

# New Trier Scobol Solo 2013

## Championship, Phase I



1. This senator has been censured by five Republican county organizations in his state, and the Republican Liberty Caucus has already endorsed Lee Bright against him in the 2014 primary. This senator is placing a hold on money to the Egyptian-American Enterprise Fund, and, following a *60 Minutes* segment on Benghazi, he vowed to block all Obama nominees until the senate heard more witness testimony. After Marco Rubio backed down, this senator introduced the Pain-Capable Unborn Child Protection Act in the Senate. He is from the same state as Tim Scott, and he took over the seat held by Strom Thurmond. Name this unmarried senator from South Carolina.

Answer: Lindsey (Olin) **Graham**

2. At one battle in this war, a stretcher-bound commander failed to keep his troops from being split by the enemy's T-shaped arrangement of forts. Despite Axel Roos's efforts, that leader was captured four years later by Ottoman forces at Bender. Following his defeat at Kliszów [KLIH-shoof] during this war, Augustus II was deposed as king of Poland. Cossack ruler Ivan Mazepa [mah-ZEH-pah] turned traitor in this conflict, and General Lewenhaupt [LEV-en-hawpt] and Field Marshal Rehnskiöld led a disastrous attack at Poltava. Name this war in which Peter the Great's Russian forces defeated Swedish forces under Charles the Twelfth.

Answer: **Great Northern** War [or **Second Northern** War or **Third Northern** War or **Twenty Years'** War; or **Stora nordiska** kriget; or **Velikaya Severnaya** voyna or **Dvadtsatiletnyaya** voyna; or **trzeci** wojna **północna** or **wielka** wojna **północna**]

3. One work by this painter is set between busts of Raphael and Michelangelo, and shows an elk walking past a memorial to Joshua Reynolds. Another work by this painter shows a drunk boy lying face down in its lower left corner next to a dog following sheep towards a cornfield. After the death of his wife, Maria Bicknell, he revisited a cathedral he had painted from the bishop's grounds and painted it below a rainbow, this time from the vantage of the meadows. This artist whose landscapes were set in an area of East England known as Dedham Vale painted a work that on its left side shows the house of Willy Lott by the River Stour. Name this painter who showed a vehicle being pulled by horses across that river in *The Hay Wain*.

Answer: John **Constable**

4. One of the leaders of what is now this country killed Baldwin I of Constantinople at the end of the Fourth Crusade. That leader, Kaloyan the Romanslayer, was part of its second empire, while during its first empire Boris I oversaw the Council of Preslav which put Simeon I in power. Its Committee for State Security killed dissident Georgi Markov in London during its communist period, during which this country was headed by Todor Zhivkov. This country was established in the Treaty of San Stefano, and after losing territory during World War One, this country joined the Axis in an attempt to get that territory back in World War II, making it easier for Germany to attack Greece. Name this country recently headed by soccer player Boyko Borisov.

Answer: Republic of **Bulgaria**

5. Degumming of plant oils is the removal of these specific molecules, which are used to build plasmalogens in animal cells. The enzyme flippase moves these molecules from the inner to the outer surface, and it is possible to scramble egg yolk into white because lecithin, one of these molecules, acts as a natural emulsifier. Some of these are used as surfactants. When arranged in a single layer, these molecules can form a micelle, but usually the hydrophilic heads points out while the hydrophobic tails point in, forming a namesake bilayer. Name this type of lipid composed composed of fatty acids, glycerol, and an anion, which makes up most of the cell membrane.

Answer: **phospholipid** [prompt on **lipid**]

6. The formation of this class of compounds is used to connect omega hydroxy acids to form cutin [KYOO-tinn]. One example of this class is used in the Tennessee Eastman acetic anhydride process. That chemical in this class, methyl acetate, can be formed by combining acetic acid with methanol using sulfuric acid as a catalyst. One lipid in this class includes triglyceride, which is hydrolized in saponification. The combination of a carboxylic acid with an alcohol produces compounds in this class using a process named for Emil Fischer. Name these compounds often used to create a fruity odor.

Answer: **esters**

7. This effect is given a different name if its magnetic field is strong enough to couple the orbital and spin angular momentums. Its size can be calculated by assuming two electrons are spinning in opposite directions in the same plane and finding the change in velocity and therefore energy of the electrons caused by adding a magnetic field. Because this was discovered before the concept of electron spin was understood, a common version of it is called anomalous. Name this weaker version of the Paschen-Back effect in which a magnetic field acting on an atom causes the splitting of spectral lines.

Answer: **Zeeman** [ZAY-mun] effect

8. Novilla is the setting for a novel by this author in which Simon attempts to find the mother of the young boy David. That novel, *The Childhood of Jesus*, was released in March 2013. This author also fictionalized Russian nihilist Sergey Nechayev and Fyodor Dostoyevsky's stepson Pavel in *The Master of Petersburg*. In another novel, this author chronicles a man who ends up volunteering to get rid of unwanted dogs after his daughter is raped and he is no longer allowed to teach Communications and Poetry. That father of Lucy had an affair with Melanie, one of his students. This author also wrote about a man's attempt to bring his mother to the town of Prince Albert. Identify this South African author who wrote about the hare-lipped Michael K and wrote the novel *Disgrace*.  
Answer: J(ohn) M(axwell) **Coetzee** [kuut-SEE-uh]

9. This book states that power is twofold, passive and active, in response to a question asking whether there is power in God. That statement follows four objections to the question, the first of which is that God is the first agent, and the statement is followed by replies to each objection. That is one of hundreds of questions in this work, which was written to educate Christian theology students. This work makes several references to the works of Peter Lombard, who lived about a century before it was written, and to Aristotle. Name this work central to scholasticism written in the 13<sup>th</sup> century by Saint Thomas Aquinas.  
Answer: ***Summa Theologica*** [or ***Summa Theologiæ***]

10. This person wrote "Nobody can advise you and help you... Go into yourself... confess to yourself whether you would have to die if you were forbidden to write." At the advice of Rodin [roh-daan], this poet spent time at a zoo and produced a poem about an animal that "paces in cramped circles, over and over". Another of his poems ends with the exhortation "You must change your life." He wrote a collection of ten works while staying at a castle near Trieste. That collection begins "Who, if I cried out, would hear me among the Angelic Orders?". This poet of "The Panther" and "Archaic Torso of Apollo" had his writings to Franz Xaver Kappus published as *Letters to a Young Poet*. Identify this German poet of *The Duino Elegies*.  
Answer: Rainer Maria **Rilke**

11. Reid's paradox concerns how rapidly plants experienced this action after the last ice age, and irregularities in this can result in nomadism. Many pelagic [peh-LAA-jik] organisms experience a daily vertical form of this action. Gene flow in animal groups usually occurs because of this action that is longest for the Arctic tern. The rainy season triggers the great one of *this* for the wildebeest and zebra on the Serengeti. Monarch butterflies perform a unique two-stage form of this action, which is guided by smell in anadromous fish such as salmon. Name this action exhibited by birds flying south for the winter in which populations periodically move from one place to another.  
Answer: **migration** [accept word forms]

12. This novel claims that Betty Martin could no more read writing than Hebrew, making it suspicious that she knew who the letter on the pincushion was addressed to. That letter tells Miss Briggs about a marriage to a man who is unable to inherit either his aunt's or his father's estate. This work begins at a school for girls at Chiswick Mall, and it follows one of the students who is eventually widowed when her husband dies at Waterloo. That woman gives birth to George and eventually marries William Dobbin. In this work, Lady Jane and Sir Pitt Crawley raise the son of Becky Sharp. Name this work about Amelia Sedley, written by William Makepeace Thackeray.

Answer: ***Vanity Fair***

13. Literary works by this composer include his *Theory of Harmony* and *Brahms, the Progressive*. He wrote a cantata based on poems by Jens Peter Jacobsen and he created a work which ends with a group of Jews singing the "Shema Yisroel". This composer of the *Gurre Lieder* [GUR-uh "leader"] and *A Survivor From Warsaw* composed a string sextet inspired by a Richard Dehmel poem. Poems by Albert Giraud [zhee-roh] serve as the basis for another work by this man in which the narrator speaks in the "Sprechstimme" [SHPREK-shtee-muh] style. Name this proponent of the twelve-tone system who composed *Transfigured Night* and *Pierrot Lunaire* [pyair-oh loo-nair]

Answer: Arnold **Schoenberg**

14. One character in this work misses her meeting with the DAR after stopping to check on her daughter's progress at typing school. Another character in this play earns the nickname "Shakespeare" for his avid love of literature. That character, Tom, goes to the movies every night, much to his mother's dismay. In this play, the central family awaits the arrival of Jim O'Connor, a potential suitor for a disabled girl who is concerned about the title objects. Name this play in which Amanda is worried about the well-being of her daughter Laura Wingfield, a work by Tennessee Williams

Answer: *The **Glass Menagerie***

15. If a basis has this property, then any vector can be expressed as the sum of projections onto its vectors. In addition to normalizing a set of vectors, the Gram-Schmidt process gives them this property. The gradient of a function has this relationship to its level curves. In the equation of a plane, the vector whose components correspond to the coefficients has this relationship to the plane. If two vectors have this property, then the product of their magnitudes equals the magnitude of their cross product, and their dot product equals zero. If two lines in the Cartesian plane have this property, then their slopes are opposite reciprocals. Name this property of lines that meet at right angles.

Answer: **orthogonal** [accept mutually **perpendicular** or **normal**; prompt on **orthonormal** or answers mentioning **right** angles]

16. This incident occurred soon after Governor Joseph Wanton's request for a meeting was turned down, and it led Reverend John Allen to write *An Oration on the Beauties of Liberty*, which was published with a dedication addressed to the Earl of Dartmouth. This event was precipitated when Benjamin Lindsey moved just past Namquid point in his boat *Hannah* while being pursued by Lieutenant William Dudingston. Abraham Whipple then put a crew together that completely destroyed Dudingston's ship in Narragansett Bay. Dudingston had been stopping smuggling, and the English reaction to the attack was to threaten to try Americans for treason in England. Name this 1772 affair that heightened tensions before the Revolutionary War.

Answer: HMS *Gaspée* affair [accept synonyms for "affair"]

17. The palace in this city, which has a Noble Room featuring Victor Brecheret sculptures, is located on Paranoá Lake. That lake features a bridge crossed by three arcs. Sculptures by Dante Croce stand just outside this city's cathedral, which is made of sixteen columns in a circle bent to form a hyperboloid. This city also houses a parliament building which has two semi-spheres on its roof, designed by Oscar Niemeyer. This city was planned in an airplane shape by a disciple of Le Corbusier [kor-buss-yay], Lúcio Costa, during the late 1950s. Name this South American city that was built to become a national capital.

Answer: Brasilia, Brazil

18. The eastern shore of this island features Tintingue Bay, which is across from the much smaller Nosy Boraha Island. Its southwest coast is known for its spiny thickets, and its west coast includes the port of Mahajanga and is near Juan de Nova Island. Some of the islands northwest of this one include Mayotte, Comoros, and the Glorioso Islands. This island is the native home of lemurs, and islands further off its east coast include Mauritius and Réunion [rayn-yaw]. Name this island home of the nation whose capital is Antananarivo, located between the Mozambique Channel and Indian Ocean off the east coast of Africa.

Answer: Madagascar

19. This man raised the treacherous Midac [MIH-dak], who later imprisoned this man and his companions in a house of rowan trees. As a youth, he reclaimed his father's magical crane-skin bag and held a spear against his forehead to resist the sleep-inducing harp of Aillen [AH-len]. His two dogs refused to kill a deer that this man married after she regained her form as a woman named Sadb [SAHV]. This father of Oisín [oh-SHEEN] will awake from his slumber at the hour of greatest need, and he gained wisdom by burning his thumb as he cooked the Salmon of Knowledge. Name this woodland warrior from Irish mythology.

Answer: Fionn mac Cumhaill [FINN mak "COOL"] [accept Deimne [DAY-nee]]

20. An assassination attempt against this person failed when he did not take the plane named the *Kashmir Princess* to the Bandung Conference, where he stated “The population of Asia will never forget that the first atom bomb exploded on Asian soil.” Unlike He Long, this leader took the Little Long March, ending up in Hong Kong shortly after the Nanchang Uprising. A dispute over when to stop mourning the death of this person led to the Tiananmen Incident, which almost prevented the rise of Deng Xiaoping, and which allowed supporters of this person to continue opposing the Gang of Four. Name this first Foreign Minister of the People’s Republic of China, who for many years served under Mao Zedong as China’s Premier.

Answer: **Zhou** Enlai [or **Chou** En-lai; prompt on **Enlai**]