

## Prison Bowl VII

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### Round 01 – Tossups

1. This ruler deported 10,000 Nordalbingian families, replacing them with immigrants from his homeland. Abd-al Rahman presented him with a clock and an elephant, leading to their alliance. He besieged Pavia until he received the title of *patrician* and defeated a former ally, Desiderius. The Paderborn or Aachen Epic described a meeting between Pope Leo III and this man. He invaded Saxony in a nearly thirty year conflict. This man used the sword Joyeuse, which was later used to coronate French kings, and sparked the Carolingian Renaissance. For 10 points, name this Frankish king who was crowned first Holy Roman Emperor on Christmas Day in 800.

ANSWER: Charlemagne [or Charles the Great; or Charles I] <JL/RN>

2. This musician included “Summer Night” as an outtake from an album which also includes “So Near, So Far.” He collaborated with saxophonist Wayne Shorter and pianist Herbie Hancock on the album *Nefertiti* and featured pieces by guitarist Joaquin Rodrigo in his *Sketches of Spain*. This musician, who experimented with modal jazz in his fusion album *Bitches Brew*, created an alternate take of the modal jazz track “Flamenco Sketches” on an album that also includes “So What.” For 10 points, name this jazz trumpeter who collaborated with Bill Evans and John Coltrane on *Kind of Blue*.

ANSWER: Miles Davis <BM>

3. In one of these works, the viewer looks up through a stairwell as men smile down from a balcony. Controversy erupted over another of these that depicts people in white smocks laughing with mutilated baby dolls and meat. In a black-and-white one, a collage of faces emerges from the hair of sketched heads. The central group in one of these works wears blue hats and jackets and gestures meaninglessly in semaphore, while another one of these is completely white. A police officer stopped traffic to facilitate the making of an iconic one of these works, in which four men walk in single file through a crosswalk. For 10 points, name these artworks found on the front of *Revolver* and *Abbey Road*.

ANSWER: The Beatles album covers [prompt on album covers; prompt on albums] <MZ>

4. In a novel by this writer, Abraxas appears in a dream as a bird breaking free from an egg. In another of his novels, Joseph Knecht attains the rank of the Magister Ludi before resigning and leaving Castalia. *Demian* and *The Glass Bead Game* are novels by this writer, who created a character who experiences life as a son of a Brahmin, ascetic, businessman, lover, and finally, a ferryman. In another novel by this man, Harry hears Mozart laughing in a place designated “for madmen only!”, the trippy Magical Theater. For 10 points, name this author of *Siddhartha* and *Steppenwolf*.

ANSWER: Hermann Hesse <KX>

5. This term can refer to a matching between the kinetic energies of two particles and those two particles’ bound-state energy. That type, used to study Bose-Einstein condensates, is named for Feshbach. Another type formed the Huygens and Kirkwood gaps, and the Laplacian type refers to the integer ratios between the orbital periods of Io, Europa, and Ganymede. In chemistry, it can be depicted by a double arrow between contributing forms, and the delocalized electrons that form its eponymous structures stabilize benzene. For 10 points, give this scientific term, which in physics refers to a system’s tendency to oscillate more strongly when driven at certain frequencies.

ANSWER: resonance [accept Feshbach resonance; accept orbital resonance] <ZP>

6. The Battle of Ambuila was fought for control of this system, whose stakeholders once controlled the Bank of Nantes. The papal bull *Dum Diversas* lent papal support to this system, and Ouidah and Goree were Portuguese ports involved in this practice. John Quincy Adams defended Cinque and other participants of an 1839 uprising on a Spanish ship made for this purpose, the *Amistad*. The Dahomey and Oyo Empires captured each other's citizens to generate its commodities. This practice sent guns and rum to West Africa in exchange for certain people. For 10 points, name this part of the Triangular Trade in which millions of Africans were shipped to the Americas.

ANSWER: trans-Atlantic slave trade [accept slavery; prompt on triangular trade] <RN/AM>

7. One work by this author features a man responding to inquiries of his name, his homeland, and his father's name by saying only "triple scoundrel." In that play by this writer, the gods have moved away, leaving only War, so Trygaeus forms a posse to rescue Peace. This man writes of Dionysus visiting the underworld where Lake Acheron's occupants intone *brek-kek-kek*, as well as about Pisthetairos ("piz-the-TEAR-ohs") and Euelpides' ("you-ELP-ih-deez's") attempt to build Cloud-cuckoo-land. For 10 points, name this Greek comic playwright who wrote *The Birds* and *The Frogs*.

ANSWER: Aristophanes <ZP>

8. The deification of this object will be consumed by Skoll at Ragnarök. The ancestor of the Inca royal family was said to be a deity of this object named Inti. It is the symbol of the son of Hyperion, who is also father to Phaethon ("FAY-uh-tawn"). One deity of this object birthed three gods from a sword, and hid in a cave after a fight with her brother; that goddess is Amaterasu. Under the reign of Amenhotep IV, Egypt began monotheistic worship of a disk representing this object known as Aten. For 10 points, name this object presided over by the Egyptian Ra and the Greek Apollo.

ANSWER: Sun <AM>

9. A model for one type of this phenomenon ensemble averages over all possible angles of orientation, and  $A$  over distance to the twelfth minus  $B$  over distance to the sixth gives its potential. A term for polarizability is introduced in an equation for the Debye type of this phenomenon. Moles squared over volume squared times a corrects for this in the Van der Waals equation. This type of interaction may also result in a partial charge on a hydrogen atom and a dipole moment, and noble gases attract can attract one another by the London dispersion type. For 10 points, identify these interactions, including Van der Waals forces and hydrogen bonds, which occur between molecules.

ANSWER: intermolecular forces [accept IMF, accept Debye force before mention; prompt on partial] <BM>

10. One of this man's works depicts his face against a black background with bones along the bottom edge, his *Self Portrait with Skeleton Arm*. Other works of his include one where two large women sit in front of a shadowy figure and another which depicts various people in dark dress mourning after his sister's death in a sickroom. Those works were both included in his *Frieze of Life* series. Another work features two black figures to the far left, and the central figure stand on a bridge under an orange and red sky and clutches its face, with eyes and mouth wide open. For 10 points, name this Norwegian painter of *The Scream*.

ANSWER: Edvard Munch ("Moonk") <AT>

11. This author used an oak tree as a metaphor for the constancy of a 300-year-old character who spontaneously changes sex. Vita Sackville-West was the basis for that fictional biography of Orlando. Judith Shakespeare commits suicide in a work by this author that describes the androgynous mind, *A Room of One's Own*. In a novel by this author, the trauma psychologist William Bradshaw links a character who once kissed Sally Seton with Septimus Smith, whose suicide is mentioned at a party. Another of her novels notes in parentheses the deaths of Prue and Mrs. Ramsey away from the title structure. For 10 points, name this modernist author of *Mrs Dalloway* and *To the Lighthouse*.

ANSWER: Virginia Woolf <MZ>

12. Hydroxymethyl uracil replaces thymine in the genome of the SPO1 type of these, which also has a baseplate that is rearranged during tail contraction into a hexameric pinwheel. Production of the most common protein in the MS2 variety is inhibited by dimers of its coat protein. Lederberg and Zinder demonstrated the transfer of genetic material via these by labeling parts of them with sulfur-35 and phosphorus-32 to help confirm that DNA was the genetic material of the Hershey-Chase experiment. The T4 variety only reproduces via the lytic cycle, while the lambda type may also use the lysogenic cycle. For 10 points, name these viruses that infect bacteria.

ANSWER: bacteriphages [prompt on viruses] <SH>

13. It's not California, but this state contains Triple Divide Peak, which is part of the Great Northern Divide and causes the Waterton River to turn north. This state's Fort Peck Lake was formed by damming the Musselshell and Missouri Rivers, and is located south of Glasgow. It contains Lake McDonald, next to which runs Going-to-the-Sun Road, also named Route 1 of its namesake national park. The Bitterroot Range forms part of its western border, and its city of Whitefish is located north of Flathead Lake and just west of Glacier National Park. Containing the cities of Butte, Billings, and Bozeman, for 10 points, name this western US state with its capital at Helena.

ANSWER: Montana <ZP>

14. This man called for the sentence of Abdel al-Megrahi, the Lockerbie bomber, to be served in Libya, and for his conviction to be appealed. A deputy president of his party under Chief Albert Luthuli, he admired Zachariah Matthews. He rose to prominence as the leader of Umkhonto we Sizwe, and he gave the "I am prepared to die" speech during the Rivonia Trial. As president, he opened the Truth and Reconciliation Commission after being released from prison by a man he later shared a Nobel Peace Prize with, F. W. de Klerk. For 10 points, name this Xhosa ANC leader, the first African president of post-apartheid South Africa, who served 27 years on Robben Island.

ANSWER: Nelson Mandela <JL>

15. One character in this novel sells two pieces of nickel candy to a father and his sons for a penny. Another character wants to take a correspondence class to fix radios, but is intrigued by high wages as a tractor driver. In this novel, a starving man is breastfed by a woman who earlier gave birth to a stillborn child, Rose of Sharon. This novel sees the preacher Jim Casy killed in a strike for higher wages, as Tom is forced to escape the plantation. This novel follows one family's migration from Oklahoma to California. For 10 points, name this novel about the Joad family during the Dust Bowl, written by John Steinbeck.

ANSWER: *The Grapes of Wrath* <SoH>

16. An "effective" form of this quantity used to calculate conductivity in the Drude model is equal to three times the harmonic mean of three similarly-named values specific to each dimension. Its invariant form is proportional to the square root of the difference of the squares of energy and momentum times the speed of light. Some of this quantity is lost when atoms bond, this value's defect. Black holes are completely categorized by charge, angular momentum, and this quantity. Given by force divided by acceleration, for 10 points, name this measure of an object's inertia, measured in kilograms.

ANSWER: mass [accept effective mass before "this value"] <SH>

17. This movement's treatment of the intersubjective self discussed lovers experiencing each other as ambiguous subjects and others, and the look that brings self-awareness of being-for-others. One of its early thinkers urged a leap to faith to overcome despair, a state of sin. Rejecting the Cartesian ego, a proponent of this movement described the authentic being-for-itself as a being who rejects bad faith and creates its own meaning in an absurd world through its own existence. That idea is expressed in this movement's maxim "existence precedes essence". For 10 points, name this philosophy espoused by Soren Kierkegaard, Simone de Beauvoir and Jean-Paul Sartre.

ANSWER: existentialism <AM/MZ>

18. Paul Douglas defended this man's slum clearance program and he fired J. Howard McGrath, his Attorney General, following an IRS corruption scandal. He decried the "Do Nothing Congress," which passed a bill he called a "slave labor bill": the Taft-Hartley Act. His attempt to circumvent that law by seizing some factories after a steelworkers' strike was ruled unconstitutional in *Youngstown v. Sawyer*, and the Housing Act was the only part of his "Fair Deal" that passed. For 10 points, name this Missouri President with a namesake doctrine to contain Communism who succeeded Franklin D. Roosevelt.

ANSWER: Harry S Truman <JL/RN>

19. The double dividends hypothesis pertains to the effects of this concept, of which the Pigouvian type is used to match the individual and societal marginal cost curves. This concept is influenced by marginal benefits received in Lindahl's model. Frank P. Ramsey proposed that, like monopolistic pricing, this should be inversely proportional to the price elasticity of demand in order to reduce deadweight losses. The Laffer curve plots revenue against its rate. Supply-side economics, promoted by Ronald Reagan, includes their reduction. For 10 points, name these levies imposed by a government.

ANSWER: taxes <ZP>

20. John Cage's *Freeman Etudes* for this instrument were originally considered unplayable, and in the Chaconne movement of Bach's Partita in D minor this instrument plays a large amount of double stops. A brass fanfare begins the third movement of Mendelssohn's E minor Concerto for this instrument, and it represents the title character in *Scheherazade*. Rachmaninoff wrote a rhapsody on a theme inspired by Niccolò Paganini's *24 Caprices* for this instrument. Played by Joshua Bell and Itzhak Perlman, for 10 points name this string instrument pitched higher than the viola.

ANSWER: violin [prompt on fiddle] <AT>

TB. The narrator of this novel recalls his mother giving a piece of pie to a hobo by choice, Big Slim Hazard, and constantly eats apple pie, ice cream, and cough drops. The meaning of tomorrow is told to this novel's narrator by Ricky. In this novel, the "Holy Goof" is abandoned on the way to a Duke Ellington concert by Remi Boncoeur and the narrator, who becomes infatuated with Terry. The main characters of this novel meet Carlo Marx in Denver, and Old Bull Lee in New Orleans. The narrator, delirious from dysentery, is abandoned in Mexico City by Dean Moriarty. For 10 points, name this Beat novel narrated by Sal Paradise, a work by Jack Kerouac.

ANSWER: On The Road <AM>

## **Round 01 – Bonuses**

1. The world of computer science is filled with wonderful terms; name some relevant to Java. For ten points each:  
[10] These structures contain multiple elements of the same type and cannot be resized. They are similar to matrices in mathematics.

ANSWER: **arrays** [do not accept “ArrayLists”]

[10] One element that often goes into arrays is this primitive type, which in Java can hold a maximum value of 2 to the 31st. It has a type of division that removes the decimal value.

ANSWER: **int** [do not accept “Integer”]

[10] Integer is one of these classes that corresponds to the primitive type int. Autoboxing converts primitive types to these object blueprints that allow primitive types to have object methods performed on them.

ANSWER: primitive **wrapper** classes <AM>

2. The protagonist of this novel slips when he tells his lover, “You’re a good woman”. For 10 points each:

[10] Name this Japanese novel set in a hot spring town where Shimamura carries on an affair with the geisha Komako and fantasizes about Yoko.

ANSWER: **Snow Country** [or **Yukiguni**]

[10] *Snow Country* was written by this Nobel Prize-winning Japanese author, who also wrote *The Old Capital* and *The Master of Go*.

ANSWER: Yasunari **Kawabata**

[10] This novel by Kawabata deals with Kikuji’s affair with Mrs. Ota and Mrs. Ota’s daughter Fumiko. Those affairs are sparked in the aftermath of a tea ceremony marking the passing of Kikuji’s parents.

ANSWER: **Thousand Cranes** [or **Senbazuru**] <ZP>

3. Its second formulation states that one must treat people as autonomous ends in themselves. For 10 points each:

[10] Name this ethical concept whose first formulation states that one’s moral duty is to do what one believes everyone can and ought to do. It is absolute, unlike its hypothetical cousin.

ANSWER: **categorical imperative**

[10] The categorical imperative is the basis of this philosopher’s deontological ethics. This transcendental idealist argued that synthetic *a priori* propositions exist, and we only experience the real world as filtered through categories.

ANSWER: Immanuel **Kant**

[10] Kant proposed synthetic *a priori* judgments in the first volume of this series, “of Pure Reason”. The second volume argues for the practical necessity of believing in God, while the third volume discusses aesthetic judgment.

ANSWER: **Critiques** <PS/MS>

4. For 10 points each, answer these questions about learning proper fighting strategy.

[10] Name this book by Sun Tzu on tactics, strategy, and military organization. It contains sections on martial arts and terrain, and characterizes war as an information game involving deception and uncertainty.

ANSWER: *The* **Art of War**

[10] The uncertainty of war is also described as part of a “fascinating trinity” in *On War*, a text on early 19th-century European warfare by this Prussian officer who served during the Napoleonic Wars.

ANSWER: Carl von **Clausewitz**

[10] In *On War*, Clausewitz parallels war and this concept, which he calls the “womb” of war. He also refers to it as a continuation of war.

ANSWER: **politics** <ZP>

5. The Geiger counter measures this activity by measuring the current conducted by ionized particles emitted from this process. For 10 points each:

[10] Name this phenomenon in which the nucleus disintegrates by releasing particles when it is unstable.

ANSWER: radioactivity [or radioactive decay; or nuclear decay]

[10] Uranium 238 decays via this process, decreasing in both mass and atomic number.

ANSWER: alpha decay

[10] Metals from this group are all radioactive due to their high neutron to proton ratio. They are found in the bottom period of the f-block.

ANSWER: actinides <AT>

6. The protagonist refuses the grapes offered by his former lover Mercedes. For 10 points each:

[10] Name this novel in which Edmond Dantes remakes himself as the title character to take revenge on Fernand, Danglars, and Villefort for his wrongful imprisonment.

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

[10] *The Count of Monte Cristo* is a novel by this French author of *The Three Musketeers*, whose son of the same name wrote *The Lady of the Camellias*.

ANSWER: Alexandre Dumas, pere

[10] A subplot of *The Count of Monte Cristo* is Heloise's attempt to secure the Villefort fortune for Edouard through this action. First proposed by Dantes, this action is thwarted after Dantes realizes Maximilien loves Valentine.

ANSWER: mass poisoning [generously prompt on mass murder] <MZ>

7. In Europe, this "global war" was ended by the Treaty of Hubertusburg. For 10 points each:

[10] Name this "world war" which saw Frederick the Great hold off combined Franco-Austro-Swedish forces, allowing Britain to concentrate its forces against the French in the New World in the French and Indian War.

ANSWER: Seven Years' War

[10] This battle was the climax of the French and Indian War. The Marquis de Montcalm's column was routed by General Wolfe here, letting the British take the Citadelle. Much of the battle occurred near a namesake farmer's field.

ANSWER: Battle of the Plains of Abraham [prompt on Battle of Quebec; accept 1759 Battle of Quebec]

[10] This treaty ended the theatre of the Seven Years' War between Prussia and Russia in the "Miracle of the House of Brandenburg", saving Prussia.

ANSWER: Saint Petersburg [accept Sankt-Peterburg] <JL/RN>

8. For 10 points each, name some things associated with pillars of Islam.

[10] This pillar of Islam, which takes place during the last month of the Islamic calendar, is a ritual pilgrimage to Mecca.

ANSWER: hajj

[10] This other pillar of Islam involves giving alms to the poor and needy. Its non-Muslim equivalent is the *Jizyah* tax.

ANSWER: zakat

[10] By not declaring that Allah is the only god, one would be failing to uphold the pillar *Shahadah* and committing this sin. This sin also encompasses idolatry and polytheism, in general.

ANSWER: shirk <PS>

9. Parallels of these patterns in Western art include the backgrounds of Van Gogh paintings and swirling motifs in Byzantine art. For 10 points each:

[10] Name these Islamic interlacing designs composed of geometric and vegetal patterns.

ANSWER: arabesque

[10] Since figurative art treaded the line of idolatry, mosque decor relied on arabesques and this art form, which can be done in Kufic using a qalam. Stone rubbing is often used to transfer Chinese versions of this art form.

ANSWER: calligraphy [or Khatt ul-Yad; or shufa]

[10] This writer espoused his theory of interior design, including the heavy use of arabesque, in "The Philosophy of Furniture". His *Tales of the Grotesque and Arabesque* includes "The Fall of the House of Usher".

ANSWER: Edgar Allen Poe <MZ>

10. It results in the sky appearing blue and the sun appearing yellow. For 10 points each:

[10] Name this scattering of light by small particles, named after a British physicist.

ANSWER: Rayleigh scattering

[10] The intensity of Rayleigh scattering is inversely proportional to this quantity raised to the fourth power.

ANSWER: wavelength

[10] Unlike Compton scattering, Rayleigh scattering is considered to be this type of scattering, because neither the wavelength nor the frequency of the light is substantially altered.

ANSWER: elastic scattering <SH>

11. He penned *De Profundis* to his lover Lord Alfred Douglas while imprisoned on gross indecency charges. For 10 points each:

[10] Name this Catholic decadent writer. He created a character who makes a Faustian wish that his portrait will assume his sins.

ANSWER: Oscar Wilde

[10] The speaker of this final Wilde poem describes a fellow condemned man who killed his wife. It references Tannhauser in the image of the pope's blooming staff and asserts "Each man kills the thing he loves".

ANSWER: "The Ballad of Reading Gaol ("jail")"

[10] "Each man kills the thing he loves," Wilde wrote, "The coward does it with [one of these], the brave man with a sword!" The ballad mentions one given by Caiaphas, and Judas gave another to Jesus.

ANSWER: a kiss <MZ>

12. A spin-off of this AMC TV series, *Better Call Saul*, is set to be produced. For 10 points each:

[10] Name this TV show that documents the escapades of terminal cancer patient Walter White as he struggles to provide for his family through the dealing of methamphetamine.

ANSWER: Breaking Bad

[10] Using his knowledge of chemistry, Walter is able to produce a 99.1% pure form of methamphetamine that is this color because of his usage of methylamine instead of pseudoephedrine.

ANSWER: blue [accept blue sky]

[10] In Season 5 of *Breaking Bad*, Walter meets Lydia, a top executive at Madrigal Electromotive, who offers to help him distribute his blue sky to this central European country.

ANSWER: Czech Republic <JL>

13. For 10 points each, name the following about Southeast Asia during the colonial period.

[10] This French colony included the present-day countries of Vietnam, Laos, and Cambodia. These countries became independent in 1954, following the Geneva accords, despite French military intervention.

ANSWER: French Indochina

[10] Led by the Chakri dynasty, this country was the only Southeast Asian country to escape colonization. It lost Laos and the Malay peninsula to the French and British, respectively, and retains its monarchy today.

ANSWER: Siam [or Thailand]

[10] This country was initially ruled by the Konbaung dynasty. In the colonial period, this colony also included the Shan states of Siam. Aung Sang Suu Kyi was elected president here before a military coup.

ANSWER: Burma [or Myanmar] <DM>

14. This entity is imagined to "fester like a heavy sore", "sag like a heavy load", or "explode". For 10 points each:

[10] Name this subject of the poem "Harlem". The speaker of "Harlem" imagines this concept's future and asks questions like "does it dry up / like a raisin in the sun?"

ANSWER: a dream deferred [prompt on dream]

[10] This Harlem Renaissance poet of "The Weary Blues" asked, "What happens to a dream deferred?" He wrote, "You are white- / yet a part of me, as I am of you. / That's American" in "Theme for English B".

ANSWER: Langston Hughes

[10] This monthly periodical published by the NAACP widely promoted Hughes and other Harlem Renaissance poets. Founded by W.E.B. DuBois, it also featured commentary on racial and social injustice.

ANSWER: *The* Crisis <BM/MZ>

15. One of his piano suites titled *Miroirs* contains movements such as “Sad Birds” and “The Valley of Bells.” For 10 points each:

[10] Name this French Impressionist composer of *Concerto for the Left Hand* and the ballet *Daphnis et Chloe*, who notably included a snare drum ostinato in one of his works.

ANSWER: Maurice **Ravel**

[10] This aforementioned work by Ravel is in a slow 3/4 time with different instruments repeating the main melody, starting with the solo flute followed by the clarinet and bassoon. It features a long, drawn-out crescendo.

ANSWER: **Boléro**

[10] This other work by Ravel, originally scored for piano, starts with a mellow theme played on the French horn. It is a slow dance meant to evoke the title figure dancing in a court.

ANSWER: **Pavane for a Dead Princess** [accept **Pavane pour une infante défunte**] <BM>

16. Some blamed this program for the Recession of 1937. For 10 points each:

[10] Name this series of federal government policies that included the National Industrial Recovery Act, passed by FDR in response to the Great Depression.

ANSWER: **New Deal**

[10] One “alphabet agency” created by the New Deal was this agency run by Harry Hopkins that employed millions of Americans to carry out public projects.

ANSWER: **Works Project Administration** [or **Works Progress Administration** or **WPA**]

[10] The Supreme Court ruled that the New Deal-era National Industrial Recovery Act was unconstitutional in this court case filed by a namesake poultry company. In response to this ruling, FDR attempted to pack the courts.

ANSWER: **Schechter Poultry Corp. v. United States** [accept in reverse order] <JL>

17. This quality was possessed by Pollux, but not Castor. For 10 points each:

[10] Name this quality conferred by nectar and ambrosia. Possessed by the gods of Olympus, it makes the gods unchanging in their imperfections.

ANSWER: **immortality**

[10] This centaur surrendered his immortality to free Prometheus. He mentored a number of heroes including Heracles and Achilles.

ANSWER: **Chiron**

[10] Thanks to the oversight of his lover Eos, this poor shepherd was endowed with immortality but not eternal youth. Unable to die, he shriveled into a grasshopper.

ANSWER: **Tithonus** <MZ>

18. For 10 points each, name the following about the study of suicide.

[10] The first sociological study of suicide was conducted by this French author of *Rules of the Sociological Method*. He studied differences in suicide rates between Catholic and Protestant communities.

ANSWER: Emile **Durkheim**

[10] This anxiety disorder is often comorbid with suicidality. Its symptoms include flashbacks, irritability, and hypervigilance. It occurs frequently among military personnel.

ANSWER: **post-traumatic stress** disorder [or **PTSD**]

[10] In this test, those at high risk for suicide exhibit delayed reaction time in naming the color of suicide-related words. Its classical formulation presents a conflict between word meaning and font color.

ANSWER: **Stroop** test [or emotional **Stroop** test] <MZ>

19. In a photograph by Joe Rosenthal, it is being hoisted by soldiers on Iwo Jima. For 10 points each:

[10] Name this object. James Monroe clutches an early version that rises vertically behind George Washington in an Emanuel Leutze painting.

ANSWER: **American flag** [or **flag** of the **United States**; or equivalents; prompt on **flag**]

[10] This contemporary artist of *Target with Four Faces* used newspaper and collage to create the American flag in *Three Flags* and *White Flag*.

ANSWER: Jasper **Johns**

[10] Jasper Johns built up the texture of his flag paintings using collage and this technique. It uses pigment suspended in melted beeswax to achieve a mixture of sculpture and painting.

ANSWER: **encaustic** painting <MZ>



20. RuBisCo is used in its dark reactions. For 10 points each:

[10] This process, requiring chlorophyll and other namesake pigments, is used by plants to convert light energy into chemical energy.

ANSWER: photosynthesis

[10] This process is employed to minimize water loss by plants in arid conditions, including cacti and orchids. CO<sub>2</sub> is concentrated around RuBisCo and stored as the four-carbon malate when collected at night.

ANSWER: Crassulacean acid metabolism photosynthesis

[10] These epidermal pores found in leaves remain closed during the day in plants using full CAM. Their opening is regulated by the surrounding guard cells.

ANSWER: stomata <SH>

TB. Following the Age of Imperialism, nations shifted their attention from grabbing land to securing their possessions. For 10 points each:

[10] The Anglo-German naval race was sparked by the construction of this British vessel in 1906. It changed naval warfare with its heavy, uniform main battery and fast steam turbines.

ANSWER: HMS Dreadnought

[10] In 1890, this American flag officer wrote *The Influence of Sea Power on History*, revolutionizing naval strategy. His theory that stronger navies better protected naval trade influenced Japan and Germany in their naval buildup.

ANSWER: Alfred Thayer Mahan

[10] This meeting was a response to the expansion of many navies to maintain colonial possessions. The agreement signed at the end of this meeting limited the gross displacement of navies, and set maximum sizes for battleships.

ANSWER: Washington Naval Conference [or Washington Arms Conference] <JL/RN>