

Scobol Solo 2021

Packet 5 (Round 5)

1. One painting by this artist portrays Viscount Lepic ["vie-count" luh-peek] and his daughters wearing grey coats and walking their dog. This painter of *Place [plahss] de la Concorde* made a portrait of Mary Cassatt [kah-SAHT] leaning forward in her chair and holding a spread of photos. Several of this painter's relatives lived in the U.S., and one of his paintings set there shows a man reading a newspaper and was made for a textile manufacturer. That work is *A Cotton Office in New Orleans*. Name this painter who is the namesake of a type of tutu thanks to works such as *The Green Dancer*, *The Ballet Class*, and *Ballet Rehearsal on Stage*.

Answer: (Hilaire-Germain-)Edgar Degas [day-gah]

2. These phenomena are measured on the Sieberg-Ambraseys scale. Meteors or landslides can cause "mega-" versions of these phenomena. The monitoring for these phenomena uses bottom pressure recorders that send information every fifteen minutes, or every 15 seconds in Event Mode. Those recorders are connected to surface buoys and are used in the Pacific Ocean. These phenomena are caused by earthquakes or volcanic eruptions in large lakes or oceans. Identify these large waves with a Japanese name.

Answer: tsunamis [prompt on tidal waves]

3. In the first chapter of Arundhati [uh-ROON-duh-tee] Roy's *The God of Small Things*, there is a flashback to one of these events in 1969 at which Ammu, Estha, and Rahel stand apart from everybody else, then go to a police station. In *Antigone* [an-TIG-uh-nee] by Sophocles [SAH-fuh-kleez], the title character is imprisoned for carrying on with one of these events despite the wishes of Creon [KREE-ahn]. At the end of the *Iliad*, Achilles allows Priam [PRY-am] to hold this type of event for Hector. Name these events that sometimes followed the use of a burning pyre.

Answer: funerals [accept proper burials]

4. This person and Lisa Dickey argued that politics should be like Farmville in their book *Citizen·ville*. This person's 2021 effort to add 4.2 billion dollars to a bullet train project was rejected. This person appointed Rob Bonta as his state's attorney general when Xavier Becerra [bay-SAIR-uh] joined President Biden's cabinet, and he also appointed Alex Padilla [pah-DEE-yah] as a U.S. senator. This person's critics, who accuse him of favoring illegal immigrants and supporting high taxes, organized a 2021 recall election that failed. Name this governor of California.

Answer: Gavin (Christopher) Newsom

5. This country's Revolution of 1772 led to a new Constitution that was later modified by the Union and Security Act. The House of Vasa ruled this country in the 16th and 17th centuries, while the House of Bernadotte is its current line. In the Treaty of Nystad [NEE-stahd], this country gave up a lot of territory to Russia after losing the Great Northern War, which for the most part was fought while this country was ruled by Charles XII [12]. This country grew in power in the early 17th century under the leadership of Gustavus Adolphus. Name this Scandinavian country between Norway and Finland.
Answer: (Kingdom of) Sweden [or (Konungariket) Sverige]

Check the score.

6. Richard Feynman ["FINE"-mun] used this rule and energy minimization to calculate the Bohr radius. This rule applies to non-commuting, self-adjoint operators, including components of angular momentum. In a formal statement of this rule, the product of two standard deviations is greater than or equal to half of the reduced Planck constant. This rule's namesake justified it using a thought experiment in which a photon is used to measure aspects of an electron. Name this principle of quantum mechanics whose most common form states that the more precisely one knows a particle's position, the less precisely one knows its momentum, and vice versa.
Answer: Heisenberg uncertainty principle or indeterminacy principle [prompt on Heisenberg]
7. This leader says "He was a gentleman on whom I built an absolute trust" about a man who was executed for committing treason against this person. This leader's last line begins "Give me your hand; conduct me to mine host." A woman claims that she would have murdered this leader had he not looked like her father sleeping. The person who does kill this character asks "Is this a dagger which I see before me, the handle toward my hand?". This character's sons are Donalbain and Malcolm. Name this king who is killed by Macbeth.
Answer: King Duncan
8. The poet Heinrich Heine ["HI"-nuh] coined a word to describe the excitement around this person's performances. This musician is credited with inventing the piano recital. In the 1850s, this composer published separate works based on the poetry of Victor Hugo and Lord Byron [pause] and a piece that started out as an introduction to this composer's *The Four Elements*. This composer also wrote a set of 19 piano pieces that include slow *lassan* and fast *friska* sections. Name this composer whose *Les préludes* [lay pray-lood] is one of the earliest symphonic poems and who composed *Hungarian Rhapsodies*.
Answer: Franz Liszt [or Liszt Ferenc]
(The word Heine coined was "Lisztomania".)

9. Al Gore called for a global version of this initiative in the book *Earth in the Balance*. The actual leader of this initiative said that it was directed “against hunger, poverty, desperation, and chaos”. This initiative helped fund the Office of Policy Coordination within the Central Intelligence Agency. A punitive plan named for the Treasury Secretary was not used in favor of this generous plan named for the Secretary of State. That alternative was the Morgenthau Plan. Name this initiative that spent a lot of money on Western Europe after World War II.

Answer: Marshall Plan or European Recovery Program or ERP

10. The third Sunday during this period of time is called Gaudete [GOW-day-tay] Sunday. It is common to use four candles during this period, one lit on each of its Sundays, sometimes surrounding a white candle that is lit at the end of this period. This period begins a week after the Feast of Christ the King. This period mostly overlaps the Eastern Orthodox Nativity Fast, though this period starts a little later. Calendars representing this time of year often have little doors that are numbered 1 through 24 or 25. Name this time of year that lasts from the fourth Sunday before Christmas until Christmas Eve.

Answer: Advent [accept Nativity Fast before it is mentioned]

Check the score.

11. In a play by this writer, Keller says “You’re always reading the book section and you never buy a book”, to which Chris replies “I like to keep abreast of my ignorance.” This writer portrayed Chris trying to marry Ann, who is still hopeful that Chris’s brother Larry is alive. In another play by this writer, the protagonist claims “I’m vital in New England.” This writer portrayed that man as being obsessed over his sons’ high school careers, which include an F in math earned by Biff. Name this playwright of *All My Sons* who wrote about Willy Loman in *Death of a Salesman*.

Answer: Arthur (Asher) Miller

12. The creation of this type of cell is slowed down by the protein delta homolog 1. This type of cell in the body is the primary source of leptin, which acts on the hypo-thalamus [“HI”-poh-THAL-uh-muss]. Many of these cells exist alongside fibro-blasts and macro-phages in the hypo-dermis. There are two types of this cell, with the brown ones containing more cyto-plasm than the white ones. The brown ones generate heat, while the white ones store energy that can be used by the rest of the body during exercise. Name these cells that contain a lot of tri-glycerides and which form soft padding in the body.

Answer: fat cells or adipose cells [or adipocytes]

13. During this war, Redvers Buller was given the nickname “Reverse Buller” after losing at Colenso and Spion Kop [spee-AWN kawp]. Buller traveled to this war with Winston Churchill, who covered this war as a journalist before being captured and then escaping prison. The Battle of Colenso followed battles at Stormberg and Magers-fontein [MAH-gurs-fawn-tayn] as losses for the British during this war’s Black Week. At the beginning of this war there were attacks against the towns of Mafeking [MAFF-uh-keeng], Ladysmith, and Kimberley. At the end of this war, the U.K. took control over the Transvaal Republic and the Orange Free State. Name this war fought from 1899 to 1902 in what is now South Africa.

Answer: (Second) Boer War [accept Anglo-Boer War; prompt on South African War]

14. This country’s Guainía [gwy-NEE-ah] Department has a salient [SAY-lee-ent] extension and includes the city of Inírida [ee-NEE-ree-dah]. This country’s eastern border goes by its city of Yavaraté [yah-vah-rah-TAY], which is near the Vaupés [“VOW-pace”] and Maya rivers. This country was awarded the city of Leticia by the League of Nations, and that is its southernmost city, located near Tres Fronteras. This country’s north coast includes its cities of Barranquilla [bah-rahnh-KEE-yah] and Cartagena [kar-tah-HAY-nah], while its city of Cali has easy access to its Pacific coast. This country is between Ecuador and Venezuela and just south of Panama. Name this country that contains the city of Medellín [meh-deh-YEEN] and has its capital at Bogotá.

Answer: (Republic of) Colombia [or (República de) Colombia]

15. This opera contains a bass aria with long series of 16th notes in which a doctor sings “It takes more than that, my girl, to deceive me with success.” That aria, “A un dottor della mia sorte [SOR-tay]”, is sung in this opera by Bartolo. This opera begins with a serenade by a character pretending to be a poor student named Lindoro. Soon after that, the title character of this opera sings “Largo al factotum”, in which he mockingly repeats his name. Name this opera by Gioachino [joh-ah-KEE-noh] Rossini that is based on the same trilogy of books as Mozart’s *The Marriage of Figaro*.

Answer: *The Barber of Seville*(, or *The Useless Precaution*) [or *Il barbiere di Siviglia*(, ossia *L’inutile precauzione*)]

Check the score.

16. This quantity is proportional to the square root of the frequency of characteristic X-rays from elements, according to a law that is often expressed with the Rydberg constant and that used to be justified by the Bohr model. That relationship between this quantity and frequency is Moseley’s law. The so-called “effective” type of this value for a complex is based on negative charge, which contrasts with this value for an element. The ability to measure this quantity led to the discovery of several elements, and the discovery of the neutron led to an explanation of what this number represents. Name this number that is used to place elements in the periodic table, and which is 1 for hydrogen and 2 for helium.

Answer: atomic number [accept proton number or number of protons in a nucleus; prompt on Z]

17. When a famous evangelist died, this person wrote a poem that begins “Hail, happy Saint, on thy immortal throne!”. That work calls itself an elegiac [el-uh-JY-ik] poem. Another work by this poet praises a leader and advises him “Proceed, great chief, with virtue on thy side, / thy every action let the Goddess guide.” That work, written soon after this person gained fame for the collection *Poems on Various Subjects, Religious and Moral*, is “His Excellency General Washington”. This poet began another work “’Twas mercy brought me from my Pagan land.” Name this 18th-century poet who wrote “On Being Brought from Africa to America”.

Answer: Phillis Wheatley (Peters) [accept either underlined name]

18. One cause of this rebellion might be the refusal of Issachar Jacox Roberts to baptize a person who had studied with him. The leader of this rebellion transformed the God-Worshipping Society that was centered in the Thistle Mountains, and this rebellion was eventually helped by the Small Swords Society. The leaders of this rebellion used a name that meant “Heavenly Kingdom of Great Peace”. Several European countries helped end this rebellion so they could continue policies agreed to after the First Opium War. Name this rebellion that caused tens of millions of deaths in 19th-century China.

Answer: Taiping Rebellion [accept Taiping Civil War or Taiping Revolution]

19. A commonly used textbook on this topic is by Andrew Carnie and subtitled *A Generative Introduction*. The hypothesis of the autonomy of this concept claims that this concept is arbitrary and is generally believed in generative semantics. Noam Chomsky wrote a book titled *Aspects of the Theory of* this concept, which followed his book arguing that this concept is independent from semantics by discussing the sentence “Colorless green ideas sleep furiously.” Name this set of rules that governs the way words are combined to form sentences in a language [pause] and the way symbols are combined to form expressions in a computer language.

Answer: syntax [accept syntactic]

20. One way to integrate this function is to set up a substitution that becomes $\frac{du}{1-u^2}$ [“d u over the quantity 1 minus u squared”], and one way to express the integral is the natural log of the absolute value of the sum of this function and a different function. One way to evaluate this function is to find the length of a segment that goes at an angle from the origin to the line $x = 1$. This function squared equals 1 plus the tangent function squared. For an acute angle in a right triangle, this function equals “hypotenuse over adjacent”. Name this reciprocal of the cosine function.

Answer: secant function [accept answers that additionally mention a variable; do not accept “cosecant”]

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.

^{TB}21. Around the turn of the 20th century, this painter became obsessed with death and painted *Young Man with a Skull* and *Still Life with a Skull*. The best-known of this painter's depictions of skulls is a close view of an arrangement of four skulls, called *Pyramid of Skulls*. This artist spent some of that time in Aix-en-Provence [ex an praw-vawnss], which allowed him to explore and paint Mont Sainte-Victoire [mawn san vik-twar]. Name this painter who, just before that last phase of his life, made a series of five paintings showing men sitting around small tables and playing cards.

Answer: Paul Cézanne [say-zan]

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

^{TB}22. This country's Operation Flood made it the world's largest milk producer. That work was set in motion by this country's second prime minister, Lal Bahadur Shastri. This country's third prime minister ordered Operation Blue Star in the Golden Temple Complex, and she was later assassinated by her bodyguards in 1984. She was the daughter of this country's first prime minister, who led this country after failed negotiations with the Muslim League led to this country's partitioning. Name this country that was headed by Jawaharlal Nehru [juh-WAH-hahr-lol NAY-roo] and Indira Gandhi after splitting with Pakistan.

Answer: (Republic of) India [or Bharat (Ganarajya)]

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

^{TB}23. The German alphabet has a letter that combines this letter with the letter 'z', but in Swiss German this letter is written twice instead of that letter. This letter, 'd', and 'r' are often used to represent physical displacement. This letter is also often used to represent entropy. This letter is placed at the end of many words to pluralize them. Name this letter that comes between 'R' and 'T'.

Answer: s

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.