Scobol Solo 2021

Packet 11 (Round 11)

1. When this architect was broke near the end of his life, his former draftsman William Presto hired him to design the façade of the Krause Music Store in Chicago. This architect's only building in New York City, to which he was forced to add six angels on the top, is the Bayard–Condict Building. This architect was referred to as the "Lieber Meister" [LEE-bur MAISS-tur] by an architect whom he eventually fired for moonlighting in 1894. This architect partnered with Dankmar Adler on several buildings, such as the Guaranty Building in Buffalo, the Auditorium Theatre in Chicago, and the Wainwright Building in St. Louis. Name this mentor of Frank Lloyd Wright.

Answer: Louis (Henry) <u>Sullivan</u>

2. The rhyme scheme of this poem pulls every group of four lines together, but there is a break between the lines "Dim through the misty panes and thick green light, / as under a green sea, I saw him drowning" and the next two lines. The first stanza of this poem says of a group of men, "Many had lost their boots, but limped on, blood-shod." This poem is almost entirely in English except for the last lines, which quote Horace, and part of that quote is this poem's title. Name this poem about a chlorine gas attack during World War I that was written by Wilfred Owen.

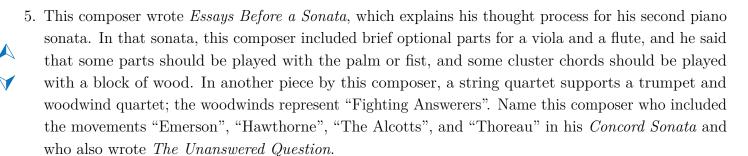
Answer: "Dulce et Decorum Est" [DULL-kay et day-KOR-um EST]

3. The first Hume-Rothery rule states that two values of this quantity need to be within 15% of each other for an element to dissolve in a metal. Elements have different values for this quantity based on the type of bond they are in, but a theoretical value is calculated using the fine structure constant and is named for Niels Bohr. An unbound value of this quantity is named for van der Waals. One of the trends for this quantity on the periodic table is called the lanthanide contraction. Name this measure of the physical size of an atom.

Answer: atomic $\underline{\text{radius}}$ [accept Bohr $\underline{\text{radius}}$; prompt on atomic $\underline{\text{size}}$ or similar descriptions]

4. During this incident, Oliver Miller Jr. and James McFarlane were killed during fighting that occurred when they attempted to get John Neville to resign at Bower Hill. This incident ended with a large show of force by Daniel Morgan, who was commanded by "Light-Horse Harry" Lee, and it led to two treason convictions that were later pardoned. Because of satire written at the beginning of this incident, the federal army was called the Watermelon Army. This incident was in reaction to a tax supported by Alexander Hamilton. Name this incident that took place in western Pennsylvania when several people refused to pay an excise tax on a type of liquor.

Answer: Whiskey Rebellion or Whiskey Insurrection



Answer: Charles (Edward) <u>Ives</u>

Check the score.

6. In Eastern mythology, there is sometimes confusion between these animals and serpents because the word "naga" can be used for both. The *Amarakosha* claims that eight of these animals carry the world. Those animals of this type were born just after the bird Garuda [gah-ROO-duh], and one of these animals was Airavata ["eye"-RAH-vuh-tuh], who is often pictured carrying Indra. The goddesses Vinayaki and Malini both had heads of these animals. Another story about the head of one of these animals involves a god coming between Shiva and Parvati. Name these animals that, from the neck up, look like Ganesha.

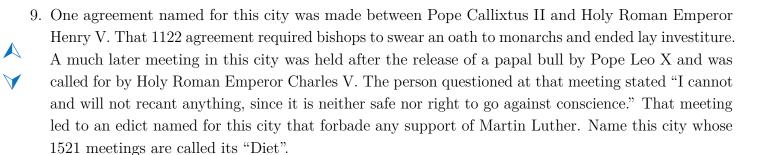
Answer: <u>elephant</u>s

7. The ultra-short-pulse types of these devices are able to focus huge amounts of energy thanks to work by Donna Strickland and Gérard Mourou [moo-roo]. Those people shared a Nobel Prize with Arthur Ashkin, who used these devices to manipulate atoms and cells. The outputs of these devices are highly collimated [KAH-lim-ay-tid], which means that they do not diverge. Inside these devices, pumping of the gain medium gets molecules out of their ground state, which is called population inversion. One common gain medium contains helium and neon. These objects are often used to create holograms. Name these objects that produce coherent—often red—light and are used in barcode scanners.

Answer: <u>laser</u>s

8. One character in this novel thinks he has a job but is told that he should have showed up on Thursday, so another manager was hired. Later in this novel, that character reads aloud love letters that he is supposed to return to a woman. That action by Joshua Jopp in this novel leads to the death of Lucetta Temple·man. For much of this novel, one of the characters is believed to be lost at sea, but he returns and is able to attend the marriage of his daughter Elizabeth-Jane to Donald Farfrae. Name this novel in which Richard Newson purchases Michael Henchard's wife, written by Thomas Hardy.

Answer: The <u>Mayor of Casterbridge</u>



Answer: Worms, (Rhineland-Palatinate, Germany) or Worms, Holy Roman Empire

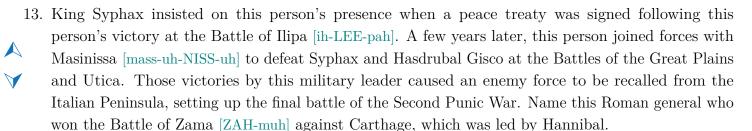
10. Wood Mountain Regional Park is in this Canadian province and is where Sitting Bull spent a few years before returning to the U.S. to surrender. Cree Lake and Wollaston Lake are in this province, as is most of Reindeer Lake, which is on its east border. Though this province does not contain most of the Canadian oil sands, it does contain Uranium City on the shore of Lake Athabasca [ath-uh-BASS-kuh]. This is the least populous province west of Quebec. Prince Albert and Moose Jaw are among this province's more populous towns. Name this Canadian province between Alberta and Manitoba whose capital is Regina [ruh-JY-nuh].

Answer: <u>Saskatchewan</u> [<u>sass-KAT-cheh-wahn</u>]

Check the score.

- 11. This phenomenon was first identified by research at Hubbard Brook in New Hampshire during the 1960s and '70s. During the 1990s, the United States addressed this specific phenomenon with an emission trading system that affected electricity generation. This problem was caused primarily along the Ohio River but affected New York and New England. This phenomenon can involve nitrogen oxides, but more often it consists of sulfur dioxide falling to the ground. When this happens, a pH that is typically around 5.6 drops below 5. Name this type of pollution consisting of corrosive precipitation.
 - Answer: acid rain [or acid deposition; prompt on answers involving sulfur dioxide]
- 12. One of this author's characters is traumatized by the death of her older sister, Dura. That character, Tashi, grew up in the fictional nation of Olinka, which this author had written about in an earlier novel. Before writing *Possessing the Secret of Joy*, this author wrote about Tashi's husband Adam and his sister Olivia being taken away from their mother at a very young age. Their mother, who writes many letters to God, is Celie [SEE-lee]. Name this author who wrote about the difficulties of black women in novels such as *The Color Purple*.

Answer: Alice (Malsenior Tallulah-Kate) Walker



Answer: (Publius Cornelius) <u>Scipio</u> Africanus [<u>SKIP-ee-oh</u> af-rih-KAN-uss or <u>SIP-ee-oh</u> af-rih-KAN-uss] [prompt on <u>Africanus</u>]

14. Matt Gaetz ["gates"] criticized this person's anti-extremism stand-downs in 2021, and this person told Gaetz "We do not teach critical race theory, we don't embrace critical race theory, and I think that's a spurious conversation." This person's stand-downs did include sensitivity training. Gaetz accused this person of being against patriotism instead of radical Islamic terrorism. From 2013 to 2016, this person was the leader of CENTCOM [sent-kahm], and he is now a member of President Biden's cabinet. Name this first African-American Secretary of Defense.

Answer: Lloyd (James) Austin (III)

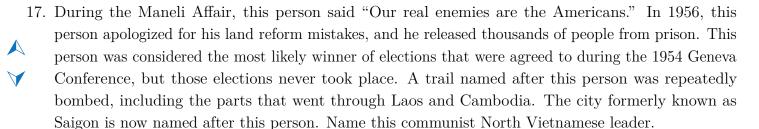
15. This artist said "I love circles today in the same way that previously I loved, for example, horses." That quote is from about the same time that this artist painted Several Circles. A few years earlier, this artist painted Farbstudie Quadrate [FARB-stoo-dee-uh kwad-RAH-teh], which in English is sometimes called Squares with Concentric Circles. Before this painter joined the Bauhaus, he referred to his simpler paintings as "improvisations" and his complex works as "compositions". This person's painting of a person on a white horse inspired the name of an art movement. Name this Russian-born painter of The Blue Rider.

Answer: Wassily (Wassilyevich) Kandinsky [VASS-ih-lee kan-DIN-skee]

Check the score.

16. This adjective can describe the plane whose normal vector equals the components of a gradient. Given a point outside of a circle, there are exactly two segments from the circle to the point that can be described by this adjective, and they are congruent to each other. A line described by this adjective can be defined as the limit of secant lines, and such a line's slope is the function's derivative. If a line can be described by this adjective relative to a circle, then the line is perpendicular to a radius of the circle. Give this adjective for a line that touches a curve without crossing it.

Answer: <u>tangent</u> (line or plane)



Answer: <u>Ho</u> Chi Minh [prompt on <u>Nguyen [wen]</u>; accept <u>Nguyen Sinh Cung</u> or <u>Nguyen Tat Thanh</u> or <u>Nguyen Ai Quoc</u>]

18. This title character stands quietly with his arms folded throughout a night while his father repeatedly checks on him. Eventually, the father tells this title character to go to the forest while the father goes to the river to perform the first ablution. Before this title character leaves, he joins the Samanas [suh-MAH-nuhs] with his friend Govinda. This title character fathers a son with Kamala, but she gets bitten by a snake. This title character spends time with Vasudeva, who is an enlightened ferryman. Name this title character of a novel by Hermann Hesse.

Answer: Siddhartha

19. This person wrote the aphorism "Truth will sooner come out from error than from confusion." This person referred to common mistakes in human thinking as the idols of the Tribe, of the Cave, of the Marketplace, and of the Theater. Thomas Hobbes worked as a transcriber for this person, and credit for the phrase "scientia [skee-EN-chuh] potentia est", which means "knowledge is power", belongs to the two of them. A novel by this person describes Salomon's House, which is an ideal college, on the mythical island of Bensalem [BEN-suh-lem]. Name this English writer of New Atlantis and Novum Organum who helped develop the scientific method.

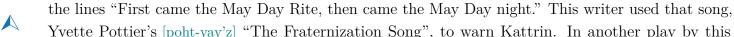
Answer: Francis <u>Bacon</u>(, 1st Viscount St. Alban)

20. Mast cells produce interleukin 4, which changes some of these cells and causes them to release more interleukin 4. Human immuno deficiency viruses take over these cells and are often detected by looking for a decrease in the number of these cells. These cells have CD4 proteins on their surfaces, which bind to class II major histo compatibility complexes and are the reason why these cells are sometimes called CD4-positive cells. Name these immune system cells that are produced in the thymus along with killer cells and which often activate B cells.

Answer: <u>helper T</u> cells or <u>T helper cells</u> or <u>helper T</u> lymphocytes [prompt on <u>T</u> cells or <u>helper cells</u>; accept <u>CD4+</u> cell before "CD4" and prompt thereon thereafter; prompt on innate <u>immune</u> cells]

This is the end of regulation. Check the score. If it is tied, proceed to overtime tossups. If it is not tied, the game is over.

TB21. One of this writer's characters says that she grew up in Flanders' fields and then sings a song with



writer, Chief of Police Tiger Brown tries to protect the protagonist from Jonathan Jeremiah Peachum. That play includes Kurt Weill's ["vile"'z] songs "Pirate Jenny" and "The Ballad of Mack the Knife". Name this German playwright of *Mother Courage and Her Children* and *The Threepenny Opera*.

Answer: (Eugen) Berthold (Friedrich) Brecht [BAIR-tawlt brekt]

If the score is still tied, continue. If it is not tied, the game is over.

In 2006, this country had two brothers serving as president and prime minister, but Prime Minister Kaczynski [kah-CHIN-skee] lost a 2007 parliamentary election and President Kaczynski died in a 2010 plane crash. In 1990, this country held its first presidential election since 1926, and it was won by a person who had been a ship-yard electrician and had led a union-based movement that ended Soviet-influenced Communist rule in this country. That person, Lech Wałęsa [lek vah-WEN-suh], was the leader of this country's Solidarity movement. Name this country between Germany and Belarus [BEH-luh-roos] whose capital is Warsaw.

Answer: (Republic of) Poland or (Rzeczpospolita) Polska

If the score is still tied, continue. If it is not tied, the game is over.

TB23. This letter represents the magnetic vector potential whose curl equals the magnetic field. This letter represents a quantity that is the derivative of velocity with respect to time. This letter forms a word used as an indefinite article. This letter is typically used for the only variable that appears in the denominator of the quadratic formula. Name this first letter.

Answer: $\underline{\mathbf{a}}$

There are no more overtime questions available. If the score is still tied, contact the control room for further instructions. If it is not tied, the game is over.