

2016 NSC - Official Scoresheet

Round	24	Room	
Bracket			
Reader			

Team									Team								
Player Names																	
Q#					Bonus	Steals	Ques. Total	Run. Score					Bonus	Steals	Ques. Total	Run. score	
1																	
2																	
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OT																	
Player 20s																	
Player 10s																	
Point totals																	
Final score																	
	Substitutions before Tossup 11								Substitutions before Tossup 11								
	Out:				In:				Out:				In:				
	Out:				In:				Out:				In:				

Circle winning team above. Clearly mark if game goes to OT/ SD. **Fill out "Point totals" row completely.**
 If there are substitutions, please note tossups by each player in "20s" and "10s" rows. Below is for Tab Room use only:

RH	RS	BH	BS	Left	Right	BH	BS	RH	RS
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PACE NSC 2016 - Round 24 - Tossups

1. Two of these figures cut out a boy's heart, washed the black speck out of it using snow from a golden jar and reinserted it back into him. Another two of these figures collectively known as the *Kiraman Katibin* and named Raqib and Atid sit on a person's shoulders and record good and bad deeds. Before the Isra, one of these figures brought the steed Barak to a prophet. That one of these figures says (*) "Recite!" to a youth on Mount Hira and also made a auspicious announcement to Maryam. These figures, who are made of light, include one that is often identified with the Grim Reaper, Azrael, as well as Israfil, who dwells in Jahannam alongside Allah. For 10 points, name these Islamic figures, which include Jibril, who is equivalent to the Christian Gabriel.

ANSWER: angels [or malak or malaikah; accept archangels] <Jose>

2. A type of this practice developed by Irvin Yalom posited that there are four "existential" ultimate concerns that an individual should address. The empty chair technique is often used in the Gestalt type of this practice developed by Fritz and Laura Perls. False beliefs and errors in logic are corrected in Aaron Beck's "cognitive" approach to this practice. In the 1930s, a (*) "humanistic" approach to this task stressed the importance of unconditional positive regard and genuineness. People speak for themselves without intervention during "free association," a part of one approach to this kind of method developed by Sigmund Freud. Carl Rogers developed the client-centered approach to this task. For 10 points, name these treatments of psychological disorders.

ANSWER: psychotherapy [or treatments until mentioned] <Jose>

3. The last native-born king of this country was died in 1097 while trying to stop a Hungarian invasion at Gvozd Mountain, which is now called Petrova Gora in his honor. In 926, this country defeated Bulgaria at the Battle of the Bosnian Highlands, strengthening the Trpimirović dynasty under Tomislav. This country gained control of Baranja, Western Syrmia, and Eastern Slavonia during the 1990s under the (*) Erdut Agreement, which was negotiated when this country was led by its first president, Franjo Tuđman. During World War II, this country became a puppet state under the Ustaše group after the Axis Powers invaded Yugoslavia. For 10 points, name this country that controls Dalmatia and is ruled from Zagreb.

ANSWER: Croatia <Reinstein>

4. Twisting of the sun's magnetic field lines due to the sun's rotation is called an "effect" named for this letter. The square of the electron charge divided by h-bar times c gives a quantity denoted by this letter which characterizes the strength of electromagnetic interactions in particle physics. The coefficient of thermal expansion and the fine (*) structure constant are denoted by this letter, which names an effect used in ionization-type smoke detectors. In one experiment, a beam of particles denoted by this letter was shot at a gold foil, and the resulting deflection provided evidence for the atomic nucleus. A helium nucleus is released from an atom in a form of radioactive decay denoted by this letter. For 10 points, name this first letter of the Greek alphabet.

ANSWER: alpha <Busse>

5. Scholar Helene Foley has described the way that these passages get reversed to show the interdependence of men and women, and a reversed one of them describes the joy of a few survivors of a shipwreck who finally reach land. In the first use of this device, the swarming of bees immediately precedes the appearance of personified Rumor. In another example of this device, a lion and a wild boar fight over water before the son of Menoetius is killed by the oldest son of (*) Hecuba and Priam. The deaths of Sarpedon and Patroclus are both accompanied by passages that employ this device, which in its "epic" or "Homeric" form is often an extended comparison between the ordinary and extraordinary. For 10 points, name this kind of metaphor that uses "like" or "as."

ANSWER: Homeric similes [or epic similes] <Mehigan>

6. The Turkish artist Burhan Dogancy was known for photographing thousands of works in this artistic medium for his posters. An artist who is often called the "father of" this medium was known as Blek le Rat, since he believed that rats were the only free animals. Rhys Ifans (REESE EE-vons) narrates a "mockumentary" directed by an artist in this medium that follows the immigrant Thierry Guetta; that documentary, (*) *Exit Through the Gift Shop*, was made by an artist of this medium known for his feuds with King Robbo. In the late 1970s, an artist who often signed his artworks "SAMO" (SAME-oh) created many works in this medium in Manhattan's Lower East Side. The mononymic Banksy and Jean-Michel Basquiat (boss-KYAAH) were practitioners of, for 10 points, what form of street art often considered to be vandalism?

ANSWER: graffiti [accept street art before it is mentioned] <Jose>

7. This was the first presidential election in which Gus Hall and Angela Davis ran on the Communist Party ticket. John B. Anderson was a third party candidate in this election. After being criticized for voting against Medicare, the eventual winner of this election stated "There you go again" during a debate. The incumbent in this election secured the nomination after details about the death of Mary Jo Kopechne on (*) Chappaquiddick Island ruined the possibility of Ted Kennedy receiving it. A primary challenger to this election's winner called his proposed economic policies "voodoo economics." This election's issues included the ongoing Iran Hostage Crisis. For 10 points, name this election in which incumbent Jimmy Carter was defeated by Ronald Reagan.

ANSWER: presidential election of 1980 [prompt on the year 80; prompt on election won by Ronald Reagan or election between Jimmy Carter and Ronald Reagan] <Jose>

8. During this century, composers like Harry Partch developed microtonal music, which divides the scale into very small intervals. A group of composers during this century pioneered music characterized by repetitions of lengthy ostinatos that slowly change based on systemic processes, such as two rhythms that gradually shift in and out of phase. In this century, a composer invented a technique based on inverting and transposing a phrase containing (*) all the pitches of the chromatic scale. Composers in this century created the movements of Neoclassicism and Minimalism. Early in this century, members of the Second Viennese School pioneered the technique of the twelve-tone row. For 10 points, name this century whose important composers included Igor Stravinsky and John Cage.

ANSWER: **20th** century [or the **1900s**] <Magin>

9. A racemic mixture of this chiral compound is aerosolized to treat croup. Oxidizing this compound with chromium causes it to polymerize, which is why tumors that overproduce it stain dark brown. This compound is biosynthesized by hydroxylating dopamine and then methylating a primary amine. Either this compound or glucagon classically activates the PKA-cAMP signaling pathway to break down (*) glycogen.

Propranolol competitively inhibits beta receptors that bind this compound. This compound is injected during anaphylaxis to stimulate vasoconstriction and to relax bronchial muscles. It is produced in the medulla by a pair of glands lying above the kidneys. For 10 points, name this hormone that activates the fight-or-flight response.

ANSWER: **epinephrine** [or **adrenaline**; do not accept or prompt on "norepinephrine"]
<Silverman>

10. A non-fiction book about the area surrounding this river described how the soldier Leon Rom kept decapitated heads in his flower bed. The chant "Boomlay, boomlay, boomlay, BOOM" is repeated in a poem describing this river "creeping through the black, cutting through the jungle with a golden track." A 1998 book by journalist Adam Hochschild takes its name from a line in a (*) Vachel Lindsay (VAY-chul LIN-zee**) poem about this river. The narrator of a novel discovers a report about this river's natives that ends with the handwritten message "Exterminate all the brutes!" An ivory trader dies on this river after exclaiming "The horror! The horror!" For 10 points, name this African river, which Marlow travels up in search of Kurtz in Joseph Conrad's *Heart of Darkness*.**

ANSWER: **Congo** River <Wang>

11. William Huggins observed one of these entities while studying the Cat's Eye Nebula, which led him to propose the element "nebulium." The electronic transition of molecular hydrogen in quasars gives rise to a collection of these objects termed the Lyman Alpha Forest. Equal and opposite shifts of these phenomena due to Doppler (*) broadening is used to detect a certain class of binary stars. For the hydrogen atom, two of the "series" consisting of these things are named for Balmer and Paschen. For a blackbody, none of the "emission" type of these are present, but all "absorption" ones are present. For 10 points, name these "lines" that indicate what wavelengths a body emits or absorbs.

ANSWER: **spectral** line [accept **emission** line or **absorption** line before read] <Jose>

12. A story by this author follows two sisters who were romanced in their youths by a Swedish lieutenant and a famous French opera singer. The second section of a book by this author describes an incident in which the kitchen boy Kabero shoots two of his friends, killing one and destroying the other's jaw. In a story by this author, a French cook uses her lottery winnings to make a banquet for Martina and Philippa. Dances called (*) *ngomas* appear in a book by this author which describes the hilltop grave of a man who died in a plane crash, Denys Finch-Hatton. This author of "Babette's Feast" wrote a memoir that describes leaving Rungsted with her husband Bror to operate a coffee plantation in Kenya. For 10 points, name this Danish author of *Out of Africa*.

ANSWER: Isak **Dinesen** [or Karen **Blixen**; or Baroness Karen von **Blixen**-Finecke] <Brownstein>

13. Infrared photography revealed that this painting's subject originally wore a transparent overdress, a traditional symbol of nursing. John R. Eyre wrote a monograph arguing for the authenticity of the so-called Isleworth version of this painting. Only a small portion remains visible of the two columns which once stood on the ledge behind this painting's subject. In this painting, a four-arched (*) bridge over a winding river can be seen in the craggy background above the subject's right shoulder. The shadows around the eyes of this subject's eyes are characteristic of the *sfumato* technique. A reproduction of this painting with a goatee drawn on makes up Marcel Duchamp's *L.H.O.O.Q.* For 10 points, name this Leonardo da Vinci painting of an enigmatically smiling woman.

ANSWER: *The **Mona Lisa*** [or *La **Gioconda***; or *La **Joconde***] <Bentley>

14. This state's Saint Mary Lake is where Stanley Kubrick filmed the opening scene of *The Shining*. The Laurentian and Great Divides meet at this non-Californian state's Triple Divide Peak, from which water can flow into either the Pacific, Atlantic, or Arctic Oceans. The popular Going-to-the-Sun Road runs through a national park in this state, whose western border is formed by the (*) Bitterroot Mountains. In the southern part of this state, the confluence of the Jefferson, Gallatin, and Madison Rivers forms the Missouri River. This state contains Glacier National Park and a small northern strip of Yellowstone National Park, which it shares with Idaho and Wyoming. For 10 points, name this "Big Sky" state whose capital is Helena.

ANSWER: **Montana** <Wang>

15. According to Apollodorus, after this woman's death, she married Achilles in the Isles of the Blessed. Late in life, she returned to her homeland to depose her uncle King Perses after the death of her children Mermeros and Pheres. This sister of Chalciope once threw the pieces of an aged ram's chopped-up carcass into a boiling cauldron to trick King Pelias into his own death. She also advised a hero to throw a rock into a crowd of warriors who grew from (*) dragons' teeth. This woman tried to poison Theseus while she was queen of Athens and chopped up her brother Absyrtus to escape from her father Aeetes. After her husband spurned her, she gave a poisoned robe to that man's new wife Glauce. For 10 points, name this sorceress from Colchis who fell in love with Jason.

ANSWER: **Medea** <Jose>

16. Genetic recombination in this organism is prevented by deliberately causing chromosomal inversions to block synapsis. A gene family discovered in this organism got its name from the German for "great" after its role in sensing infection was first realized. The P element, a transposon, is found in its genome. This organism replicates its DNA without mitosis to form enormous polytene chromosomes. Its mutants have ironic names like *tinman*, *groucho*, and (*) *eyeless*. Toll-like receptors, the Wnt signaling pathway, and Hox genes were discovered in this organism. Thomas Hunt Morgan had a room devoted to these organisms at Columbia, where he studied genetic linkage in traits like eye color and wing location. For 10 points, name this ubiquitous model insect in biology.

ANSWER: *Drosophila melanogaster* [or *D. melanogaster*; or fruit fly; prompt on fly]
<Silverman>

17. This philosopher's *Idea for a Universal History with a Cosmopolitan Purpose* states that "no straight thing was ever made" from the "crooked timber of humanity." He proposed a system of aggregating knowledge described as "architectonic" so that knowledge can "become a science." This thinker argued that the human mind uses "categories of understanding" to structure knowledge in a book that distinguishes manifestations of objects of inquiry, or (*) "phenomena" from the objects themselves, or "noumena." This man concluded that synthetic *a priori* truths are possible by using the example that "7 plus 5 equals 12" in a work first published in 1781. For 10 points, name this German philosopher who wrote three "Critiques," including one of "Pure Reason."

ANSWER: Immanuel Kant <Jose>

18. In 930 CE, this city was sacked by Abu Tahir al-Djannabi, the leader of the Qarmatians. The Nakhla raid was the most successful of several "caravan raids" against a dynasty which held power in this city. 63 people were beheaded following a seizure of a building in this city by Juhayman al-Otaybi, who believed his brother-in-law to be the Mahdi. A mosque in this city was seized in 1979 by Ikhwan militants advocating for the overthrow of the ruling (*) dynasty. Rulers of this city and a northern rival signed the Treaty of Hudaybiyyah after a former resident of this city helped that northern rival defeat this city in the Battle of Badr and the Battle of the Trench. In this city, the Quraysh tribe controlled the Kaaba. For 10 points, name this holiest city of Islam.

ANSWER: Mecca [or Makkah] <Bentley>

19. In Ostia, a well preserved one of these structures contains many mosaics of Neptune. One of these places named for Zeuxippus was destroyed during the Nika Revolts in Constantinople. A conical roof covered the *laconicum* of these places, whose entrances were rooms called *apodyteria*. These buildings were heated by a system called the hypocaust. Slaves called *unctores* would often use a *strigil* on their masters in the *destrictarium* of these places. In 212 AD, (*) Caracalla commissioned a large one of these buildings that are only smaller than ones named for Diocletian. The *frigidarium* of these structures was filled with cold water, while hot water could be found in the *caldarium*. For 10 points, name these public locations where Romans would clean themselves.

ANSWER: baths [or thermae] <Jose>

20. A quotation from this poem provides the title for William Styron's "memoir of madness" about his recovery from depression, *Darkness Visible*. A character in this poem disguises himself as a cherub in order to ask directions from Uriel. Instead of applause, one of this poem's characters hears a "dismal universal hiss," and finds his mouth full of ashes after biting into some (*) fruit. This poem's first book describes a "horrid crew" that "[rolled] in the fiery gulf" for nine days, and claims that the poem's purpose is "to justify the ways of God to man." In this poem, Raphael recounts a three day-long battle that sends rebellious angels and Lucifer to hell, and Michael expels Adam and Eve from Eden. For 10 points, name this epic poem by John Milton.

ANSWER: *Paradise Lost* <Yu>

21. A black man sits on a log in this artist's portrait of John Henry, which is titled *A Well-Remembered Servant*. This student of Samuel Morse began making imperial-sized portraits with ambrotype after earning First Prize at the Crystal Palace Exhibition. Another of this artist's portraits shows his beardless subject standing next to a column on the day that the subject gave the (*) Cooper Union Speech. This artist stands next to a tree to the right of the title figures in his *General Robert Potter and Staff*. Men such as Millard Fillmore were included in his *Gallery of Illustrious Americans*. He exhibited works made by Alexander Gardner and James Gibson, including one of a mass of dead bodies lying next to a fence at Antietam. For 10 points, name this Civil War photographer.

ANSWER: Mathew B. Brady <Bentley>



PACE NSC 2016 - Round 24 - Bonuses

1. This man ordered the arrest of the Comte de Montmorency-Bouteville in an attempt to stamp out dueling among the aristocracy. For 10 points each:

[10] Name this man who also founded the Academie Francaise. On the Day of the Dupes, he survived an ouster attempt orchestrated by Marie de Medici.

ANSWER: Cardinal **Richelieu** [or Armand Jean du Plessis, Cardinal-Duke of **Richelieu** and of Fronsac]

[10] Richelieu helped set Samuel Champlain up as Governor of New France, an office located in this city. Benjamin Wolfe died on the Plains of Abraham during a 1759 battle fought outside this Canadian city.

ANSWER: **Quebec**

[10] A later French cardinal to run the French government, Cardinal de Fleury, had to deal with the collapse of this company. Scottish financier John Law created its namesake "bubble" by encouraging speculation on this company.

ANSWER: **Mississippi** Company [or Company of the **West**] <Bentley>

2. A 2012 decision to make Sansha a prefecture level city exacerbated tensions over this body of water. For 10 points each:

[10] Name this body of water where Vietnam lost skirmishes over the Spratly and Paracel Islands during the 1970s and 1980s.

ANSWER: **South China Sea**

[10] Tensions increased at the beginning of 2016 when China used land reclamation to complete the construction of one of these locations on Fiery Cross Reef.

ANSWER: **airstrip** [or **airbase** or **airport** or **runway**]

[10] Islands in the South China Sea supposedly form some of the namesake nodes of this hypothesized network of maritime strong points that is often used as a stand-in for China's Indian Ocean strategy.

ANSWER: The **String of Pearls** <Reinstein>

3. The principle named for these objects states that the information in a volume of space can be encoded on the surface of the space. For 10 points each:

[10] Name these two dimensional objects that contain images which appear three dimensional.

ANSWER: **holographs** [or **holograms**]

[10] Holograms were originally created and viewed using light with this property, though rainbow holograms can be viewed in regular white light. Light with the temporal and spatial types of this property comes from a common source with a common wavelength.

ANSWER: **coherence** [or **coherent**]

[10] Holograms are created using a split beam of coherent light. This name is given to the beam of light that does not bounce off the object being imaged.

ANSWER: **reference** beam <Reinstein>

4. This book controversially argues that the legalization of abortion was the main reason why U.S. crime rates dropped in the 1990s. For 10 points each:

[10] Name this 2005 book by Stephen Dubner and Steven Levitt, which aims to apply economic analysis to unexpected scenarios in everyday life.

ANSWER: **Freakonomics**

[10] Steven Levitt is an economist from this university, whose economics department employed Gary Becker and Ronald Coase and was known for its neoclassical, free-market views.

ANSWER: University of **Chicago**

[10] In Chapter 3, Levitt analyzes the economics of one of these organizations in Chicago. That chapter relied on the work of the sociologist Sudhir Venkatesh, who wrote a 2008 book about being one of these organizations' "Leader For A Day."

ANSWER: **gangs** <Wang>

5. This poem includes "a wild horse taking a roll" on a list of things "we cannot understand." For 10 points each:

[10] Name this poem which, in 1967, was cut down to just the lines "I too dislike it. Reading it, however, with a perfect contempt for it, one discovers in it, after all, a place for the genuine."

ANSWER: "**Poetry**"

[10] "Poetry" is by this female American poet who used a lot of quotation marks. This poet, who isn't Elizabeth Bishop, also wrote a poem called "The Fish."

ANSWER: Marianne **Moore**

[10] Moore's poem "The Steeple-Jack" describes a man who puts up a "Danger" sign while gilding the star atop one of these buildings. The title character of Willa Cather's *Death Comes For the Archbishop* establishes one of them in New Mexico.

ANSWER: **churches** <Brownstein>

6. One of the miracles of Jesus, recounted in the opening of Matthew Chapter 8, is the curing of a man with this condition. For 10 points each:

[10] Name this disfiguring disease, now called Hansen's disease, which made those it afflicted ritually impure and shunned.

ANSWER: **leprosy** [accept **tzara'ath**]

[10] This author of *Canticle of the Sun* spent much time tending to lepers shortly after declaring that he would marry "Lady Poverty." Like Catherine of Siena, he is a patron saint of Italy.

ANSWER: Saint **Francis** of Assisi

[10] Pope John Paul II beatified this 19th century father, who traveled to Molokai and tended to people in a leper colony in Hawaii before being struck with the disease himself.

ANSWER: Father **Damien** [or Saint **Damien**; accept Jozef De **Veuster**] <Jose>

7. For 10 points each, name these sculptors of the 20th century:

[10] Though he made sketches of the American west for *Harper's Weekly*, this artist is probably best known for his oft-reproduced image of a cowboy riding a horse whose two feet are in the air, *Bronco Buster*.

ANSWER: Frederic **Remington** [or Frederic Sackrider **Remington**]

[10] Many of this artist's works, such as *Lobster Trap and Fishtail* and *Flamingo*, hang from the air and are called "mobiles."

ANSWER: Alexander **Calder**

[10] Anthony Caro was a student and apprentice to this other artist, whose *Reclining Figures* series was inspired by the pose of Chacmool sculptures of Mesoamerica.

ANSWER: Henry **Moore** [or Henry Spencer **Moore**] <Jose>

8. This function is constructed by integrating the probability mass or density function. For 10 points each:

[10] Name this probability function, which gives the likelihood that an event occurs with a value less than or equal to the input.

ANSWER: cumulative **distribution** function [accept **cdf**]

[10] The cumulative distribution function will have discontinuities in it if the underlying random variable is of this type. This opposite of "continuous" describes certain branches of mathematics, such as number theory.

ANSWER: **discrete** [accept word forms]

[10] A random variable is a function that assigns a probability to this set of all possible outcomes. This set is often denoted with a capital omega, and for flipping a coin twice, it consists of "heads, heads;" "tails, tails;" "heads, tails;" and "tails, heads."

ANSWER: **sample space** <Jose>

9. In his *Intimate Journals* this author wrote about feeling the "wind of the wing of madness," a term now often used to describe depression. For 10 points each:

[10] Name this author, who whose other depression-inspired works includes the line "Our brains teem with a race of Fiends, who frolic / Thick as a million worm guts." That line appears in one of his poems which calls a "reader" a "hypocrite" and "my twin."

ANSWER: Charles **Baudelaire**

[10] Baudelaire's *To the Reader* opens this volume of Symbolist poetry, whose sections includes "Spleen and Ideal" and "Revolt."

ANSWER: *Les Fleurs du Mal* [or *The Flow ers of Evil*]

[10] "Baudelaire calls the Poet a "prince of space" in a poem asserting that the wings of this bird "hobble his pace when exiled from his heights to the Earth below."

ANSWER: The **Albatross** <Jose>

10. A traditional folk song of people working on this body of water contains the repeated cry of "Yo, heave ho!" For 10 points each:

[10] Name this body of water. Peasants known as *burlaki* used harnesses and ropes to drag barges up and down this body of water.

ANSWER: **Volga** River

[10] Most of the *burlaki* were from this class of enslaved peasants, who were emancipated by Alexander II in 1861.

ANSWER: Russian **serfs** [or **krepostnoi**]

[10] The Volga region was also settled by people of this ethnicity during the reign of Catherine the Great. The colonization of Eastern lands by people of this ethnicity, known as the "Drive to the East," was adopted into the propaganda concept of "Living Space."

ANSWER: **Germans** [or **Deutsche**] <Bentley>

11. Venetian artists were among the first to paint on this material, which they obtained from old sails. For 10 points each:

[10] Identify this material, traditionally derived from linen. A low-cost type of this material is called cotton duck.

ANSWER: **canvas**

[10] Before the mid-19th century, artists often had to grind pigments themselves when employing this type of paint, which is often made from linseed and applied to canvas. Jan van Eyck pioneered the replacement of tempera with this kind of paint.

ANSWER: **oil** paint

[10] This Flemish contemporary of Jan van Eyck and student of Robert Campin was also an early adopter of oil paint, which he used in *Saint Luke Drawing the Virgin* and his crossbow-shaped *Deposition from the Cross*.

ANSWER: Rogier van der **Weyden** [or Roger de la **Pasture**] <Bentley>

12. Kenesaw Mountain Landis oversaw the trial of 113 members of this organization after their Chicago headquarters was raided during World War I. For 10 points each:

[10] Name this radical labor organization whose founders included "Big Bill" Haywood and Eugene V. Debs. Its members were known as "Wobblies."

ANSWER: **Industrial Workers of the World** [or **IWW**; do not accept "International Workers of the World"]

[10] This Irish-born co-founder of the IWW organized a march of silk workers dubbed the "Children's Crusade," and was called "the most dangerous woman in America" for her work with the United Mine Workers.

ANSWER: **Mother Jones** [or Mary Harris **Jones**]

[10] In 1917, a KKK-associated group tarred and feathered members of the IWW in this city. The "Black Wall Street" of Greenwood District was burned to the ground by whites during this city's 1921 race riot.

ANSWER: **Tulsa**, Oklahoma <Golimlim>

13. G.S. Hartley wrote about the formation of these structures in his thrilling treatise *Paraffin Chain Salts*. For 10 points each:

[10] Name these systems which only form when they are both above a namesake critical concentration and the Krafft temperature. These elliptical or spherical collections of lipids form in water, with their hydrophobic tails pointing inwards.

ANSWER: **micelles**

[10] In solvents with this property, a "reverse micelle," in which the hydrophilic head aggregates toward a center, while the hydrophobic tails point outward, may form. This kind of solvent is exemplified by oil, but not water.

ANSWER: **non-polar** solvent [accept word forms of **non-polar**]

[10] Some non-polar drugs are delivered to the body in this kind of structure, a kind of micelle-like vesicle with a lipid bilayer.

ANSWER: **liposome** <Jose>

14. Answer the following about literature involving Dominican dictator Rafael Trujillo, for 10 points each.

[10] Julia Alvarez's novel about the Trujillo-resisting Mirabal sisters is partially titled for these animals.

ANSWER: **butterfly** [or **butterflies**; or *In the Time of the Butterflies*]

[10] This Dominican-born author created the protagonist Yunior, who calls Trujillo "the Dictatingest Dictator who ever Dictated" in his novel *The Brief Wondrous Life of Oscar Wao*.

ANSWER: Junot **Diaz**

[10] *The Brief Wondrous Life of Oscar Wao* often compares Trujillo to various sci-fi characters but also includes numerous references to works in this other popular genre, other literary examples of which include *Persepolis* and *Maus*.

ANSWER: **comic** books [or **graphic novels**] <Jackson>

15. This piece's central movement, a Largo alla siciliana titled "La Paix," is followed by a more celebratory "La Réjouissance" movement. For 10 points each:

[10] Name this five-movement suite written to celebrate the signing of the 1748 Treaty of Aix-la-Chapelle.

ANSWER: **Music for the Royal Fireworks**

[10] This composer was commissioned by the British royal family to write pieces such as *Music for the Royal Fireworks* and the coronation anthem *Zadok the Priest*.

ANSWER: George Frideric **Handel** [or George Friedrich **Händel**]

[10] The "Hallelujah" chorus ends Part II of this Handel oratorio about the life of Jesus Christ.

ANSWER: **Messiah** <Kim>

16. Hugh Huxley proposed that the prevailing theory for how this process works should be called the "swinging bridge" model. For 10 points each:

[10] Name this process. During this process, a flexible protein "head" crosslinks the target filament, then slides past it in a "power stroke" driven by ATP hydrolysis.

ANSWER: **muscle contraction** [or **muscle relaxation**; or **muscle movement**; or obvious equivalents; however, prompt on partial answers that don't mention muscles]

[10] Motor neurons begin the pathway for muscle contraction upon stimulation by this secondary messenger, which enters cells through special voltage-gated channels after an action potential reaches its terminus.

ANSWER: **calcium** [or **Ca²⁺**]

[10] Muscle contraction is involuntary in this non-striated muscle tissue, which makes up internal organs and the walls of blood vessels. It often has less myosin than cardiac or skeletal muscle.

ANSWER: **smooth** muscle tissue <Jose>

17. In 1968, this country's president was almost killed in an incident named for the residence of this country's leader. For 10 points each:

[10] Name this country, whose leader lives in the Blue House. In 1953, this country was split from its communist northern neighbor by a demilitarized zone.

ANSWER: **South Korea** [or **Republic of Korea**]

[10] This man, South Korea's first democratically elected president was ousted in the April 19 Revolution and exiled to Hawaii. He was known for his suppression of dissidents, such as his army's massacre of over 15,000 people on Jeju Island.

ANSWER: Syngman **Rhee**

[10] One of Syngman Rhee's proposed, but unsuccessful, reforms was his attempt to simplify this Korean script, which had been introduced by Sejong the Great.

ANSWER: **hangul** <Jose>

18. This work likens the military to the protective roof of a palace. For 10 points each:

[10] Name this 16th century dialogue which called for the replacement of mercenaries by militias, and shares its name with a 6th century BC treatise.

ANSWER: *The Art of War* [or *Dell'Arte della Guerra*]

[10] The author of *The Art of War* also wrote this treatise, whose title figure is advised to avoid flatterers and beat *fortuna* down like a woman due to her impetuosity.

ANSWER: *The Prince* [or *Il Principe*]

[10] This author of *The Prince* and *The Art of War* called for a return to ancient Roman civic "virtù" in his *Discourses on Livy*.

ANSWER: Niccolò Machiavelli [or Niccolò di Bernardo dei Machiavelli] <Jose>

19. Ironically, one of this poem's inspirations, the Earl of Harcourt, died when he fell into an abandoned well at his new estate. For 10 points each:

[10] "Name this poem about the residents of "Sweet Auburn...where health and plenty cheered the laboring swain." The former inhabitants of the title place are forced into exile in "new found worlds."

ANSWER: "The Deserted Village"

[10] "The Deserted Village" was written by this author of the plays *The Vicar of Wakefield* and *She Stoops to Conquer*.

ANSWER: Oliver Goldsmith

[10] Several lines of "The Deserted Village" make use of this poetic technique, including "Amazed the gazing rustics ranged around." Related to consonance, this technique consists of using similar vowel sounds in the stressed syllables of adjacent words.

ANSWER: assonance <Bentley>

20. This man angered the gods by feeding them a stew whose major ingredient was the chopped-up body of his son Pelops. For 10 points each:

[10] Name this early mythical king, who was punished by being forced to stand in a pool of water such that food and drink remained eternally just out of reach.

ANSWER: Tantalus

[10] Most of the gods detected the use of human meat; however, this goddess absent-mindedly ate Pelops's shoulder, as she was distracted by grieving for her recently-abducted daughter Persephone.

ANSWER: Demeter [or Ceres]

[10] This Arcadian king foolishly tried to determine if Zeus was truly omniscient by feeding him a stew containing the body of his son Nyctimus. For his insolence, Zeus turned him into a wolf and killed his 50 other sons.

ANSWER: Lycaon <Jose>

21. This woman was cursed with infertility early in life, so out of jealousy of her sister Leah, she gave her servant Bilhah to her husband as a surrogate mother. For 10 points each:

[10] Name this mother of two of the twelve progenitors of the tribes of Israel. She died while giving birth to Benjamin.

ANSWER: Rachel

[10] This older son of Rachel was sold into slavery by his brothers but rose to become vizier of Egypt. Jacob gave him a coat of many colors when he was a young man.

ANSWER: Joseph [or Yosef]

[10] Many years later, according to First Kings and Second Chronicles, the tribe of Benjamin joined the tribe of Judah to support this successor of Solomon who was rejected by the ten other tribes.

ANSWER: Rehoboam [or Rehav'am] <Reinstein>