



NSC 2018 - Round 01 - Tossups

1. It is implied that these figures created "The Diary of P." and "The A.B. Memoirs," as well as objects found in a footlocker near Bangor. These figures often greet and say goodbye to each other with the phrase "Under His Eye." One of these figures finds the phrase "nolite te bastardes carborundorum" (NOH-lee-tay TAY bas-TAR-dace car-boh-run-DOH-rum) carved into a cupboard. Groups of these figures use their bare hands to kill a condemned person in a type of Salvaging known as a (*) Particicution. These figures are trained by Aunts at Rachel and Leah Centers, and are given new names referring to the member of the ruling class of Gilead to whom they are assigned. The protagonist Offred (OFF-red) is a member of, for 10 points, what group of fertile women in a novel by Margaret Atwood?

ANSWER: **handmaids** [accept *The Handmaid's Tale*; prompt on women]
<Carson, Literature - World>

2. The Czech engraver Wenceslaus Hollar made panoramic engravings before and after this event. This event is commemorated by a 202-foot-tall monument topped by a golden urn that, until 1830, had an inscription blaming it on the "malice of the Popish faction"; that monument was co-designed by Robert Hooke, who was appointed surveyor after this event. Charles II was informed of this event by a man who wrote of burying his cheeses during it, (*) Samuel Pepys (peeeps). The Duke of York commanded troops that tore down buildings during this event. This event ended on Pie Corner, leading some to attribute it to God's wrath at the sin of gluttony, and supposedly began at a bakery on Pudding Lane. For 10 points, name this 1666 conflagration in England's capital.

ANSWER: Great **Fire** of **London** [or the **London Fire** of 1666; prompt on partial or descriptive answers]
<Bentley, History - European>

3. A theorem introduced by this man gives a formula to find the radii of four mutually tangent circles. The second book of a work by this mathematician consists of a classification of algebraic curves, including his namesake "folium." This man is the inventor, and sometimes the namesake, of the field of analytic geometry. This man's three (*) "laws of nature" were a major influence on Isaac Newton's laws of motion. An upper limit on the number of positive roots of a polynomial can be found using this mathematician's "rule of signs." In two dimensions, ordered pairs are used to represent the x- and y-coordinates of numbers in his namesake coordinate system. For 10 points, name this French mathematician, who, in a famous work of philosophy, stated "Cogito ergo sum."

ANSWER: René **Descartes** (day-CART)
<Minarik, Science - Math>

4. A narrative about two of these objects and a hidden marble are used in a psychological experiment devised by Simon Baron-Cohen to assess whether children attribute false beliefs to others. Papers published in 1939 and 1940 described experiments in which subjects were asked to choose between two of these objects with different characteristics by researchers Kenneth and (*) Mamie Clark. These objects, which are central to the "Sally-Anne task," were used in research summarized by expert witnesses in the *Brown v. Board* case. Social learning theory was devised based on an experiment in which children imitated adults' actions toward one of these objects. For 10 points, what kind of object did adults beat up in Albert Bandura's experiment involving a "bobo" one?

ANSWER: dolls [accept bobo dolls; prompt on toys]

<Hart, Social Science - Psychology>

5. In this opera, a soft timpani roll underlies a shift from B-flat major to the mediant of G major during the sextet "Sola, sola in buio loco." This opera's final sextet, "Questo è il fin di chi fa mal" (KWESS-toh EH eel FEEN dee KEE fah MALL), which delivers the moral, was cut in most 19th-century productions. At a dinner scene in this opera, a character claims to be sick of constantly hearing the composer's earlier "Non più andrai" (known pyoo ahn-DRY). In this opera's aria "Il mio tesoro," Don (*) Ottavio swears to avenge the murder of Donna Anna's father. Its title character woos Masetto's betrothed Zerlina in the aria "Là ci darem la mano" (LA chee dah-REM la MAH-no), and Leporello recounts its title character's sexual conquests in the "Catalogue Aria." For 10 points, name this Mozart opera that ends with a statue of the commendatore dragging the title seducer to hell.

ANSWER: Don Giovanni [do not accept "Don Juan"]

<Kothari, Arts - Opera>

6. This deity becomes enraged when she is reminded of a man who brought her dates but refused to sleep with her, after which she turned him into a mole. A partially-extant poem describes this deity turning a bandit woman into a waterskin. The *gala-tura* and the *kur-jara* rescue this deity after a journey in which she is repeatedly delayed by the gatekeeper Neti. This deity, who was attended by Ninshubur, was cursed with (*) sixty diseases by Namtar. The Bull of Heaven was sent after Enkidu and Gilgamesh by this goddess, who removed one item of clothing at each of seven gates when descending to the underworld, which was ruled by her sister Ereshkigal. For 10 points, name this wife of Dumuzid or Tammuz, the Mesopotamian goddess of love and sex.

ANSWER: Ishtar [or Inanna; accept Astarte]

<Grames, RMP - Other Myth>

7. The existence of these things was accidentally revealed by Alexander Butterfield. Some of these things were stored at a facility in Yorba Linda, California, and not released to the public until 2013. One rejected compromise involved making Senator John C. Stennis the only person allowed to review these things. Political cartoonists made fun of the so-called "Rose Mary (*) Stretch," an awkward posture supposedly used to accidentally destroy parts of one of these things. That stretch resulted in an 18-and-a-half minute gap in them. The Saturday Night Massacre followed Archibald Cox's insistence on receiving these secretly-made objects. For 10 points, name these audio records of a president who resigned during the Watergate scandal.

ANSWER: Nixon tapes [or transcripts of President Richard Nixon's White House tapes; or President Richard Nixon's White House recordings; accept Watergate tapes until "Watergate" is read; prompt on partial answer]

<Bentley, History - American>

8. A book by this author ends with the Wandering Jew informing the narrator that a door in his museum was made from the gate of ivory that Aeneas once passed through in Hades. That book by this writer ends with the story "The Virtuoso's Collection," and it includes a story in which Annie opens an ebony box and her infant child crushes Owen Warland's mechanical butterfly. Another of his stories ends by noting that "no hopeful verse" was carved on the (*) tombstone of the title character's grave. This author included "The Artist of the Beautiful" in a collection named for his home, *Mosses from an Old Manse*, which also features a story set in Salem where the title character sees a procession in a forest. For 10 points, name this author of "Young Goodman Brown."

ANSWER: Nathaniel Hawthorne

<Jose, Literature - American>

9. A recent restoration of this painting revealed two spiderwebs behind the two donors in it and proved that the wood used for the hermit panel was the same as its others. This painting was rescued from an Austrian salt mine shortly before the mine was blown up by the Nazis. Equestrian portraits of men such as Philip the Good are included in a panel of this painting called *The (*) Just Judges* that was stolen in 1934. The man who completed this painting called himself "second in art" to his deceased brother. When closed, this work shows grisaille statues of saints below an Annunciation scene. When opened, it reveals a panel of a large procession gathering around a lamb about to be sacrificed. For 10 points, name this master altarpiece of Jan Van Eyck.

ANSWER: Ghent Altarpiece [accept Adoration of the Mystic Lamb until "lamb" is read]

<Bentley, Arts - Painting>

10. Lev Landau showed that, under certain conditions, the cyclotron motions of charged particles have this property, a fact which allows resistance to be written in terms of the von Klitzing constant. A sharp peak at 254 nanometers corresponding to 4.9 electron-volts implied this result in an experiment that fired electrons through a vapor of mercury and was run by Franck and Hertz. When deriving his law of blackbody radiation, (*) Max Planck arbitrarily assumed that energy has this property. Einstein explained the photoelectric effect by proposing that light is a particle, and thus has this property. For 10 points, name this property where at small scales, quantities become discretized, which names a subfield of physics involving wavefunctions and randomness.

ANSWER: quantization [accept word forms indicating things are quantized or in quanta or are quantum; accept anything suggesting things are discrete or discretized until "discretized" is read]

<Wang, Science - Physics>

11. One paper about this concept concludes by identifying the writer's position with Hegel, who saw this concept as a "distorted reflexion" of reality that Kant referred to this concept as a "form of inner sense" in the Transcendental Aesthetic. The A-series and B-series theories of this concept were introduced in a J. M. E. McTaggart paper titled for the "unreality" of this concept. Henri Bergson (BAIRK-son) paired this concept with "free will" in the title of a book that uses the term (*) "duration." Theories of this concept include the "growing block," as well as a theory that holds that John F. Kennedy still exists. For 10 points, name this concept, subject of theories like presentism, that Einstein united into a manifold with space.

ANSWER: time

<Boyd, RMP - Philosophy>

12. 30,000 people were killed in a raid orchestrated by this monarch against a city that had recently been captured by Hayreddin Barbarossa. His ineffective New Laws prompted the Valladolid (vah-yah-doh-LEED) debates. The enormous fleet for this monarch's conquest of Tunis was mostly financed with the gold ransom delivered from Atahualpa. Troops fighting against the League of Cognac for this son of Philip the Handsome and Juana the (*) Mad pillaged monasteries while sacking Rome. This king spent his gouty final years at a monastery after abdicating. His massive inheritance included the Habsburg Netherlands. For 10 points, name this Holy Roman Emperor and King of Spain who abdicated in 1556 in favor of his son, Philip II.
ANSWER: **Charles V** [or **Charles I**; or **Carlos I**; or **Karl V**; or **Carlo V**; prompt on **Charles**]
<Bentley, History - European>

13. In the Goldschmidt classification, species are grouped by whether their preferred host is rock, ores, gas, or this element. This element and a more dense one "rained out" of molten material during the "catastrophe" named for it, a key step in planetary differentiation. Siderophiles are named for their preference for this element, which is said to be (*) "telluric" if it is found on Earth as not part of an ore. This element bonded to sulfur forms galena (guh-LEE-nuh). Ores of this element include a specimen historically called lodestone and the reddish-brown hematite. Fool's gold, or pyrite, is an ore of this metal, which along with nickel is a major element of the Earth's core. For 10 points, name this magnetic chemical element abbreviated Fe.
ANSWER: **iron** [or **Fe** until read]
<Jose, Science - Earth Science>

14. This author appended his essay *On the Use of the Chorus in Tragedy* to a play in which Don Manuel and Don Caesar are the title character's feuding sons. The villain of another of his plays is killed when a peasant woman named Armgart and her children delay him by pleading for clemency in front of his horses. Another of his protagonists is torn between honoring the sacrifices of Roller and Schweizer (SHVYTE-zer) and his love for Amalia von Edelreich (ah-MALL-yah fon AID-ull-ryke) after being banished from his home by his father, the Count. This author of (*) *The Bride of Messina* wrote about the conflict between the brothers Franz and Karl Moor in one play, and another of his plays is titled for a huntsman who defies the Swiss tyrant Gessler. For 10 points, name this German playwright of *The Robbers* and *William Tell*.
ANSWER: Friedrich **Schiller** [or Johann Christoph Friedrich von **Schiller**]
<Carson, Literature - European>

15. In this country's capital, thousands of coins are nailed to a stump that supposedly cures toothaches. Eyes pointing in four directions are a motif on a monument at Swayambhunath (sway-om-boo-nath) in this country. A snake-infested floodplain that contains this country's capital was supposedly drained by the bodhisattva Manjushri, and many of its temples were built by the Newar people. The Terai Swamp in this country's south contributed to its (*) isolation. This country became a republic in 2008 and was once ruled by the Ranas. It is home to the largest Sherpa population in the world. Its well-above-sea-level capital was devastated by a 2015 earthquake. For 10 points, name this mountainous Asian country with capital at Kathmandu.
ANSWER: **Nepal** [or Federal Democratic Republic of **Nepal**]
<Bentley, Geography - World>

16. In this piece's tenth section, woodwinds repeat the pattern "quarter rest, four falling sixteenth notes, quarter rest," where the first sixteenth note is tenuto and the rest are staccato. As a joke, the viola melody in this piece's sixth section crosses directly from the fourth to the second string. Jagged, toccata-like chromatic runs in its second section depict an amateur pianist warming up. Most section titles of this piece are (*) initials, like C. A. E., which represents its composer's wife Alice. Viola student Isabel Fitton and the stuttering Dorabella are two "friends pictured within" this piece. It may be based on "Auld Lang Syne" or "Rule Britannia." August Jaeger (YAY-ger) inspired its section "Nimrod." For 10 points, name this orchestral piece by Edward Elgar with an unknown theme.

ANSWER: Enigma Variations [or Variations on an Original Theme; or Elgar's Opus 36]

<Magin, Arts - Music>

17. The radar jamming system used by low-flying Vautour planes in Operation Focus during this war so spooked the otherwise uninvolved Soviets that Nikolai Yergorychev purged many Polish officers. In the build-up to this war, a strike killed 18 people at Al-Samu and UN Emergency Forces were ordered out of one country. One side lost 286 of its 420 (*) MiG (mig) fighters on the tarmac on a single day in this war. In the buildup to this conflict, the port of Eilat (ay-LAHT) was cut off from supplies by the closure of the Gulf of Aqaba. The Sinai Peninsula, Golan Heights, and Gaza Strip were captured by the victors in this conflict, a defeat for Egypt's Gamal Abdel Nasser. For 10 points, name this 1967 conflict in which Israel defeated its enemies in less than a week.

ANSWER: Six-Day War [or June War; or Third Arab-Israeli War; or Milhemet Sheshet HaYamim]

<Bentley, History - World>

18. A defect in one enzyme in this pathway has a severe "Beppu" variant and causes echinocytes to appear on a peripheral smear. An enzyme that catalyzes the start of this pathway has three subtypes referred to as "low *K*-sub-*m*" isozymes for their increased affinity to their substrate, and also a fourth isozyme that is found only in the liver. Another enzyme in this pathway performs an aldol cleavage to form the intermediate DHAP. This pathway begins with (*) substrate-level phosphorylation carried out by hexokinase and ends with two three-carbon molecules that are eventually converted into acetyl-CoA. For 10 points, name this first step of cellular respiration that cleaves glucose to create two pyruvate molecules.

ANSWER: glycolysis [or Embden–Meyerhof–Parnas pathway; or Entner–Doudoroff pathway; prompt on cellular respiration]

<Kalathiveetil, Science - Biology>

19. In the first of these poems, the speaker asks that the addressee "like adamant draw mine iron heart." In a poem from this collection, the speaker claims to be made of "elements and an angelic sprite," which are "betray'd to endless night," and calls himself "a little world made cunningly." Another of these poems declares that the speaker will never be "chaste, except you ravish me" and implores (*) "Break, blow, burn, and make me new." This collection includes a poem that calls the addressee "slave to fate, chance, kings, and desperate men," as well as a poem beginning "Batter my heart, three-person'd God." For 10 points, name these nineteen religious poems, including "Death, Be Not Proud," written by John Donne.

ANSWER: Holy Sonnets [or Divine Meditations; or Divine Sonnets; prompt on sonnets by John Donne]

<Bollinger, Literature - British>

20. Description acceptable. In advance of this event, a leader asked his cousin to cover himself in a green cloak and sleep in his bed. Historians identify the Axumite king Armah with a man involved in the so-called "first" version of this event, Ashama ibn Abjar, who sheltered several *sahaba*. A place of worship at Quba was founded during this event, in which two men stopped and prayed on Friday in the first instance of (*) *jumu'ah*. The person who undertook this event ended up in Yathrib, which was renamed shortly afterward, and carried it out with Abu Bakr. This event, whose Julian date is April 19, 622 AD, marks the beginning of the Islamic calendar. For 10 points, name this flight of the prophet from one of Islam's holy cities to another.

ANSWER: **Hijrah** [or **Hegirah**; accept **Second Hijrah**; accept answers indicating **Muhammad's flight from Mecca** or **Muhammad's flight to Medina** or **Muhammad's flight to Yathrib** until Yathrib is read; do not accept or prompt on "hajj"]

<Alston, RMP - Other Religion>

21. The NINCDS-ADRDA criteria are used to diagnose this disease. The first person diagnosed with this disease was a woman named "Auguste D." Screens for this disease led to the discovery of presenilins, the catalytic subunits of gamma-secretase. The drug donepezil, sold under the brand name Aricept, is used to treat symptoms of this disease. Sufferers of this disease can exhibit neurofibrillary (*) tangles due to hyper-phosphorylation of tau proteins. This disease can be caused by a mutation in the APP protein, which leads to the buildup of plaques of amyloid beta. This disease causes progressive cognitive impairment, shown by language and memory problems. For 10 points, name this neurodegenerative disease, the most common cause of dementia.

ANSWER: **Alzheimer's disease** [prompt on **dementia** until read]

<Ramaswami, Science - Biology>



NSC 2018 - Round 01 - Bonuses

1. In one work by this artist, a corpulent man with his hands in his pockets has a sack of money for a head. For 10 points each:

[10] Identify this artist who drew *The "Brains."* Another of his works features the caption, "What are you going to do about it?" beneath a tiger who has mauled a person in a Roman stadium.

ANSWER: Thomas **Nast**

[10] Samuel Tilden helped bring down this frequent target of Nast, a corrupt politician who embezzled as much as two hundred million dollars from Tammany Hall.

ANSWER: Boss **Tweed** [or William Marcy **Tweed**; or William Magear **Tweed**]

[10] Opponents of Boss Tweed organized a reform platform at this place in 1871. Abraham Lincoln gave his longest speech here in 1860 in an address that concerned the government's power to regulate slavery.

ANSWER: **Cooper Union** [or The **Cooper Union** for the Advancement of Science and Art]

<Bentley, History - American>

2. This character sings "For bonny sweet Robin is all my joy" after handing out flowers. For 10 points each:

[10] Name this character who is told "Get thee to a nunnery" and who loses her sanity after the death of her father Polonius.

ANSWER: **Ophelia**

[10] Ophelia states that she cannot pass out this type of flower because the ones she had all died. After Ophelia dies, Laertes hopes that this type of flower may spring "from her fair and unpolluted flesh."

ANSWER: **violets**

[10] In *A Midsummer Night's Dream*, this character states, "I know a bank where the wild thyme blows, Where oxlips and the nodding violet grows" while instructing Puck to fetch a flower.

ANSWER: **Oberon**

<Reinstein, Literature - British>

3. Brahms recapitulated his Fourth Symphony's opening "chain of thirds" theme by doubling every note's length, applying a rhythmic transformation named for this word. For 10 points each:

[10] Name this quality of a triad made of two stacked major thirds. A perfect or major interval widened by one semitone has this quality.

ANSWER: **augmented** [or rhythmic **augmentation**; or **augment**; accept **augmented** triad, **augmented** chord, or **augmented** interval; or **aug**; do not accept or prompt on "prolongation"]

[10] The third movement opens with a jaunty high descending theme; low instruments apply *this* transformation to play the theme reflected nearly upside down. This term also refers to a chord that's not in root position.

ANSWER: **inversion** [or **inverting**; accept chord **inversion** or triad **inversion**]

[10] The Fourth Symphony ends with a passacaglia (**pah-sah-CALL-yah**), a set of variations over this kind of repeated short "line" or ostinato. This term names the bottom note of a chord, which defines its inversion, and the clef used by the lowest string instrument.

ANSWER: **bass** [accept **bass** line, ground **bass**, or **basso** ostinato; accept **bass** note, **bass** clef, or double **bass**]

<Lifshitz, Arts - Music>

4. One of these events that lasted for a second came from SGR 1806-20 and released as much energy as the Sun releases in 150,000 years. For 10 points each:

[10] Name these events in which the strain on the crust of a stellar body causes it to deform, releasing a large amount of energy in the process.

ANSWER: **starquakes** [prompt on quakes]

[10] Starquakes have only been observed in this kind of ultra-dense star, which are formed from their namesake uncharged particles. The first discovered pulsar is one of these stars.

ANSWER: **neutron stars**

[10] Starquakes typically output their energy in this high-energy portion of the EM spectrum, which is observed by NASA's Chandra telescope as well as a "Timing Explorer" named for Bruno Rossi.

ANSWER: **X-rays**

<Jose, Science - Astronomy>

5. In his only surviving speech, this probably-legendary figure takes Leocrates to task for fleeing to Athens after the Battle of Chaeronea. For 10 points each:

[10] Identify this man credited with obtaining the Great Rhetra constitution and establishing the *agōgē* (ah-GO-gee) education system.

ANSWER: **Lycurgus** the Lawgiver

[10] The oldest source to discuss Lycurgus is by this native of Halicarnassus, who helped found the discipline of history with his history of the wars between the Greeks and the Persians.

ANSWER: **Herodotus**

[10] Lycurgus's reforms supposedly bound these state slaves of Sparta to areas of land, not owners. According to Herodotus, they outnumbered the Spartans seven to one.

ANSWER: **helots**

<Bentley, History - European>

6. A black goblin who lives in a snuffbox presumably causes this character to fall out of a window, where he is put in a newspaper boat, nearly charged a toll by a sewer-dwelling water rat, and then eaten by a fish. For 10 points each:

[10] Name this character who is always balanced on one leg, just like the ballet dancer he falls in love with.

ANSWER: the steadfast **tin soldier** [or den standhaftige **tinsoldat**; prompt on soldier]

[10] This character created by the same author attempts to hawk her wares on New Year's Eve, though she freezes to death after seeing a shooting star that reminds her of her grandmother.

ANSWER: the little **match girl** [or den lille **pige** med **svovlstikkerne**; accept answers like the **girl** with the **matchsticks**; prompt on "little girl"]

[10] "The Steadfast Tin Soldier" and "The Little Match Girl" are two of the many children's stories by this Danish author of "The Emperor's New Clothes" and "The Ugly Duckling."

ANSWER: Hans Christian **Andersen** (AWN-uh-sin)

<Carson, Literature - European>

7. Andrew Humphreys' book on the "Golden Age of Travel" along this river describes Europeans spending months travelling in dahabiya boats on it. For 10 points each:

[10] Name this river. The source of its White tributary was found by John Hanning Speke.

ANSWER: **Nile** River [or en-**Nil**; or an-**Nil**]

[10] By the late 19th century, the company named for this man had exclusive rights to passenger steamship operations on the Nile. This Fleet Street merchant's travel books popularized his namesake quick trips through a country among the masses.

ANSWER: Thomas **Cook** [accept **Cook's** tour]

[10] Cruising the Nile became popular again with the opening of one of these businesses in Cairo in 1959.

American POWs in Vietnam nicknamed the Hỏa Lò Prison the "Hanoi" one of these places.

ANSWER: **Hilton** hotel [or **Hilton** Hotels & Resorts; prompt on hotel]

<Bentley, Mixed/Other/General Knowledge>

8. This measure can be computed at the site level, signified alpha, or at the community level, signified gamma. For 10 points each:

[10] Name this property of a community that measures the variety of life that is found in an ecosystem. It can be measured with Shannon's index.

ANSWER: **biodiversity** [or **biological diversity**; or **species diversity**; prompt on diversity]

[10] These biomes are extremely biodiverse, containing around 40 to 75 percent of all species in the world. The largest of these biomes covers the Amazon Basin and spans over 2 million square miles.

ANSWER: tropical **rainforests** [prompt on forests or jungles]

[10] Shannon's index of diversity prioritizes this property of the system over just the number of species found. This property is a measure of how close in numbers the size of each species is.

ANSWER: species **evenness**

<Grames, Science - Biology>

9. The SEC is often criticized for facilitating this practice, since many of its employees later work in the financial firms they regulated. For 10 points each:

[10] Give the two-word term for this practice, named for a metaphorical entrance through which individuals alternate between taking jobs in an industry and jobs regulating that industry.

ANSWER: **revolving door**

[10] The revolving door contributes to this phenomenon, in which regulatory agencies become dominated by interest groups representing industries they regulate. The theory of it was largely developed by George Stigler.

ANSWER: regulatory **capture**

[10] This central bank of the U.S. has rules to slow the "revolving door" by delaying its employees from working for financial firms that they have regulated. It is currently chaired by Jerome Powell.

ANSWER: **Federal Reserve** Bank [or The **Fed**]

<Alston, Social Science - Economics>

10. Holders of the "devil's advocate" position argue against conferring this status on a deceased individual. For 10 points each:

[10] Name this status that the Catholic Church confers through canonization.

ANSWER: **sainthood** [accept any answers indicating being a made a **saint**]

[10] Before canonization, a bishop declares a person to be a servant of God, and the Pope grants the individual this status. The term for this status is frequently used to identify the saint who wrote an *Ecclesiastical History of the English People*.

ANSWER: **venerable** [or **Venerable**; accept **Venerable Bede**]

[10] Before canonization, an individual undergoes this process to be called "Blessed." To be considered for this process, a deceased individual must have performed at least one posthumous (**POSS-chuh-miss**) miracle.

ANSWER: **beatification** (bee-AT-ification) [accept word forms like **beatified**]

<Jose, RMP - Bible/Christianity>

11. This sculpture demarcates the eastern end of the "Path of Heroes" in the city of Târgu Jiu (**TER-goo JEE-oo**).

For 10 points each:

[10] Name this tribute to the Romanian soldiers who died in World War I. It was built by stacking 17 and a half rhomboidal pieces of cast iron onto one another.

ANSWER: **Endless Column** [or **Coloana fara Sfarsit** or **Coloana Infinitului**]

[10] *The Endless Column* is a work by this Romanian sculptor, who also created the abstract series *Bird in Space*.

ANSWER: Constantin **Brâncuși** (brin-KOOSH)

[10] The group of sculptures at Târgu Jiu also includes this work by Brâncuși, which consists of twelve chairs surrounding the title object. Critics have said that the central object represents the passage of time.

ANSWER: *The **Table of Silence*** [or **Masa Tacerii**]

<Jose, Arts - Sculpture>

12. Answer the following about short poems by American poets, for 10 points each.

[10] An Imagist poem by William Carlos Williams claims that "so much depends" upon a "red" one of these objects, which is "glazed with rainwater" and stands "beside the white chickens."

ANSWER: **wheelbarrow** [accept "The **Red Wheelbarrow**"]

[10] This novelist wrote thousands of *haiku* near the end of his career. In his most widely-read novel, the lawyer Boris Max defends the protagonist after he is charged with the murder of his girlfriend.

ANSWER: Richard **Wright** (The novel is *Native Son*.)

[10] Though today most readers study the full five-stanza version of this poem, the author's final version of this poem was cut down to only three lines, the first of which begins "I, too, dislike it."

ANSWER: "**Poetry**" (by Marianne Moore)

<Jose, Literature - American>

13. This cabinet department's Washington headquarters flies a special flag when its current head, Ryan Zinke (**zinky**), is in the building. For 10 points each:

[10] Identify this cabinet department that oversees the Office of Insular Affairs and Bureau of Indian Affairs.

ANSWER: United States Department of the **Interior** [or **DOI**]

[10] This state was exempted from Zinke's Gulf of Mexico drilling plan in what *Politico* reported was staged as a political win for Governor Rick Scott. The Parkland School Shooting took place in this state.

ANSWER: **Florida**

[10] It's not the Grand Staircase-Escalante monument, but Donald Trump agreed to Zinke's recommendation to reduce the scope of this National Monument in San Juan County, Utah. The name of this monument comes from its distinctive twin buttes (**byoots**).

ANSWER: **Bears Ears** National Monument

<Bentley, Current Events - United States>

14. The electrolysis of brine produces this compound along with chlorine and hydrogen gas. For 10 points each:

[10] Identify this compound produced in the chloralkali (**klor-AL-kuh-lye**) process. Combining this compound with hydrochloric acid produces table salt and water.

ANSWER: **sodium hydroxide** [or **NaOH**; prompt on **lye**]

[10] Dissolving sodium hydroxide into water produces hydroxide ions, which have this charge. All halides have this charge.

ANSWER: **negative one** [or **-1**; prompt on **negative**; do not accept or prompt on "one"]

[10] Sodium hydroxide has a high value for this property, defined as affinity for atmospheric water vapor. Therefore, exposing sodium hydroxide solid to air will immediately cause water to begin condensing.

ANSWER: **hygroscopic** [or **hygroscopy**; or **deliquescence**; do not accept or prompt on "hygroscopic"]

<Prieto, Science - Chemistry>

15. An encyclopedia in this field was written in the early 10th century by al-Razi. For 10 points each:

[10] Identify this field whose medieval Muslim practitioners studied books such as the *Qanun* by Ibn Sina alongside Greek texts by Hippocrates.

ANSWER: **medicine** [or **surgery**; or **health**; or **medical science**; or equivalents; accept *The Canon of Medicine* or *al-Qānūn fī al-Ṭibb*]

[10] al-Razi worked in this city, the capital of the Abbasid Caliphate. The House of Wisdom was located in this city.

ANSWER: **Baghdad**

[10] The physician Abu al-Qasim did pioneering work on dissections and removing bladder stones in this city. Abd ar-Rahman III ruled from this city, whose massive Great Mosque contained a Court of the Oranges and was converted to a Catholic cathedral in 1236.

ANSWER: **Cordoba** [or **Cordova**]

<Bentley, History - World>

16. In the story "When the World Screamed," this character is part of an expedition to drill the mantle, but he later realizes that the core of the Earth may be a sentient entity. For 10 points each:

[10] Name this character. In a 1912 novel, he takes the narrator Edward Malone to South America, where they are attacked by pterodactyls.

ANSWER: Professor **Challenger**

[10] Professor Challenger appears in this British author's novel *The Lost World*. His last Challenger novel, *The Land of Mist*, was influenced by his belief in Spiritualism, which also led him to defend the veracity of the Cottingley Fairies photographs.

ANSWER: Arthur Conan **Doyle**

[10] Another professor, James Moriarty, is the arch-nemesis of this detective, whose adventures are chronicled by John Watson in Doyle's best-known works.

ANSWER: **Sherlock Holmes** [accept either underlined name]

<Jose, Literature - British>

17. Identify the following about critic Robert Hughes's thoughts on Edward Hopper, for 10 points each.

[10] Hughes contrasts the "lush and solid" New York of the Ashcan artists with the "paper-thin" buildings in this "geometrical aquarium." This Hopper painting depicts four lonely people in a café below a sign for Phillie's cigars.

ANSWER: **Nighthawks**

[10] Hughes posits that a Hopper painting titled for this period of time, in which long shadows extend from the fire hydrant and barber pole on an empty street, was derived from a stage backcloth.

ANSWER: *Early* **Sunday Morning**

[10] First name acceptable. Hughes thinks that the difficult relationship between Hopper and this woman, his wife and model, is best encapsulated in Hopper's 1956 painting *Four Lane Road*.

ANSWER: **Jo** Hopper [or Jo **Nivinson**]

<Bentley, Arts - Painting>

18. Answer the following about Eos (**AY-ohss**), the goddess of the dawn, for 10 points each:

[10] Memnon and Emathion (**ee-MAY-thee-on**) are Eos's sons by this Trojan prince, who after many years turned into either an invalid or a cricket after Eos failed to ask that he be granted eternal youth to go along with his immortality.

ANSWER: **Tithonus**

[10] Eos also kidnapped this Aeolian (**ee-OH-lee-an**) hero from his wife Procris; after returning him to her, their continuing suspicions of each other's fidelity eventually resulted in this man accidentally slaying Procris with a never-missing javelin.

ANSWER: **Cephalus**

[10] Eos repeatedly kidnapped attractive men because an early dalliance with Ares caused this jealous goddess of love to curse her with insatiable desire.

ANSWER: **Aphrodite**

<Carson, RMP - Greco-Roman Myth>

19. This regime is defined as when the square of the aperture size divided by the product of the wavelength and the distance from the aperture is much less than one. For 10 points each:

[10] Name this approximation useful in describing parallel and monochromatic light approaching an object set at a large distance away from the image plane.

ANSWER: **Fraunhofer** diffraction regime [accept **far-field** diffraction regime]

[10] Diffraction can be modeled by viewing each point on a wavefront as a source of a spherical wave, as stated by this principle named for a Dutch physicist.

ANSWER: **Huygens**–Fresnel principle

[10] Christiaan Huygens (**HIGH-guns** or **HOY-guns**) created a telescope with two of these curved objects, which use refraction to focus light to a point.

ANSWER: **lenses** [accept convex **lenses**; accept concave **lenses**]

<Kalathiveetil, Science - Physics>

20. Identify the following about early anti-Protestant measures in France, for 10 points each.

[10] Henry II let this religious organization, founded by Ignatius of Loyola, set up a college in Paris in 1551.

ANSWER: **Jesuits** [or **Society of Jesus**; or **Societas Iesu**]

[10] Several phases of the French Wars of Religion were instigated by this woman, the widow of Henry II and regent to three of her sons. She was blamed for the St. Bartholomew's Day Massacre.

ANSWER: **Catherine de' Medici** [or **Caterina de' Medici**; or **Catherine de Medicis**]

[10] Anti-Protestant persecution increased after this event in 1534 where the namesake broadsheets were put up around Paris denouncing the Catholic mass.

ANSWER: **Affair** of the **Placards** [or **Affaire des Placards**]

<Bentley, History - European>

21. In the 19th century, people addicted to this drug were said to suffer from the "soldier's disease" due to the widespread addiction rates of injured Civil War soldiers. For 10 points each:

[10] Name this drug from which morphine is derived. Two 19th-century wars in China are named for this drug.

ANSWER: **opium** [or **poppy tears**]

[10] Opium was first federally regulated by this 1915 act named for a New York Congressman. The 1925 case of *Linder v. United States* overturned this bill's authority to target doctors for prescribing opium.

ANSWER: **Harrison** Narcotics Tax Act

[10] This laudanum addict entered a severe depression following the death of her son Willie from typhoid fever. In 1872, she was photographed by William H. Mumler with the "ghost" of her slain husband.

ANSWER: Mary Todd **Lincoln** [or Mary Ann Todd **Lincoln**; or Mary Ann **Todd**]

<Bentley, History - American>

