



NSC 2019 - Round 11 - Tossups

1. The causes of this process can be modeled by environmental R and D, or genetic F and A vortices. Increasing demographic and environmental stochasticity increases the probability of this process occurring. The rescue effect in metapopulations prevents this process from occurring within a local patch. The "co-" version of this process commonly occurs when this phenomenon occurs to a (*) keystone species. The Allee ("ahl-LEE") effect contributes to an increasing rate of this process with decreasing population size. Because its current global rate exceeds the background rate, the Anthropocene ("AN-thruh-puh-seen") is characterized by the sixth mass event of this type. For 10 points, name this process undergone by the passenger pigeon in which a species dies out.

ANSWER: **extinction**

<Wang, Science - Biology>

2. Like Pierre-Auguste Renoir, this artist included a depiction of a floating restaurant on a boat in a painting named for the resort La Grenouillère ("grun-wee-YAIR"). An orange, yellow, and red sky dominates the majority of this artist's painting *San Giorgio Maggiore* ("muh-JOR-ee") *by Twilight*. While visiting London, this artist created a series of paintings depicting Charing Cross Bridge surrounded by fog. The Musée d'Orsay ("moo-ZAY dor-SAY") contains several of this artist's paintings depicting (*) poplar trees and Rouen ("ROO-awn") Cathedral. Sales from this artist's paintings of *Haystacks* gave him the funds he needed to buy an estate at Giverny ("zhee-vair-nee"), where he created a garden full of water-lilies that appears in several of his paintings. For 10 points, name this French founder of the Impressionist movement.

ANSWER: Claude **Monet** [accept Oscar-Claude **Monet**]

<Jose, Fine Arts - Painting>

3. Ethnic violence against the Muhajir people in this country's largest city erupted after a bus driver hit college student Bushra Zaidi in 1985. A leader of this country created a system of local councils called "basic democracies" to re-elect himself in 1965. A leader of this country declared "we will eat grass for a thousand years" and called the Multan meeting to begin its nuclear weapons program. That leader, (*) Zulfikar Ali Bhutto, signed the 1972 Simla Agreement after this country lost a 1971 war to an eastern neighbor. This country and its eastern neighbor have fought several wars over the disputed region of Kashmir. For 10 points, name this country which split from India during a 1947 partition.

ANSWER: Islamic Republic of **Pakistan**

<Singh, History - World>

4. A group of characters in this play complain that smoke bites their eyes "like a mad dog" when they blow on their pots of fire. During this play, a group of characters insist that they do not want to behave like a "lioness on a cheese grater." At the conclusion of this work, a naked handmaid uses a map to divide land rights. At this play's opening, a fortress is seized by a chorus of Old Women. This play, which contains a *parabasis* criticizing the (*) Sicilian expedition, begins after Lampito makes a deal with Calonice ("cal-UH-nee-kay") and the title character, who has captured the treasury in the Acropolis. A "sex strike" is put on by the title character of, for 10 points, what play satirizing the Peloponnesian War, which was written by Aristophanes?

ANSWER: *Lysistrata*

<Dees, Literature - World and Miscellaneous>

5. Studies of these events by Michael Faraday found that their apparent effects could be explained by a type of automatism ("aw-TOM-uh-tism") called the "ideomotor effect." Faraday made that discovery while observing a type of these events called a "table-turning." Richard Hodgson attended several of these events held in a writing room in Adyar by Helena Blavatsky. Hundreds of New York state residents attended some of these events held by (*) three women who supposedly heard "rappings," the Fox sisters. In the 19th century, the Spiritualist movement popularized these events, some of which were held by Mary Todd Lincoln to communicate with her son Willie. For 10 points, name these gatherings often hosted by mediums, in which participants attempt to contact the dead.

ANSWER: séances [prompt on answers referring to mediums or contacting the spirit world or talking to dead people; do not accept or prompt on "therapy"]

<Alston, RMP - Other Religion>

6. Several concerti for this instrument are dedicated to the performer Nicanor Zabaleta ("sah-bah-LEH-tah"). The Italian word for "whispering" names the technique for playing tremolos on this instrument, *bisbigliando* ("bees-beel-YAHN-doh"). Claude Debussy wrote a sonata for flute, viola, and this instrument. When this instrument is played *près de la table* ("preh du la TAHB-luh"), a musician's hands are close to its soundboard. This instrument accompanies the recurring violin solo in (*) Rimsky-Korsakov's *Scheherazade* ("shuh-HAIR-uh-zahd"). Discrete glissandi of dozens of notes can be easily produced on this instrument by moving the hands back and forth. This instrument's standard concert variety spans six and a half octaves and has seven pedals for adjusting its sound. For 10 points, name this instrument with 47 strings.

ANSWER: harp [accept concert harp or pedal harp]

<Alston, Fine Arts - Music>

7. This quantity lends its name to a type of attack that relied on a side channel into the data cache that forced Intel to redesign its CPUs in the Spectre exploit. This quantity can be unified across servers by Cristian's algorithm and David Mill's NTP algorithm. Contact with NASA's Deep Impact probe was likely lost due to an overflow in the variable representing this quantity. January 1st, 1970 is an anchor point for the version of this quantity used by (*) Unix. JavaScript's Moment library can parse strings into this quantity. Programs that stored this quantity in an insufficient number of digits had to be fixed to avoid the Y2K bug. For 10 points, name this value often stored in computer files as a namesake "stamp" that indicates when the file was last modified.

ANSWER: time [accept timestamps or timing attack; prompt on date; do not accept or prompt on "year"]

<Bentley, Science - Computer Science>

8. A pipefitter named Victor Joseph Gatto made a painting of this event 33 years after he witnessed it, and it was memorialized in sheet music for the song "Di Fayer Korbunes". Pauline Newman may have exaggerated the conditions that led to this event and served on a committee to investigate it alongside Frances Perkins. Joseph Asch paid out \$75 to the family of each victim of this event. Isaac Harris and his business partner Max Blank were acquitted in the trial that followed this event in part because they said they were unaware that stairway (*) doors were locked. Many people jumped to their death in this event because ladders couldn't reach them. For 10 points, name this 1911 conflagration at a New York garment factory.

ANSWER: Triangle Shirtwaist Company Fire [or Triangle Shirtwaist Factory Fire; or Triangle Waist Company Fire; prompt on Shirtwaist Fire]

<Bentley, History - American>

9. In one Platonic dialogue, Socrates asks an unnamed character if his countrymen regard members of this school of thought as "statesmen," "philosophers," both, or neither; that dialogue is one of two to depict the "Eleatic Stranger." A philosopher from this school of thought from Abdera wrote the lost text *Truths*, which advocates a form of moral relativism; that member of this school once asserted "Man (*) is the measure of all things." The philosopher Protagoras was a member of this school, which Plato said was engaged in "imitation making" and "copy-making." The Greek word for "wisdom" provides the name of, for 10 points, what school of philosophy, whose members were criticized for abusing rhetoric to make arguments?

ANSWER: Sophists [accept First School of Sophists]

<Jose, RMP - Philosophy>

10. A character in one of these places observes a poster with the caption "Safety First," which she rejects, instead saying "Goodness, Truth, and Beauty, come first." That character in one of these places nudges Rose Stanley into having an affair with the artist Teddy Lloyd. In another novel, Bitzer is praised in one of these places for calling a horse "Quadruped Graminivorous," while Sissy Jupe's definition is summarily rejected. The ridiculously-named (*) M'Choakumchild ("m-CHOKE-um-child") works at one of these places in the novel *Hard Times*. For her fascist sympathies, Miss Jean Brodie is fired from her job at one of these places in a novel by Muriel Spark. For 10 points, in a novel by Thomas Hughes, Tom Brown is bullied by Flashman in what sort of place that he attends?

ANSWER: schools [accept high schools or elementary schools or boarding schools or middle schools; do not accept or prompt on colleges]

<Bentley, Literature - British>

11. The central object of an opera by this composer is represented by eight almost-atonal chords played by high flutes, celesta, and violin harmonics. A minor triad called the "Agamemnon motif" opens another opera by this composer which adapts a play by Hugo von Hofmannsthal ("HOFF-mahnz-tall"), with whom this man collaborated on five later operas. In one of his operas, the police arrive after Annina's children are released on a man who "seduced" the protagonist under the disguise of (*) "Mariandel." After Baron Ochs ("ox") is foiled, an opera by this composer ends with the duet "Ist ein Traum, kann nicht wirklich sein," ("eest yne TRAUM, kann neesht VEERK-leesh ZYNE") which is sung by Sophie and the man who had given her a silver flower, Octavian. For 10 points, name this composer of *Elektra* and *Der Rosenkavalier* ("dur ROH-zen-kah-VAH-leer").

ANSWER: Richard ("REE-card") Strauss [accept Richard Georg Strauss]

<Reed, Fine Arts - Opera>

12. A tract by this writer suggests that it is not naturally grown fruits but those "we have bastardized ... to please our corrupt taste" that we have labelled as "wild." Shakespeare likely cribbed a speech from *The Tempest* using John Florio's translation of this author's piece about three people brought to King Charles IX's court. This writer joked "but hold! They do not wear trousers" at the end of a piece contrasting the barbaric practice of torture with (*) Brazilian natives who only eat dead men. This author discusses topics "Of Liars" and "Of Ancient Customs" in a book published in 1580 that includes his piece "Of Cannibals," and which created a new genre of expository writing named for the French word for "attempts." For 10 points, name this French author of the *Essays*.

ANSWER: Michel de Montaigne

<Smith, Literature - European>

13. This word, followed by "Cor Meum", titles a 2006 classical music album by Paul McCartney. It is the first-word in the title of a book series whose characters include the annoying "Sextus Molestus," and which depicts the lives of the Corneli family of patricians in ancient Rome. This is also the first word in the title of a book in which the author explains "Why I am a Fatality" and "How One Becomes What One Is." This word precedes "Romani" in the title of a series of Latin textbooks. A Hieronymus Bosch painting titled partly for this word depicts (*) Jesus before a mob of Roman people. An autobiographical Friedrich Nietzsche work is titled after, for 10 points, what four-letter Latin word meaning "behold," used by Pontius Pilate to mock Jesus?

ANSWER: Ecce [accept Ecce homo or Ecce Romani]

<Jose, Other - Other Academic and General Knowledge>

14. Polar explorer Jules Dumont d'Urville was killed in an especially deadly one of these events following a fete thrown by Louis Philippe at Versailles. A young Andrew Carnegie rose through the ranks by repeatedly forging his boss Thomas Scott's signature to quickly deal with the aftermath of these events. One of these events in Armagh ("ar-MAH"), Ireland prompted a law requiring block signaling. Tsar Alexander III used his (*) massive strength to save his family during one of these events that took place at Borki. Electrical pioneer George Westinghouse developed a compressed air-powered brake that reduced the incidence of these types of events. For 10 points, name this type of disaster that can occur when two locomotives run into each other.

ANSWER: train crash [or train disaster; or train wreck; accept synonyms of "crash"; accept railroad in place of "train"; prompt on partial answer]

<Bentley, History - Cross, Historiography, and Miscellaneous>

15. A pair of dual juxtaposed objectives characterizes a super-resolved microscope named for this number. When expressed in Gaussian cgs units, the right-hand sides of Gauss's law and Ampere's law are both multiplied by this number. A special function denoted "Y-zero-zero" simply equals one over the square root of this number. When integrating a spherically symmetric function in spherical coordinates, the angular part comes out to this number, which is the number of (*) steradians subtended by a sphere. The Coulomb's law constant equals one over this number times the permittivity of free space. This number equals *two* times the factor used to convert Planck's constant to its reduced form. For 10 points, give this number of radians corresponding to *two* revolutions about the unit circle.

ANSWER: 4 pi

<Busse, Science - Physics>

16. Nina Olson is an independent advocate who prevents abuse in this organization. Under one-time Freddie Mac head John Koskinen, this organization couldn't hire enough seasonal associates to answer citizen questions in 2015. *ProPublica* found that private companies partnering with this agency used robots.txt files to prevent users from Googling free options. Lois Lerner was blamed for instructing agents at this organization to give extra scrutiny to groups with (*) "Patriot" or "Tea Party" in their name. A Republican House bill introduced in 2011 reduced this agency's funding by \$600 million and banned it from enforcing the ACA's individual mandate. Audit rates are at historic lows at, for 10 points, what federal agency that issues W-9 tax forms?

ANSWER: IRS [or Internal Revenue Service]

<Bentley, Current Events - U.S.>

17. After a leader of this country was assassinated in France, lawyer Henri Torres secured the acquittal of the assassin Sholom Schwartzbard ("SHOLE-um SHVARTZ-bard"). This country's interwar Directorate was responsible for mass killings under that leader, Symon Petliura ("see-MOHN pet-LYOO-rah"). This country's namesake "Insurgent Army" perpetrated massacres in Volhynia ("vol-HEE-nee-ah") under the leadership of Nazi collaborationist Stepan Bandera. Pavlo Skoropadsky ("sko-roh-PAHD-skee") took the (*) Cossack title of "Hetman" in this present-day country following a post-World War I revolt. Lazar Kaganovich helped cause a 1932 famine here. For 10 points, name this Soviet Republic that was the site of the Holodomor and a massacre of Jews at Babi Yar, a ravine outside its capital of Kiev.

ANSWER: Ukraine [accept Ukrainian Soviet Socialist Republic or UkrSSR or UkSSR or Soviet Ukraine or Ukrainian People's Republic or Ukrainian National Republic; do not accept or prompt on "USSR" or "Soviet Union" or "Russia"]

<Singh, History - European>

18. At the opening, this story's narrator parenthetically remarks that it is written on "dead paper" making telling it a "great relief." The narrator of this story sees a figure in "the dark grape arbors" and "creeping all around the garden" at an estate where she yearns to see her cousins Henry and Julia. That narrator hides a key under a plantain leaf in this work so the housekeeper Jennie cannot reach her. Silas Weir Mitchell, who administered a "rest (*) cure," inspired the protagonist's physician husband John in this story. It is narrated by a woman who lives at a house with the title "silly and conspicuous front design" to cure her of a "slight hysterical tendency" and "nervous depression." For 10 points, a colorful decoration gives its name to what story by Charlotte Perkins Gilman?

ANSWER: "The Yellow Wallpaper"

<Mao, Literature - American>

19. The biological component of an activated sludge is created by inducing this process to bacteria. EDTA suppresses this undesirable process induced by zymolectins in batch yeast fermentations. When this process is used as a separation technique, it is followed by a sedimentation step. Small, highly charged cations *and* anions induce this process by reducing the impact of Coulombic repulsions versus van der Waals attractions. Species like alumina that induce this process during wastewater treatment are called clarifying agents. This process, the reverse of peptization, is thermodynamically favorable but must be preceded by (*) coagulation to form smaller particles. For 10 points, name this process of destabilizing a colloid by forming clumps.

ANSWER: flocculation [or word forms; or coagulation or word forms until it is read; or coalescence or word forms]

<Silverman, Science - Chemistry>

20. In one of Aesop's fables, Zeus turns Chelone ("kuh-LONE-ee") into a turtle because she failed to appear at one of these events. Another of these events took place after a man refused to let go of a figure who shape-shifted into water, then fire, and then into a beast. One of these events took place as recompense after Zeus turned into a cuckoo and raped a goddess. A god who was supposed to attend all of these events was named (*) Hymen. An object inscribed with the phrase *Te Kalliste* ("tay kah-lees-tay") caused conflict at one of these events where the horses Balius and Xanthus were given as a gift. Irritation at not being invited led the goddess Eris to throw the golden apple of discord into, for 10 points, what kind of event, which in that case united the nymph Thetis with the hero Peleus?

ANSWER: **weddings** [accept **marriages** or **marriage** ceremonies]

<Jose, RMP - Greco-Roman Mythology>

21. One of this author's stories follows Fred, who finds an infant's corpse while escaping the police in a sewer. In another story by this author of "The Man who Lived Underground," Jim shoots Lester and Buck while they are swimming as Bobo escapes with Big Boy. The death of a woman who lives at 4605 Drexel is investigated by Detective Britten in a novel by this author where the protagonist signs a ransom note "Red" and backs out of robbing (*) Blum's deli. This author of the short story collections *Eight Men* and *Uncle Tom's Children* created a character who eats at Ernie's Kitchen Shack with the Communist Jan Erlone, whom he frames for his murder of Mary Dalton. For 10 points, name this African-American creator of Bigger Thomas in his novel *Native Son*.

ANSWER: Richard **Wright** [or Richard Nathaniel **Wright**]

<Mao, Literature - American>



NSC 2019 - Round 11 - Bonuses

1. In Herodotus's version of this man's story, he sees the queen Nyssia naked, after which she offers him the option to kill the king Candaules ("kan-duh-LEEZ") and marry her. For 10 points each:

[10] Name this shepherd, who in another mythological appearance becomes king after he finds an invisibility-granting ring within an iron horse in a large cave and uses it to seize power.

ANSWER: **Gyges** ("JIE-jeez")

[10] Another mythical Gyges is one of the Hecatoncheires ("heh-kah-TON-keh-reez"), whose name refers to the fact that they have one hundred of these body parts.

ANSWER: **hands** [accept hundred-**handed** ones; prompt on **arms**]

[10] Both Gygeses are not to be confused with Ogyges ("oj-IJ-eez"), the namesake of a flood that ends the Silver Age in this poem by Hesiod. It also contains Hesiod's attempts to instruct his brother Perses in farming.

ANSWER: the **Works and Days** [accept **Erga kai hemera**]

<Jose, RMP - Greco-Roman Mythology>

2. *Da'wah* missions sent by this caliphate's ruler al-Moezz converted many people in Khorasan ("CORE-uh-sahn") to Isma'ilism. For 10 points each:

[10] Name this Shi'a caliphate which ruled Egypt from the 10th through 12th centuries.

ANSWER: **Fatimid** caliphate ("FAH-tih-mid") [accept **Fatimid** dynasty]

[10] After the Fatimids were weakened by the intrigue of the vizier Shawar ("shuh-WAHR") and the invasions of Amalric of Jerusalem, a ruler from this dynasty sent his general Shirkuh ("SHEAR-kuh") to seize Egypt. This dynasty's namesake founder conquered Edessa, sparking the Second Crusade.

ANSWER: **Zengid** dynasty [accept Imad ad-Din **Zengi**]

[10] Shirkuh was the uncle of this Kurdish ruler, who succeeded him and ruled Egypt as its first Ayyubid monarch. This famously chivalrous king dealt with the Third Crusade.

ANSWER: **Saladin** [accept **Salah ad-Din** Yusuf ibn Ayyub; accept **Yusuf ibn Ayyub**; prompt on al-Malik an-Nasir]

<Alston, History - World>

3. A saxophonist with this surname, whose first name is Branford, leads a quartet which includes pianist Joey Calderazzo. For 10 points each:

[10] Name this jazz family whose members include the trumpeter Wynton, who composed the jazz oratorio *Blood on the Fields*.

ANSWER: **Marsalis** family [accept Branford **Marsalis** or Wynton **Marsalis**]

[10] In 2016, Wynton Marsalis teamed up with this octogenarian saxophonist to bring down the house in London in a live performance with the Lincoln Jazz Center Orchestra. This musician co-founded the fusion jazz band Weather Report and was part of Miles Davis' Second Great Quintet.

ANSWER: Wayne **Shorter**

[10] The youngest of the Marsalis brothers, Delfeayo ("del-FEE-oh"), primarily plays this brass instrument whose pitch can be changed by moving a slide.

ANSWER: **trombone**

<Alston, Fine Arts - Jazz>

4. Many pathogenic genera ("JEN-er-uh") use the Type III system for this process to inject toxins directly from their cytoplasm into the host's cytoplasm. For 10 points each:

[10] Name this process that allows bacteria to transport proteins or other effectors from the inside of their cells to the outside.

ANSWER: **secretion** [accept **secreting** or other word forms; accept **secretion** system; prompt on **SS**]

[10] Many secretion systems are unique to clades that test either positive or negative when this staining procedure is applied. The crystal violet used in this stain binds to peptidoglycan.

ANSWER: **Gram** staining [or **Gram's** method]

[10] Type IV secretion systems, like the VirB/D ("veer"-“B”-“D”) system in *Agrobacterium*, can be used to transfer both proteins and DNA due to its homology to this process in which bacteria use a pilus to exchange genetic material.

ANSWER: **conjugation** [accept word forms, such as **conjugating**]

<Kothari, Science - Biology>

5. This poem's religious imagery includes a description of a voice crying, "The tomb in Palestine / Is not the porch of spirits lingering." For 10 points each:

[10] Name this poem from the collection *Harmonium* whose opening stanza describes a woman enjoying "Complacencies of the peignoir ("PAY-nwar"), and late / Coffee and oranges in a sunny chair."

ANSWER: "**Sunday Morning**"

[10] This American poet of "The Emperor of Ice Cream" wrote "Sunday Morning."

ANSWER: Wallace **Stevens**

[10] In "Sunday Morning," the speaker asks if divinity should be cherished "like the thought of" of this place. The tomb of princess Badroulbadoor ("bah-DROOL-buh-door") appears in a Stevens poem depicting worms at this place's "gate."

ANSWER: **heaven** [accept The **Worms at Heaven's Gate**; do not accept or prompt on any other answers]

<Alston, Literature - American>

6. Shulamith Firestone's book *The Dialectic of Sex* is often published with a tagline proclaiming it "the missing link between" Karl Marx and this thinker. For 10 points each:

[10] Name this thinker whom Herbert Marcuse attempted to synthesize with Marx in a book that views history as a struggle against the repression of human instincts. That book is title for one this 20th-century thinker's concepts "and civilization."

ANSWER: Sigmund **Freud** [accept Sigismund Schlomo **Freud**]

[10] Firestone's *The Dialectic of Sex* contests this thinker's theory of the family. He co-wrote *The Communist Manifesto* with Marx.

ANSWER: Friedrich **Engels** [accept Frederick **Engels**]

[10] Firestone dedicated *The Dialectic of Sex* to this other 20th-century philosopher, who wrote that "one is not born, but rather becomes a woman" in a book that contends "woman" is treated as an "other" to the male "subject."

ANSWER: Simone **de Beauvoir** [accept Simone Lucie Ernestine Marie Bertrand **de Beauvoir**; do not accept or prompt on "Beauvoir"] (The book is *The Second Sex*.)

<Smith, RMP - Philosophy>

7. In the mean field approximation for this model, one quantity equals the hyperbolic tangent of an affine ("uh-FINE") transformation of itself. For 10 points each:

[10] Name this model that expresses the Hamiltonian as the sum of the interactions between adjacent pairs of spins plus the sum of the interaction of each spin with an external field.

ANSWER: **Ising** model

[10] The Ising model describes materials with this property. The Barkhausen effect refers to discontinuous jumps in the B-H curve of materials with this property.

ANSWER: **ferromagnetism**

[10] A ferromagnet becomes paramagnetic above the temperature named for this man. He won a Nobel Prize along with his wife for their research on radioactivity.

ANSWER: Pierre **Curie**

<French, Science - Physics>

8. Identify the following about individuals whom the *New York Times* has written "Overlooked" obituaries for, for 10 points each.

[10] In its obituary of this woman, "the most famous black woman in the United States during her lifetime," the *Times* pointed to the influence of her book *Southern Horrors* in documenting lynchings.

ANSWER: Ida B. **Wells** [accept Ida Bell **Wells-Barnett**]

[10] The *Times* wrote that these things, obtained from obituary subject Henrietta Lacks, "have travelled around the earth." Lacks lends her name to the HeLa ("HEL-uh") variety of these things.

ANSWER: **cells** [accept immortal **cell** line or human **cells** or HeLa **cells**]

[10] Emily Warren Roebling was remembered as the woman who brought this engineering project to completion. This bridge, completed in 1883, connects Manhattan to its namesake borough.

ANSWER: **Brooklyn** Bridge

<Bentley, History - American>

9. E. M. Forster once praised this line of poetry, stating that the author who wrote it can "command me to follow him." For 10 points each:

[10] Give this line that its author disavowed as "trash" that he was "ashamed to have written." In a poem, it follows the lines "Hunger allows no choice to the citizen or the police . . ."

ANSWER: **we must love one another or die** [accept **we must love one another and die**, the modified version; do not accept or prompt on "the last line" of September 1st, 1939, since it's not the last line]

[10] This author did not allow for the line "we must love one another or die" to be printed when his poem "September 1st, 1939" was anthologized.

ANSWER: W. H. **Auden** [accept Wystan Hugh **Auden**]

[10] Auden's other wartime poems include this one named for a mythological object. In this poem, Thetis "looked over" Hephaestus's shoulder and does *not* view the scenes of happiness that she expected to see on the title armor.

ANSWER: "The **Shield of Achilles**"

<Jose, Literature - British>

10. Osaka ended one of these relationships with San Francisco after the American city erected a statue honoring comfort women. For 10 points each:

[10] Name these relationships that exist between Oxford and Leiden, and Toledo, Ohio and Toledo, Spain.

ANSWER: **sister cities** [accept **twin towns**; or **partnership towns**; or **friendship towns**; or **twinned towns**; accept cities in place of towns in any of these answers; prompt on **cities** or **towns**]

[10] In the aftermath of World War II, citizens of Bristol donated shoes to this sister city in exchange for musical performances. The House of Windsor was originally named for this German city.

ANSWER: **Hanover**

[10] One of the more consequential sister city pairings was between Seattle and this Communist-controlled city during the Cold War. A 1965 war between India and Pakistan was ended via a treaty named for this capital city on the Chirchik River.

ANSWER: **Tashkent** [accept **Dzhadzh** or **Chachkent** or **Shashkent** or **Binkent**]

<Bentley, Geography - World>

11. For 10 points each, answer the following about European mercenaries:

[10] Mercenaries from Genoa were known for using this type of weapon, which proved ineffective against English longbows at the Battle of Crécy.

ANSWER: **crossbows** [prompt on **bow** or **bow and arrow**]

[10] Mercenaries such as John Hawkwood who fought in Italy were known by this Italian-language term.

ANSWER: **condottiere** [accept **condottiero**]

[10] During the American Revolutionary War, the British hired these German mercenaries who were named for the German state they originated from. A leader of these people named Johann Rall failed to prevent George Washington's attack on Trenton.

ANSWER: **Hessians** [accept **Hesse-Kassel** or **Hesse-Hanau**]

<Bentley, History - Cross, Historiography, and Miscellaneous>

12. For 10 points each, answer the following about Orson Welles's influence on Latin American literature:

[10] Jorge Luis Borges called Welles's film *Citizen Kane* a "metaphysical" type of this work. Borges wrote that these works should not include more than six characters, and he himself wrote one with Kabbalistic elements centering on a character named Erik Lonnot.

ANSWER: **detective** story [accept **whodunit**]

[10] The title character of this author's *The Death of Artemio Cruz* was inspired by Welles's *Citizen Kane*.

ANSWER: Carlos **Fuentes** [accept Carlos **Fuentes** Macías]

[10] This author's novel *Betrayed by Rita Hayworth* is titled after Orson Welles's ex-wife. The inmates Molina and Valentin discuss the plots of films to cope with their imprisonment in this author's novel *Kiss of the Spider Woman*.

ANSWER: Manuel **Puig** [accept Juan Manuel **Puig** Delledonne]

<Jose, Literature - World and Miscellaneous>

13. This concept is examined in Keith Allan and Kate Burridge's book *Forbidden Words*, which examines how it influences daily conversation. For 10 points each:

[10] Give this word of Polynesian origin which designates an activity that is implicitly prohibited, such as incest.

ANSWER: **taboo**

[10] An area of interest in sociolinguistics seeks to examine why many cultures treat this process of changing languages rapidly in conversation to be taboo. This behavior is done more successfully by "balanced" polyglots than "non-balanced" polyglots.

ANSWER: **code switching** [prompt on language alteration or language change or answers referring to changing which language one uses]

[10] Many "mother-in-law languages" in which using certain words with specific relatives are taboo, are spoken in this country. Dyirbal ("gerbil") and Wemba-Wemba are two oft-studied languages from this country.

ANSWER: **Australia** [accept Commonwealth of **Australia**]

<Alston, Social Science - Linguistics>

14. For 10 points each, give the following about a particularly pesky problem in geology known as the Sues effect:

[10] The Sues effect interferes with the usage of this isotope, thus making geological dating more tricky. This isotope decays into its "13" counterpart.

ANSWER: **carbon-14** [prompt on carbon]

[10] The Sues effect is the release of carbon-13 into the atmosphere by the burning of these substances, such as natural gas, oil, or coal. They are formed by decomposing the remains of dead life.

ANSWER: **fossil fuels** [prompt on nonrenewable energy or nonrenewable fuels]

[10] The reason that fossil fuels don't release carbon-14 when they are burned is because carbon-14's half life is so short. Within 10%, what is the half-life of carbon 14? Please give your answer as an integer.

ANSWER: **5730 years** [any number given between **5157 to 6303**]

<Jose, Science - Earth>

15. This ritual was usually practiced inland at such sites as Oseberg and Ladby. For 10 points each:

[10] Give this ritual commonly performed for high-status Vikings. Artifacts from one of these rituals at Sutton Hoo now reside in the British Museum.

ANSWER: **ship burial** [accept **boat grave**; accept answers indicating a person is buried or interred in a **ship**]

[10] Ibn Fadlan writes that Vikings would perform this action on the small boats in which they buried poor men. This action is performed on bodies in a crematorium.

ANSWER: setting it on **fire** [accept equivalent answers which refer to starting a **blaze** or **fire** or **burning**; accept **incineration** or word forms thereof]

[10] Vikings paid careful attention to burial because they believed angry dead people could emerge from the grave as these creatures and menace the living. Unlike *haugbui* ("HOWG-boo-ee"), these Viking zombies could wander far from their mounds.

ANSWER: **draugs** [accept **draugr** or **draugar**]

<Bentley, RMP - Other Religion>

16. Without oxygen, anaerobic bacteria are forced to use a range of unusual metals to do biochemistry. For 10 points each:

[10] This heavy element substitutes in for molybdenum in some complexes in *Clostridia*. Its atomic symbol, oddly, is a W.

ANSWER: **tungsten**

[10] Acetogenic bacteria catabolize carbon monoxide with cobalt and this other metal, which biochemists use to purify His-tagged proteins. In water, this metal acquires a +2 charge and forms green coordination complexes.

ANSWER: **nickel**

[10] Nickel and iron both are cofactors in enzymes that catalyze the oxidation of *this* chemical species, a reaction that electrochemists have assigned as having zero volts of standard reduction potential.

ANSWER: **hydrogen** gas [accept **H₂**; do not accept or prompt on "H"]

<Silverman, Science - Chemistry>

17. The second movement of Beethoven's 8th symphony is thought to contain a musical joke about Johann Maelzel's improved model of these devices. For 10 points each:

[10] Identify these devices that click at regular intervals to help musicians keep tempo.

ANSWER: **metronomes**

[10] This Hungarian's *Poeme symphonique* is scored for one hundred metronomes. Excerpts of his *Atmosphères* and *Lux Aeterna* appeared in *2001: A Space Odyssey* without his knowledge.

ANSWER: Gyorgy **Ligeti** ("JURJ LIG-uh-tee") [or György Sándor **Ligeti**; or **Ligeti** György Sándor]

[10] A slowed down, distorted metronome creates a steady "clip-clop" in this composer's "Farewell to Cheyenne." In this composer's most famous piece, a flute, ocarina, and choir -- the last of which represents the "ugly" Tuco -- imitate a howling coyote in turns.

ANSWER: Ennio **Morricone**

<Smith, Fine Arts - Music>

18. In a 2019 book, Armand D'Angour claims that Socrates learned about love from this woman, who was long thought to be the inspiration for Diotima from Plato's *Symposium*. For 10 points each:

[10] Name this Milesian woman and lover of Pericles whose house served as an intellectual center in Athens.

ANSWER: **Aspasia**

[10] Socrates claimed that Aspasia wrote the famous oration given by Pericles at one of these events; that oration praises Athenian democracy as a reason to fight for the city.

ANSWER: mass **funeral** [or **burial**]

[10] Pericles' funeral oration was documented in this historian's *History of the Peloponnesian War*, which also includes the Melian ("MEE-lee-un") dialogue.

ANSWER: **Thucydides**

<Raje, History - European>

19. This movement's art focused on evoking raw emotion, as exemplified by its member Franz Marc's statement that he sought the "animalization" of art. For 10 points each:

[10] Name this predominantly German art movement exemplified by Emil Nolde's ("NOL-duh'z") *Dance Around the Golden Calf* and other works by members of Die Brücke ("dee BRUE-kuh").

ANSWER: German **Expressionism** [do not accept or prompt on "Abstract Expressionism"]

[10] Several Expressionists, including Nolde, turned to making works in this medium. German artist Käthe Kollwitz ("KEH-tuh KOHL-vitz") used this medium to create her series *War*.

ANSWER: **woodcuts** [prompt on wood; do not accept or prompt on "woodblock print"]

[10] Expressionist tenets were fundamental to the Blue Rider movement, which was led by this Russian-born artist and named for one of his paintings of a horseman.

ANSWER: Wassily **Kandinsky** [accept Wassily Wassilyevich **Kandinsky**]

<Bentley, Fine Arts - Painting>

20. In one story by this author, the low-ranking civil servant Akaky Akakievich saves money to buy the title piece of clothing. For 10 points each:

[10] Name this Russian author whose "Petersburg Tales" include "The Overcoat" and "The Nose."

ANSWER: Nikolai **Gogol** [accept Nikolai Vasilievich **Gogol**]

[10] Gogol also wrote this story narrated by Poprishchin ("pah-PREESH-cheen"), who believes that he can understand a conversation between two dogs. This story's text consists of written entries whose confused dates reflect the delirium of the narrator.

ANSWER: "The **Diary of a Madman**" [accept "**Zapiski sumasšedšego**" or "A **Madman's Diary**"]

[10] In *The Diary of a Madman*, Poprishchin believes that he is the heir to the throne of this kingdom, which he mistakes for China. In actuality, this "country" is a madhouse.

ANSWER: **Spain** [accept Kingdom of **Spain** or Reino de **España**]

<Jose, Literature - European>

21. This movement titles a book by the architectural historian Henry-Russell Hitchcock and Philip Johnson, which explains that it was used in countries on every continent. For 10 points each:

[10] Give the name of this two-word architectural movement that favored industrial materials like glass, steel, and concrete. It arose after World War I and remained popular until the 1970s.

ANSWER: The **International Style**

[10] The architect Walter Gropius founded this school of design in Weimar that espoused the International Style. A museum devoted to this school can be found in Tel Aviv, whose white buildings were inspired by it.

ANSWER: **Bauhaus** (rhymes with "cow house")

[10] This Finnish architect's Turun Sanomat newspaper building in the city of Turku has characteristics of the International Style. Other such works include the Paimio Sanatorium.

ANSWER: Alvar **Aalto** [accept Hugo Alvar Henrik **Aalto**]

<Jose, Fine Arts - Architecture>