

New Trier Scobol Solo 2014

Round 8



1. This musician's band included his wife Lil Hardin on piano, but he replaced her with Earl Hines, and they went on to record King Oliver's "West End Blues". This person and Hines also wrote a song with the first line "It was just one of those things", entitled "Muggles". While his wife was still in the band, his band recorded "Potato Head Blues" and was known as the Hot Seven. This person had a big hit in 1964 with "Hello, Dolly!". Name this trumpeter and singer who recorded a song that begins "I see trees of green, red roses too" and is entitled "What a Wonderful World".

Answer: Louis Armstrong

2. Baxter State Park contains one of the higher northern peaks in this mountain range, Mount Katahdin, which is near the Mahoosuc Range. One belt of these mountains is the Ridge and Valley Province. An early attempt to build a path through these mountains was the Wilderness Road. The highest mountain in this range is Mount Mitchell. This range includes the Blue Ridge and Great Smoky Mountains. The western part of this mountain range, called its plateau, is divided into the Catskills, Cumberlands, and Alleghenies. Name this mountain range extending from southeast Canada to Alabama that goes through many eastern U.S. states.

Answer: Appalachian Mountains [or Appalachians]

3. This empire used a *millet* system to tolerate religious minorities, known as *dhimmis*, within its borders. Groups of soldiers in this empire were called Janissaries, who revolted against an attempt to disband them in the Auspicious Incident. This empire lost to the Holy League at the naval battle of Lepanto. In the early 16th century, this empire defeated the Mamluk Sultanate and the Safavid dynasty under the leadership of Selim I, who was succeeded by Suleiman the Magnificent. This empire captured Constantinople from the Byzantine Empire in 1453. Name this empire, dissolved after World War I, that was nicknamed the "sick man of Europe".

Answer: Ottoman Empire [prompt on Turkish Empire or Turkey]

4. The speaker of this poem describes a man "forever panting, forever young" in its third stanza. This poem's speaker addresses an object which has a "brede / of marble men and maidens overwrought". This poem's speaker states that "human passion far above" leaves "a burning forehead, and a parching tongue." The speaker reassures a lover in this poem that his object of affection cannot fade, noting that "forever wilt thou love, and she be fair." This poem's speaker claims that "heard melodies are sweet, but those unheard are sweeter" and calls the title object a "sylvan historian". Name this poem which asserts that "beauty is truth, truth beauty", by John Keats.

Answer: "Ode on a Grecian Urn" [do not accept "Ode to a Grecian Urn"]

5. This country arrested Fauzia Allal Mohamed in August 2014, claiming that she planned to join ISIS after leaving its exclave city of Melilla. This country's justice minister resigned in 2014 following the government's decision not to enact his namesake Gallardon [gy-YAR-dohn] law limiting abortions. One region of this country is headed by Artur Mas, who has called for a referendum on independence, but that referendum is opposed by Prime Minister Mariano Rajoy [rah-HOY]. Felipe VI became its king in 2014 following the abdication of Juan Carlos I. Name this European country facing an independence movement in Catalonia.

Answer: (Kingdom of) Spain [or Reino de España]

6. This fictional character was struck by a Jezail bullet during the Second Anglo-Afghan War at the Battle of Maiwand. After being sent to England, he ran into an old friend named Stamford who helped him find a roommate. This character was notably absent from "The Adventure of the Blanched Soldier" because he left his roommate to get married to Mary Morstan. This doctor, who always narrated the works he appeared in, met his future wife after warning his roommate against using cocaine in *The Sign of Four*. Stapleton showed this man the Grimpen Mire in *The Hound of the Baskervilles*. Name this doctor who lived at 221B Baker Street with Sherlock Holmes.

Answer: Dr. John (James Hiram) Watson [prompt on answers containing only non-underlined names]

7. If there is no charge present, this value equals the square root of the quantity time derivative of electric field divided by curl of magnetic field. The reciprocal of this quantity gives the slope of the sides of a cone in spacetime that defines which events can be impacted by a given event. This value is in the denominator of beta, which is used to find the Lorentz factor. The second postulate of special relativity states that this value is constant. The square of this value equals the ratio of energy to mass. Name this value that is represented by a lowercase *c* and equal to about 3 times 10 to the 8th meters per second in a vacuum.

Answer: speed of light [prompt on c]

8. This battle began as an attempt to find aircraft carriers in the wake of the Battle of the Coral Sea one month earlier. American decryption efforts not only prepared the namesake atoll for the attack, but allowed U.S. carriers to launch a surprise attack on Japanese forces. Japan inflicted minimal damage on the namesake naval base, losing four aircraft carriers while the United States only lost one. This battle took place just after Japanese successes in the Solomon Islands campaign. Identify this June 1942 naval battle that saw the loss of the USS *Yorktown*, but was otherwise an American victory at an atoll located about halfway between North America and Asia.

Answer: Battle of Midway

9. This person's younger brother composed most of the piece that became known as Mozart's 37th symphony. One of this composer's works is *The Seven Last Words of Our Saviour on the Cross*. After the bankruptcy of his patron Count Morzin, this composer worked for Prince Paul Anton, writing symphonies that gained the nicknames "Morning", "Noon", and "Night". The G-major *Andante* movement in one of his symphonies features bassoons and plucked strings making a ticking sound, so it became known as the *Clock* symphony. That piece is one of his *London* symphonies. Name this "Father of the String Quartet" who composed 106 symphonies.

Answer: (Franz) Joseph Haydn

10. Though Rudolf Steiner wanted the English title of one of his books to be *Philosophy of Spiritual Activity*, it is usually titled *Philosophy of* (this concept). Søren Kierkegaard wrote that anxiety is the "dizziness" of this concept. B. F. Skinner described when the feeling of this concept is an unreliable guide in his book asking to move *Beyond* (this concept) *and Dignity*. The first amendment to the Constitution states that Congress cannot abridge the application of this concept to speech and other areas. Give this synonym of liberty and independence that refers to the absence of restraint.

Answer: freedom

11. Red rugs line the wall in the upper right corner of this painting. The duke for whom this painting is named is believed to have commissioned it to teach his wife about the roles she should play. This painting includes a girl searching through a chest in the background and a dog lying on the bed next to the central woman in this painting. That woman, who has a pose similar to a woman in a Giorgione [jor-JOH-nay] painting, lies nude on a bed, with one of her hands clutching a bunch of flowers and her other hand partly covering her nudity. Name this painting by Titian [TEE-shun] whose title associates the subject of the painting with the goddess of love.

Answer: Venus of Urbino

12. In some cases, setups for performing this process will include a Dean–Stark trap to remove water. The amount of theoretical plates needed for this process can be determined via the McCabe–Thiele ["teal"] method. It is difficult to obtain alcohol that is more than 96% pure because this technique cannot be executed completely on azeotropes [AY-zee-oh-"tropes"]. Setups for this process use a reflux condenser to collect the products. One form of this process commonly used in petroleum refining and the separation of air is called the "fractional" type. Name this process that separates liquids by their boiling points.

Answer: distillation [accept word forms]

13. Colombian priest Jesús Héctor Gallego Herrera [hay-ZOOS ayk-TOR “guy”-YAH-goh heh-RAIR-ah] was killed while opposing this country’s government, and his remains were never found. This country’s first female leader, Mireya Moscoso, was the widow of a man removed as this country’s president by three different coups, Arnulfo Arias. A region of this country was the subject of the Hay–Bunau-Varilla Treaty and Torrijos–Carter Treaties, leading to the loss of U.S. control of that region in 1999. The United States invaded this country in 1989, detaining its dictator Manuel Noriega. Name this country that used to be part of Colombia, and that allows ships to pass between the Atlantic and Pacific Oceans through its namesake canal.

Answer: (Republic of) Panama [or (República de) Panamá]

14. The mythology of this religious tradition claims that the first person was Manu. The Laws of Manu are part of this religion’s remembered texts, or Smriti. People who accept all of the major gods of this religion are called Smartists. One of its holidays is known as the festival of colors and celebrates the slaying of the demoness Holika, and this religion celebrates its goddess of prosperity during its festival of lights, Diwali. Its deities are praised in the Puranas, and its earliest texts are the Vedas. Its priests are called Brahmins. Name this religion adhered to by 80% of the population of India.

Answer: Hinduism

15. In one novel by this writer, a commanding officer threatens to horsewhip people if his purse is not found. In another novel by this author, a prince claims that Madame Stahl is bedridden due to vanity during a visit to a German spa. Another work by this author begins during the Melvinski trial, where workers try to determine what promotion they will receive upon hearing of the death of a colleague. That work is *The Death of Ivan Ilyich*. One of this author’s title characters, who helps her brother Stiva reconcile with his wife Dolly, eventually throws herself under a train. Name this author of *Anna Karenina* and *War and Peace*.

Answer: Leo (Lev Nikolayevich, Count Graf) Tolstoy

16. The first person prosecuted under the Civil Rights Act of 1964, who was later elected the governor of this state, was Lester Maddox. Supreme Court cases determining the legality of the death penalty determined the fates of this state’s Troy Gregg and William Furman. In this state, the death of Mary Phagan led to the lynching of factory superintendent Leo Frank. Before becoming president, Jimmy Carter was the governor of this state. Before working in Alabama, Martin Luther King, Jr. grew up in this state. Home Depot, Delta Air Lines, Coca-Cola, and CNN were started in this state. Name this state started by James Oglethorpe whose former capitals include Milledgeville and Savannah and whose current capital is Atlanta.

Answer: Georgia

17. A diode pump is a vacuum pump that is also known as this type of pump, and it is used in lasers that are replacing this type of gas laser. This term names the type of exchange that is common between two electrolytes. Proteins in lipid bilayer membranes that regulate cell volume form channels named for these particles because they allow these types of particles to pass into and out of cells. Plasma is made of these particles. Bonds of atoms with large differences in electronegativity are named for these particles. Names of these particles typically end with the suffix “-ide”, “-ite”, or “-ate”. Identify these atoms and collections of atoms that have a net charge.

Answer: ions

18. In one novel by this author, the leader of the Kolhouris tours America and is told to use machines, while the Ghost Shirt Society tries to destroy machines. In a story by this writer, intelligent people are forced to wear headphones that make loud noises according to rules enforced by the Handicapper General. In addition to *Player Piano* and “Harrison Bergeron”, this author wrote several works in which Eliot Rosewater is a fan of the science fiction writer Kilgore Trout. In this author’s best known work, the main character travels to the planet Tralfamadore after surviving the bombing of Dresden. Name this author of *Slaughterhouse-Five*.

Answer: Kurt Vonnegut (Jr.)

19. This function gives the length of a segment perpendicular to the terminal side of an angle going from the unit circle to the x -axis, and it also equals the length of a vertical segment from the terminal side to the point $(1, 0)$ [“one comma zero”]. The antiderivative of this function includes the opposite of the natural log of the absolute value of the cosine function, and the derivative of this function is always positive. The domain of this function is the same as the domain of the secant function since it is all numbers whose cosine is not zero. Name this function given by the ratio y divided by x on the unit circle, and the ratio “opposite leg over adjacent leg” on a right triangle.

Answer: tangent

20. A disease of this organ was the first to be recognized as an autoimmune disease. Another disease of this organ causes the eyes to bulge as a result of this organ being overactive. This organ, which is affected by Hashimoto’s disease and Graves’ disease, produces a hormone that opposes PTH and lowers blood calcium, called calcitonin. Underproduction of this organ’s namesake hormones results in cretinism, and this organ produces a pair of hormones called T_3 and T_4 , which contain iodine. Name this organ affected by goiter, a butterfly-shaped gland in the neck.

Answer: thyroid gland

- ^{TB}21. This adjective is used to describe the highest layer of permafrost, which thaws during the summer. When followed by “X”, this word names special controls used by websites that effectively only work in Internet Explorer. Sound waves are created for this type of noise cancellation. This adjective is used for the site where a substrate binds and catalysis occurs on an enzyme. This adjective is also applied to processes that use cellular energy to move chemicals across membranes against the concentration gradient, which is this type of “transport”. Name this adjective used to describe volcanoes that have recently erupted, and are thus neither extinct nor dormant.

Answer: active [accept ActiveX]

- ^{TB}22. This city’s Park of Princes lies near its Gate of St. Cloud in its southwestern Boulogne [boo-lohn-yuh] district. The “Peripheral Boulevard” surrounds this city and connects it to six national “autoroutes”. This city’s northern suburb of St. Denis [sawn deh-nee], nicknamed the ‘red city’, has a significant African Muslim population. The Grand Arch is actually a square-shaped building located in this city’s business district called La Defense, which is connected to this city by the Champs-Élysées [shawn zeh-lee-zay]. The garden of the Tuileries [twee-lur-ee] is adjacent to the Seine [sen] River and Louvre museum in this city, which also features the Cathedral of Notre-Dame [noh-tray dahm]. Name this French capital.

Answer: Paris, France

- ^{TB}23. Identify the body part that is unusually long in a Madonna painting by Parmigianino, is the preferred place for Count Dracula to bite his victims and drink their blood, and in human contains the Adam’s apple, carotid arteries, and throat.

Answer: neck [or throat]