotional repetitions, including the Rosary.

ANSWER: prayer **beads** [or prayer **rope** until "mala" is read; do not accept "rosary"] <Marvin>

7. It's not concentration, but the gradient of this quantity is set to zero to calculate the self-diffusion coefficient. For a gas, this quantity is equal to its standard state variety plus quantity $R T$ times fugacity. According to one approximation, this quantity equals the Fermi energy plus the potential energy for a cloud of trapped fermions. Noting that this quantity is equal in all phases allows one to derive the Gibbs phase rule. This quantity is related to pressure and temperature in the Gibbs–Duhem equation. For a component in a solution, this quantity is defined as the partial derivative of internal energy with respect to the component. For 10 points, name this energy that can be absorbed or released during a chemical reaction, often symbolized mu.

ANSWER: **chemical potential** [or **mu** until it is read and *prompt* afterwards] <Sundberg>

8. In a story by this author, a man goes to simply clean out his drawers, but becomes depressed reading about his old letters and ends up shooting himself. In another story by this man, the protagonist first meets the title thing after waving to a Brazilian boat. That story by this author ends with a man burning down his house to kill the title supernatural creature, but concludes "He is not dead... I suppose I must kill myself". In another of his stories, a church bell is rung over and over by a woman after she uses a dessert knife to stab the title character after he makes a speech mocking France. In that story by this author, the prostitute Rachel kills an effeminate German captain during the Franco-Prussian War. For 10 points, name this French author of "The Horla", "Mademoiselle Fifi", and "The Necklace".

ANSWER: Guy de **Maupassant** [or Henri Rene Albert Guy de **Maupassant**] <Cheyne>

9. Through a deal with Sir Dudley Carleton, this artist amassed the largest collection of antique sculpture in Europe. The French Academy was torn between a faction backing this man's view that color was more essential than drawing, and the Poussinistes (poo-san-EASTS), who argued the opposite. He subcontracted still-lives in his large paintings to artists like Jacob Jordaens. The bloody siege of this artist's home city inspired his painting in which a brutish man prepares to slam dunk a baby under the orders of Herod the Great. In 1609, this artist of *The Massacre of the Innocents* returned from Italy to Antwerp, where he painted a triptych showing *The Raising of the Cross*. For 10 points, name this Flemish Baroque painter fond of painting fleshy nude women.

ANSWER: Sir Peter Paul **Rubens** <Gupta>

10. This event involved a payment of nearly four hundred thousand pounds known as "The Equivalent". A political group called the Squadrone Volante ensured that this event occurred. The "twelve limitations" meant to reduce the effects of this event were proposed by Andrew Fletcher. This event was partially motivated by the opportunity to recover from the failure to establish a colony in Panama's Darien region. This event was symbolized by a rose and thistle growing from the same stem. After this event during the reign of Queen Anne, the song "Why Should I Be So Sad On My Wedding Day?" was played by the bells of St. Giles' Cathedral in Edinburgh. For 10 points, identify this 1707 union of two countries that officially formed the Kingdom of Great Britain.

ANSWER: the **union of England and Scotland** [or the 1707 **Act of Union**; or obvious equivalents of "union"; or the **formation of the UK** or obvious equivalents until "formed" is read] <Golimlim>

11. A god who acts rudely at one of these events is later given fourteen demons by Enki and disguised as an old man in order to withstand his forthcoming punishment. After failing to bow to Namtar at one of these events, Nergal is sent to the underworld, where he spends seven days sleeping with Ereshkigal. Inanna organizes one of these events in order to inebriate Enki and steal his *me*. Thor makes four consecutive threats to kill Loki towards the end of one of these events featuring the lengthiest Norse *flyting*. The *Lokasenna* takes place during one of these events hosted by Aegir. Demeter eats the shoulder of Pelops at, for 10 points, what type of large celebratory meal?

ANSWER: **feast** [or **banquet**; or **dinner**; or **meal** before "meal" is read; or obvious equivalents] <Kim>

12. A catalyst for this event was when two men at Sycae were spared death when the scaffolds for their hanging broke, and they fled into a church. After not being able to find Probus during this event, a crowd burned his house. During it, a woman noted "royal purple is the noblest shroud" in refusing to leave; that woman also insisted on the execution of Anastasius' nephew in its aftermath. Participants in this event wanted to crown Hypatius, but were outmaneuvered by the eunuch Narses and slaughtered by Mundus. People in this event demanded the removal of the men who drafted the *Corpus Juris Civilis*. The initial participants in its violence were "Blues" and "Greens", fans of chariot races at the Hippodrome. For 10 points, what 532 riots targeted Justinian I in Constantinople?

ANSWER: **Nika** riots <Cheyne>

13. This kind of symbol is used to denote morphisms that are treated as their own objects, the slice category. Though it is not a pipe or dagger, the Sheffer stroke is sometimes denoted using a form of this symbol named for Charles Sanders Peirce; that symbol is sometimes called the "Quine dagger" and is used to represent the NAND operation. In another notation that uses these symbols, removing them creates power towers, allowing for the hyperoperation of exponentials. These symbols are used to express incredibly large numbers in a notation developed by Donald Knuth. To convey the meaning of "iff", spelled "I-F-F", a double-headed one of these symbols is used. For 10 points, name this symbol used to signify conditionals, such as p implies q .

ANSWER: **arrows** [or up **arrows**] <Jose>

14. A character in this novel is an abolitionist who joins the Confederate Army but vows not to kill anyone because he feels guilty over the suicide of his friend Duncan. That character in this novel is obsessed with finding the slave Phebe, who discovered his affair with Annabelle Trice. The narrator of this novel adopts a nihilist, random view of life after giving an old man with a facial twitch a ride back east. Its narrator researches his ancestor, Cass Mastern, but eventually gives up and enters what he calls the Great Sleep. Near the end of this novel, Dr. Adam Stanton shoots a man to death at the Capitol building. It is narrated by reporter Jack Burden, who is the aide to the Huey Long-inspired politician Willie Stark. For 10 points, name this novel by Robert Penn Warren.

ANSWER: **All the King's Men** <Cheyne>

15. The founder of this group insisted that his sons-in-law, Frederick and Arthur, add his last name to their names. It was opposed by its founder's son, Ballington, who formed a similar, rival group, and by groups of people called the Skeletons, who believed in the three B's of "Beef", "Beer", and "Bacca". This organization got its name after another of its founder's sons, Bramwell, said, "I'm no volunteer, I'm a regular!". It grew out of the work its founder and his wife, Catherine, did in the East End of London, where two of its three S's were "soup and soap". This group publishes the newspaper *The War Cry* and its founder was known as the "General". For 10 points, what Christian charitable group founded by William Booth is structured like a military?

ANSWER: The **Salvation Army** <Cheyne>

16. A novel written by an author with this surname concludes with thirteen men dying in succession while trying to obtain clean water. A character created by an author with this last name contemplates the meaning of a quote about the "madness of art" after reading Henry James's story "The Middle Years". An author with this surname described a member of the Trotta family saving the emperor from a sniper at Solferino in his novel *Radetzky March*. A writer with this surname wrote a book in which Amy Bellette may actually be Anne Frank, *The Ghost Writer*. That author with this surname wrote about the "Swede", who is haunted by his daughter's act of terrorism, in a novel narrated by Nathan Zuckerman. For 10 points, give the surname of the author of *American Pastoral* and *Portnoy's Complaint*.
ANSWER: **Roth** [or Joseph **Roth**; or Philip **Roth**] <Droge>

17. This composer's *Piano Concerto No. 2* begins with a long solo passage without bar lines, and ends with a third movement in tarantella rhythm. The last movement of his *Symphony No. 3* is divided into a scherzo-like C minor section and a triumphant C major finale. For a Cuban violinist, this composer wrote his E major *Havanaise*. A harp plucks the note D twelve times to signal midnight at the start of a tone poem by this composer that calls for a solo violin with its E string lowered a half step. In the penultimate movement of a suite by this composer, two pianos accompany a solo cello melody that depicts the beautiful movement of the title "Swan". For 10 points, name this composer of *Danse macabre* and *Carnival of the Animals*.
ANSWER: Camille **Saint-Saëns** (san-SAWNS) [or Charles-Camille **Saint-Saëns**] <Kim>

18. A rainbow of extremophilic algae coat the man-made Fly Geyser in this state. 2000-year-old duck decoys were discovered in this state's Lovelock Cave, where guano miners unearthed mummified remains supposedly belonging to the legendary Si-Te-Cah tribe described by the Paiute. The high-def Toshiba commercial *Space Chair* launched an armchair into near space from a site in this state. The cui-ui is endemic to this state's tufa-rich Pyramid Lake, a remnant of the prehistoric Lahontan Lake in Washoe County and the terminus of the Truckee River. This state's Black Rock Desert is the site of the Burning Man Festival. For 10 points, name this state that shares Lake Tahoe with California.
ANSWER: **Nevada** <Smart>

19. This adjective appears in the name of a phenomenon coined by Alexander Kashlinsky after he observed a tendency of clusters to move toward a region of the universe in between Centaurus and Vela. Space is treated as a Chaplygin (chop-LIG-in) gas in a cosmology that posits the existence of this kind of fluid. A possibly fifth fundamental force named quintessence is a dynamic form of a phenomenon described by this adjective; more traditional theories hold that the cosmological constant is a form of that phenomenon that causes the acceleration of the expansion of the universe. Approximately 70 percent of the mass-energy of the universe is in the form of energy that is described by, for 10 points, what adjective that indicates it has yet to be directly observed?
ANSWER: **dark** [or **dark** flow; or **dark** fluid; or **dark** energy] <Jose>

20. An employee of this man, Abacuk Pricket, was a former servant of this man's benefactor Dudley Digges and was later acquitted of murdering this person. Another employee of this man, John Colman, was killed with an arrow to the neck and may have been buried at Sandy Hook, New Jersey. Jonas Poole, an agent of the English Muscovy Company, expanded on this man's discoveries, leading to the creation of the Spitsbergen whale fishery in Norway. He was last seen being set adrift with his son, John, after a successful mutiny aboard his ship, the *Discovery*, prompted after a winter stranded in James Bay. This man tried to find the Northwest Passage while captaining ships like the *Half Moon*. For 10 points, name this English sea captain who is the namesake of a large bay in northeastern Canada.

ANSWER: Henry **Hudson** <Cheyne>

21. After this city fell due to a bribed sentry, more than 500 citizens were murdered in Haultepenne's Fury. A treaty signed in this city ended a conflict that featured the British Royal Navy suffering the disastrous Raid on the Medway; that conflict prompted the Samuel Pepys (PEEPS) diary entry "I think the Devil shits Dutchmen". That treaty signed in this city ended the Second Anglo-Dutch War in 1667. A declaration named for this city was issued in response to an offer from General George Monck and promised to pardon all who recognized Charles II as the British monarch. After taking about 10,000 casualties, Justin of Nassau was forced to surrender this city to Ambrogio Spinola. For 10 points, what Dutch city surrendered to the Spanish in 1625 after an eleven-month siege?

ANSWER: **Breda** <Cheyne>

1. This woman's namesake handbag was made by Hermes and was used to cover her pregnant abdomen from the paparazzi. For 10 points each:

[10] Name this actress who married into the House of Grimaldi in 1956. She died in a car accident in 1982 after suffering a stroke behind the wheel.

ANSWER: Grace **Kelly** [or Princess **Grace**]

[10] Grace Kelly married Rainier III, who would rule this principality on the French Riviera for 56 years. Gambling at one point made up 95 percent of this country's annual revenue.

ANSWER: Principality of **Monaco**

[10] The Ballet de l'Opéra in Monaco was formed by a member of this family, who was arrested and killed by the Nazis in 1942. His brother led the Popular Front alliance after its victory in the 1936 French election.

ANSWER: **Blum** (bloom) [or Léon **Blum**; or René **Blum**] <Cheyne>

2. This god appears after the Argonauts propitiate a tripod to him while stranded in the African desert. For 10 points each:

[10] Name this son of Poseidon, who saves Jason and his crew by rolling the Argo back to the sea.

ANSWER: **Triton**

[10] Triton was considered to be the father of Pallas and foster parent of this other goddess, who kills Pallas and adopts his name as an epithet. This goddess sprung from Zeus's aching head as he walked on the shores of Lake Tritonis.

ANSWER: **Athena**

[10] While in the desert, the Argonauts have their thirst quenched by a well created by Heracles as he was completing this task. Heracles completes this task by briefly convincing Atlas to switch jobs with him.

ANSWER: stealing the **golden apples** of the Hesperides [or obvious equivalents] <Nagari>

3. While dancing with a prince, the title character of this story feels as if she is walking on sharp knives. For 10 points each:

[10] Name this story whose title character makes an unwise deal with a witch in order to marry a prince and acquire an eternal soul. She refuses to kill the prince to reverse the deal and ends up turning into sea foam.

ANSWER: "The **Little Mermaid**" [or "Den **lille havfrue**"]

[10] "The Little Mermaid" is a fairy tale by Hans Christian Andersen, who also wrote about supposedly magical new clothes being given to a man in this position. Unfortunately for this type of man, the clothes do not exist and he walks around naked.

ANSWER: **emperor** [or **ruler**; or **king**; or obvious equivalents]

[10] In this other Andersen fairy tale, a soldier obtains the title object after rather casually killing a witch. He uses it to summon magical dogs that make him rich and kill off his enemies. Like many of Andersen's early fairy tales, there is no moral.

ANSWER: "The **Tinderbox**" [or "**Fyrtolet**"] <Cheyne>

4. Despite its name, this thesis was actually proposed by Stephen Kleene (KLEE-nee). For 10 points each:
[10] Name this thesis that states that all reasonable models of computation reduce down to a certain model of computation.

ANSWER: **Church**-Turing Thesis [or **Turing**-Church Thesis; or "conjecture" in place of "thesis"]

[10] Kleene also showed that this system of logic is equivalent in expressibility to a Turing machine. It was developed by Alonzo Church.

ANSWER: **lambda** calculus

[10] What are the two types of variables in the lambda calculus? One is associated with a lambda, while the other is not.

ANSWER: **free** variables AND **bound** variables <Jose>

5. This genre, which evolved from German-language mystery plays, was viewed as the lower-class counterpart to the Italian *opera buffa*. For 10 points each:

[10] Name this light-hearted German-language musical genre, featuring spoken dialogue alternating with musical numbers. Mozart composed several examples, such as the unfinished *Zaide* (tsah-EE-duh) and *The Abduction from the Seraglio*.

ANSWER: **singspiel** (ZING-shpeel) [or **sing-play**]

[10] Mozart's best known *singspiel* opera is this one, in which Tamino and Pamina undergo several trials with the help of the title instrument.

ANSWER: *The **Magic Flute*** [or *Die **Zauberflöte***]

[10] This Austrian composer popularized the genre with his operas *Das rote Kappchen*, *Hieronymus Knicker*, and *Doktor und Apotheker*. He is better-known for his E major first double bass concerto.

ANSWER: Carl Ditters von **Dittersdorf** [or Carl **Ditters** von **Dittersdorf**] <Cheyne>

6. This property of proteins can be predicted by a high Debye-Waller temperature factor, or B-factor, which describes the mean-square displacement of their constituent atoms. For 10 points each:

[10] Name this property that exists "intrinsically" in certain folded proteins, which have higher flexibility and more structural instability than globular or fibrous types.

ANSWER: **disordered** [prompt on unstructured]

[10] Disordered regions disfavor amino acids with this property, such as phenylalanine and valine, which have non-polar hydrocarbon side chains and are usually buried in the core where they cannot contact water.

ANSWER: **hydrophobicity** [or **hydrophathy**]

[10] Annular lipid shells solvate the hydrophobic faces of members of this group of "integral" polytopic proteins that span the depth of the lipid bilayer and come in single-pass and multi-pass types.

ANSWER: **transmembrane** proteins [prompt on membrane proteins] <Smart>

7. Fighters in this war were given information and supplies by the Feminine Brigades of St. Joan of Arc. For 10 points each:

[10] Name this war that started after the government of Plutarco Elías Calles attempted to enforce anticlerical portions of the Constitution of 1917.

ANSWER: **Cristero** War [**Cristero** Rebellion; or La **Cristiada**]

[10] The Cristero War occurred in this country, where Calles founded the predecessor of the modern PRI. Calles had earlier fought in this country's 1910 to 1920 revolution.

ANSWER: **Mexico** [**United Mexican States**; or **Estados Unidos Mexicanos**]

[10] Earlier anti-clerical Mexican legislation, such as the Lerdo land reform law, sparked a conservative revolt called the Reform War, which this president defeated. This man's general Ignacio Zaragoza won the Battle of Puebla.

ANSWER: Benito **Juárez** [or Benito Pablo **Juárez** García] <O'Rourke>

8. Because the laconic middle movement of this piece is simply just two chords, it is sometimes accompanied by an improvised cadenza. For 10 points each:

[10] Name this G major concerto for three violins, three violas, three cellos, and basso continuo.

ANSWER: **Brandenburg Concerto No. 3** [prompt on partial answers]

[10] This German Baroque composer wrote six *Brandenburg Concertos* in 1721, two years before he became *Thomaskantor* of a prestigious boys' choir in Leipzig.

ANSWER: J. S. **Bach** [or Johann Sebastian **Bach**]

[10] The fifth *Brandenburg Concerto* features a lengthy cadenza for this instrument, which is both a solo instrument and part of the basso continuo. Bach's *Italian Concerto* was originally written for this instrument.

ANSWER: **harpsichord** [prompt on keyboard; do not accept "piano"] <Kim>

9. This man is credited with creating the national image of England, "John Bull", a jovial fat man. For 10 points each:

[10] Name this physician, the subject of a poetic letter that introduced the phrase "damn with faint praise" to the English language. At one point in the poem addressed to this man, the speaker rhetorically asks "who breaks a butterfly upon a wheel?".

ANSWER: John **Arbuthnot** [or Dr. **Arbuthnot**]

[10] "Epistle to Dr. Arbuthnot" is a poem by this author, who also introduced such phrases as "fools rush in where angels fear to read" in a poem written in his signature heroic couplets.

ANSWER: Alexander **Pope**

[10] Dr. Arbuthnot was a good friend of this author, who gently parodied him in the novel *Gulliver's Travels*.

ANSWER: Jonathan **Swift** <Cheyne>

10. Operation Breaking Terrorism was focused on this city. For 10 points each:

[10] What city was under siege from February to May 2016, followed by an ongoing battle to liberate it from ISIS control? It has been completely surrounded since the recapture of Ramadi.

ANSWER: **Fallujah**

[10] The push to retake Fallujah by Iraqi troops has received assistance from this other country, which has alarmed the United States. This Shia state's Supreme Leader is Ali Khamenei.

ANSWER: Islamic Republic of **Iran** [prompt on **Persia**]

[10] This current President of Iraq, a Kurdish politician, controversially appointed Haider al-Abadi in August 2014 to replace Nouri al-Maliki.

ANSWER: Fuad **Masum** [or Muhammad Fuad **Masum**] <Cheyne>

11. Deborah Sampson was placed on a pension years after disguising herself as a man to fight in this war. For 10 points each:

[10] Name this war. During one of its battles, the possibly legendary Molly Pitcher operated a cannon.

ANSWER: American **Revolutionary** War [or American **Revolution**]

[10] Molly Pitcher reportedly fought in this 1778 battle, a victory for George Washington which occurred near a courthouse in New Jersey.

ANSWER: Battle of **Monmouth**

[10] This youthful soldier in the Continental Army fought at Monmouth, White Plains, and Yorktown, and also witnessed the encampment at Valley Forge and the execution of John Andre. His account of the war, at one time published as *Private Yankee Doodle*, is an oft-quoted primary source of the war.

ANSWER: Joseph Plumb **Martin** <Cheyne>

12. The operation of strain gauges is based on this effect. For 10 points each:

[10] What effect is caused by strain in a material changing the shape of energy bands, thus changing the electrical conductivity of the material?

ANSWER: **piezoresistivity** [or **piezoresistive** effect; or **piezoresistance** effect; or word forms; do not accept "piezoelectricity"]

[10] Piezoresistivity has found wide application in these sensors, which measure the g-force associated with a movement of the sensor. Much like the gyroscope, this type of device is widely used in smartphones, but unlike the gyroscope, it has little sense of orientation.

ANSWER: **accelerometer**

[10] A very simple example of a gyroscope would be a rotor nested inside two of these things. These things can lose a degree of freedom when they become "locked".

ANSWER: **gimbals** <Voight>

13. These objects were discovered in a series of caves by Bedouin shepherds in the late 1940s. For 10 points each:

[10] Name these important documents, containing some of the earliest known manuscripts of the Hebrew scriptures. The community which produced them is often identified with the Essenes mentioned in Josephus.

ANSWER: Dead Sea Scrolls [or Qumran scrolls]

[10] The Scrolls also include extra-Biblical documents including this pseudepigraphal book, a narrative which recounts the events of Genesis in 49-year namesake periods and claims that Hebrew is spoken in heaven. It is also known as Lesser Genesis or the Book of Division.

ANSWER: Book of Jubilees

[10] The Scrolls also contain fragments of a book supposedly written by this great-grandfather of Noah. According to the Book of Genesis, this man walked with God until "he was no more" because "God took him".

ANSWER: Enoch [or Chanokh; or Idris] <Marvin>

14. Answer the following about psychologists who created therapeutic techniques, for 10 points each:

[10] This man made use of free association and his concept of transference in order to treat his patients' repressions as the founder of psychoanalysis.

ANSWER: Sigmund Freud

[10] This pioneer of humanistic psychology wrote *On Becoming a Person* and focused on congruence, unconditional positive regard, and empathy with his client-centered therapy.

ANSWER: Carl Rogers

[10] This psychologist created the ABC model and drew on Greek and Roman philosophers to develop rational emotive behavior therapy, which focuses on ridding patients of their self-defeating irrational beliefs.

ANSWER: Albert Ellis <Mehr>

15. In an essay in this book, the author describes how actors with darker skin were cast for a different class of roles than lighter-skinned actors in a 1954 all-black film production of *Carmen*. For 10 points each:

[10] Name this 1955 essay collection. Its essay "Journey to Atlanta" tells of The Melodeers, a quartet hired by the Progressive Party to campaign for Henry Wallace. Its first essay criticizes *Uncle Tom's Cabin*.

ANSWER: Notes of a Native Son

[10] This African-American author of *Notes of a Native Son* wrote about Harlem resident John Grimes in *Go Tell It on the Mountain*.

ANSWER: James Baldwin

[10] This Baldwin book contains an essay addressed to his nephew that contends the "country is celebrating one hundred years of freedom one hundred years too soon" on the 100th anniversary of the Emancipation Proclamation. It takes its title from the Negro spiritual "Mary Don't You Weep".

ANSWER: *The Fire Next Time* <Collins>

16. This thing first appeared in the paper "Knowing One's Own Mind". For 10 points each:

[10] What thing is created at exactly the same time Donald Davidson dies, looks identical to him, and has exactly the same brain and mannerisms? This construct was created by Davidson to argue that despite his identical nature, this thing is still different than the original because of a different causal history.

ANSWER: The **Swampman**

[10] The idea of the Swampman is similar to a famous problem posed by Plutarch, which examines one of these objects owned by Theseus, which had been perfectly preserved albeit with numerous changed pieces. The problem asks if this thing is the same if it was entirely replaced, piece by piece.

ANSWER: a **ship** [or **boat**]

[10] This thinker wondered what would happen if you used the original ship's parts to build another ship. He is better known for advocating strong government in *Leviathan*.

ANSWER: Thomas **Hobbes** of Malmesbury <Cheyne>

17. A painting with this compositional form shows a lavender patch of liquid leaking from a couple having sex. For 10 points each:

[10] Name this type of painting, two of which, titled for the months "August 1972" and "May–June 1973", celebrate the artist's life with his lover George Dyer, who had committed suicide. These paintings are made up of three panels.

ANSWER: **trptychs**

[10] This Irish-born artist of grotesque images painted those *Black Triptychs*, as well as the Aeschylus-inspired *Three Studies for Figures at the Base of a Crucifixion*.

ANSWER: Francis **Bacon**

[10] Bacon used passport photographs to paint an uneasy-looking, cross-legged man, in a late triptych serving as a "study for" Bacon's only full-body painting of this type. Bacon's usual forays into this genre depict just a head against a black background.

ANSWER: a **self-portrait** [prompt on portrait] <Golimlim>

18. Examples of this kind of polynomial equation includes equations of motion with non-zero values for jerk, but zero values for jounce, crackle, and pop. For 10 points each:

[10] Name this kind of polynomial equation in which the highest degree term is raised to the third power.

ANSWER: **cubic** equation [or **cubic** function]

[10] This Italian devised formulas for solving both cubic and quartic equations. He wrote a treatise on divination by interpreting forehead lines, called *Metoposcopia*.

ANSWER: Gerolamo **Cardano**

[10] Cardano's formula relies on a form of the cubic equation in which this has been done to it. This is the term for dividing out a binomial from a polynomial that usually has been factored.

ANSWER: **depressed** function [or word forms; or **deflating** function] <Jose>

19. This group destroyed Thebes as a message to other members not to rebel. For 10 points each:

[10] Name this group of Greek city-states that was created by Philip II, the first major unification of most of the states involved.

ANSWER: League of **Corinth** [or **Hellenic** League]

[10] Philip II, the father of Alexander the Great, was a king of this Greek kingdom, which became the dominant military power after the Battle of Chaeronea.

ANSWER: **Macedonia**

[10] Philip II was killed while attending his daughter's wedding by this man, a bodyguard and possibly a former lover of Philip. He shares his name with both a king and general of Sparta.

ANSWER: **Pausanias** of Orestis <Cheyne>

20. After one of these events, a man must take his family to Mbanta. For 10 points each:

[10] At what kind of event does a gun explode, killing a teenager? After that event of this type, a man and his family are sent into exile for seven years to appease the gods.

ANSWER: a **funeral** [or the **funeral** of Ezeudu]

[10] The funeral of Ezeudu is a sequence in this Chinua Achebe novel about the Nigerian tribal leader Okonkwo.

ANSWER: ***Things Fall Apart***

[10] In the novel, Okonkwo is famously skilled at this activity. The first chapter of the book describes his defeat of a man known as the "Cat" in this activity.

ANSWER: **wrestling** [prompt on **fighting**] <Cheyne>

21. The popularity of this painting spurred rival theater companies to re-stage the Voltaire play it dramatizes, changing the ending so that actors mimic the poses of the people depicted. For 10 points each:

[10] Name this painting in which a defender of the republic sits on a *klismos*, grieving his decision to have his progeny killed for rebelling to restore the monarchy.

ANSWER: ***The Lictors Bring to Brutus the Bodies of His Sons*** [or ***Brutus and His Sons***; or ***The Lictors Returning to Brutus the Bodies of His Sons***; or similar translations mentioning all three of **Lictors** and **Brutus** and his **sons**; or ***Les licteurs rapportent a Brutus les corps de ses fils***]

[10] This French neoclassical artist painted several scenes from Roman legend as allegories of late 18th century France, such as *The Lictors Bring to Brutus the Bodies of His Sons* and *The Oath of the Horatii*.

ANSWER: Jacques Louis **David**

[10] David drew on a desire for stability in the aftermath of the French Revolution in this 1799 painting, in which the wives of Romans and daughters of an aggrieved tribe physically place themselves in the middle of a battlefield.

ANSWER: ***The Intervention of the Sabine Women*** <Bentley>