## New Trier Scobol Solo 2014

## Replacements



R1. This person studied the shape Gabriel's horn, which is therefore sometimes called this person's "trumpet". The law named for this person, which is a specific case of Bernoulli's principle, states that the square root of the quantity twice little g times height from the top equals the speed of a fluid leaving a container. This scientist, who worked with Galileo, found that a column of mercury does not completely empty when inverted and that the height of the remaining mercury column depends on weather conditions. The unit named for this person is approximately equal to a millimeter of mercury. Name this inventor of the barometer.

Answer: Evangelista <u>Torricelli</u> [tor-rih-CHEL-lee] [do not accept "torr"]

R2. Liebig's law of the minimum was originally applied to the growth of these organisms, which can protect themselves using jasmonates ["jasmine-eights"]. Hormones in these organisms are found at extremely low concentrations and their effects are based on the ratios of their concentrations to those of other hormones. These organisms can be infected by a pathogen consisting of a circle of single-stranded RNA called a viroid, and the first virus discovered was one that gave members of this kingdom a "mosaic"-like appearance. Name this kingdom whose members can produce compounds such as taxol and quinine, and have cell walls made of cellulose.

Answer: <u>plants</u> [or <u>plantae</u>; accept <u>crops</u>]

R3. In mass spectrometry ["speck"-TRAH-mih-tree], impact ionization results in the formation of cat·ions with this property, which tend to fragment. In reactions involving these entities, their movement is depicted with fishhook arrows, such as in the diagram for the homolytic [hoh-moh-LIT-ik] cleavage of a bond. Molecular oxygen's para·magnetism demonstrates that it exists as one of these entities. Reactive oxygen species tend to be this type of compound, whose damaging effects on the body are stopped by antioxidants. Name these typically unstable compounds that are characterized by having unpaired valence electrons.

Answer: free <u>radicals</u> [prompt on <u>unpaired electrons</u> before the end]

R4. Recurrence relations are also called difference types of these entities. When these entities contain polynomials of degree five or higher, the Abel–Ruffini theorem applies to them. The characteristic types of these entities are used to find eigenvalues. Ordinary and partial differential examples of these entities contain derivatives. In addition to following properties named for the four basic operations, these entities follow the symmetric and reflexive properties. Systems of these entities generally include more than one variable that can be solved for. Name these entities with two expressions separated by a symbol made of two parallel segments.

Answer: <u>equations</u> [or <u>equality</u> or <u>equivalence</u> relations; accept more specific answers]

R5. The solar observatory on Skylab was named for this spaceflight program, and the last use of the spacecraft in this mission was a test project performed in tandem with the Soviet Soyuz program. A geologist who would later become a U.S. senator, Harrison Schmitt, flew on its final mission, which was commanded by Eugene Cernan. Many missions in this program were lifted off by the Saturn V [5] launcher. A fire killed Ed White, Roger Chaffee, and "Gus" Grissom before this program's first mission lifted off. Due to an oxygen tank explosion, its 13<sup>th</sup> mission returned to Earth early. Name this program whose 11<sup>th</sup> mission took Buzz Aldrin and Neil Armstrong to the Moon.

Answer: Apollo program

R6. The nickname of the town of Brookeville refers to this event. This event took place almost immediately after the defeat of William Winder's troops at the Battle of Bladensburg and was seen as revenge for the Raid on Port Dover. After this event, the Octagon House and the Old Brick Capitol were used for government functions. The legend of the savings of Gilbert Stuart's Lansdowne portrait of George Washington became part of the retelling of this event, which took place on August 24, 1814. Name this low point of the War of 1812 for the United States that forced President James Madison to temporarily relocate the government.

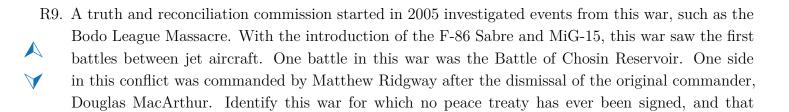
Answer: <u>burning of Washington</u>, D.C. [accept similar answers that mention an attack or burning or fire, and Washington or D.C. or the White House or the Capitol]

R7. During negotiations over this set of agreements, Claude d'Avaux [dah-voh] was recalled, so France was represented by Abel Servien [ah-bel sair-vee-aw]. France gained the Three Bishoprics of Metz, Toul, and Verdun. These agreements were reached a little more than a decade after John George I of Saxony and Ferdinand II Habsburg agreed to the Peace of Prague. The Treaty of Münster and the Treaty of Osnabrück are collectively known as this set of agreements, in which Spain agreed to recognize the Dutch Republic, ending the Eighty Years' War. Name this set of agreements that were favorable to Cardinal Mazarin and ended the Thirty Years' War.

Answer: Peace (or Treaty) of Westphalia [prompt on Münster or Osnabrück before each is mentioned]

R8. A CIA attempt to prevent the election of this leader was called Project FUBELT and supported by Henry Kissinger and President Nixon. This person finished fourth in the 1952 presidential elections in his country after being expelled from the Socialist Party. While in office, his General of the Army, Carlos Prats, shot Alejandra Cox and faced a failed coup led by Roberto Souper in the Tank Putsch. This leader also repressed the El Teniente [ten-ee-EN-tay] miners' strike. After giving a farewell speech, this leader supposedly killed himself with an AK-47 given to him as a gift from Fidel Castro in the La Moneda Palace. Name this Marxist Chilean president who was overthrown in a 1973 coup by Augusto Pinochet.

Answer: Salvador Allende



resulted in the division of an east Asian peninsula at the 38<sup>th</sup> parallel.

Answer: <u>Korea</u>n War

R10. At the beginning of one novel by this author, the protagonist dreams of meeting his rich uncle Samuel in Lycurgus while he performs in a street missionary show with his family. Another novel by this author begins with a woman getting on a train to leave Columbia City, Wisconsin. That woman performs in *Under the Gaslight* in Chicago before moving to Montreal and New York, where she and her husband pretend to have the last name Wheeler. Another of this author's protagonists plans to marry Sondra Finchley and kills Roberta Alden. Name this author who wrote about Clyde Griffiths in *An American Tragedy* and wrote *Sister Carrie*.

Answer: Theodore <u>Dreiser</u>

R11. In one novel by this author, Sarah Miles ends her affair after a bomb explodes in London during World War II near the apartment of Maurice Bendrix. In another novel by this author, Vigot investigates the death of CIA agent Alden Pyle, who competed with Thomas Fowler for the love of Phuong in Indochina. In another novel by this author, a criminal volunteers to be a hostage, but the lieutenant tells him that he is "not offering free board and lodging to the lazy." In that novel, the lieutenant pursues the whisky priest in Mexico. Name this author of The End of the Affair, The Quiet American, and The Power and the Glory.

Answer: (Henry) Graham <u>Greene</u>

R12. This author wrote about a character who did not consider himself fit for decent society because he was nearly always afflicted by gout and usually drunk. Another character this author wrote about is at the Waldzell [VALD-zel] school, which is the smallest of the Castalian schools. That character, who became Magister Ludi, is Joseph Knecht ["connect"]. This author of *The Glass Bead Game* also wrote about a title character who joins the Samanas with Govinda, with whom he fasts and begs. That character has a child with Kamala and learns from the ferryman Vasudeva. Name this author who wrote about Harry Haller in *Steppenwolf* and who wrote *Siddhartha*.

Answer: Hermann <u>Hesse</u>

R13. Some critics claim that sensuality is added to this poem by the phrase "concupiscent curds". This poem has a speaker who commands "Let the wenches dawdle in such dress as they are used to wear." A sheet that once "embroidered fantails" is supposed to be cover the face of a woman in this poem, which is from the collection *Harmonium*. The boys in this poem are told to "bring flowers in last month's newspapers." The speaker of this poem wants to "let be be finale of seem" and wants to "let the lamp affix its beam." This poem praises "the muscular one" and "the roller of big cigars". Name this poem by Wallace Stevens.

Answer: "The Emperor of Ice-Cream"

R14. One painter from this country painted several men in academic regalia watching a skeleton giving birth to another skeleton in *Gods of the Modern World*. A handless statue of Zeus contrasts with a headless statue in one work by an artist from this country, although that work was created in the United States. That mural drew criticism for including a portrait of Vladimir Lenin and was entitled *Man at the Crossroads*. The artist of that painting was married to another painter from this country who was known for self-portraits, including one showing her with a spider monkey and black cat, *Self-Portrait with Thorn Necklace and Hummingbird*. Name this birthplace of José Orozco [hoh-ZAY oh-"ROSE"-koh], Diego Rivera, and Frida Kahlo.

Answer: <u>Mexico</u> [or United <u>Mexican</u> States or Estados Unidos <u>Mexicanos</u>]

R15. One of this composer's works has a hymn near the end with the words "Thy daylight now is dawning, the threat of night has now been driven away." His piece originally called *Fantasia sinfonica Number One* is now considered his seventh and final symphony even though it only contains one movement.

One of his pieces has a section addressing the mood of Karl Knutsson, but could not be heard during its premier because the audience applauded the whole time. This composer also wrote a suite dealing with four legends of Lemminkäinen ["lemon"-KY-nin]. Name this composer of the *Karelia Suite* who protested Russian censorship in the symphonic poem *Finlandia*.

Answer: Jean <u>Sibelius</u> [or Johan (Julius Christian) <u>Sibelius</u>]

R16. Several stelae [STEE-lee] from this country are shaped like lunettes on top, including the twin Nectanebo stelae. Another stele [STEE-luh] from this country which describes the religious vision of a leader and shows him feeding a creature is the Dream Stele. The ancient unification of this country is depicted on the Narmer Palette. A pair of massive ancient rock temples in the south of this country were moved in the 1960s to prevent flooding. A 240 foot long sculpture in this country depicts a creature with the body of a lion and head of a man. Name this country that is home to Amarna and Giza, the location of the Great Pyramids.

Answer: Egypt

R17. This book is usually read during the Jewish holidays of Shemini Atzeret or Sukkot, and its Hebrew name is Kohelet. The epilogue of this book is titled "The Whole Duty of Man", and concludes that man should fear god and keep his commandments. This book proclaims "What a heavy burden God has laid on mankind!". Sometimes attributed to Solomon because it claims to be written by a son of David, this book is placed in the Bible after Proverbs. Its third chapter, which inspired a Pete Seeger song, begins with the section A Time for Everything. Name this book of the Tanakh that begins and ends by saying "All is vanity."

Answer: <u>Ecclesiastes</u> [accept <u>Kohelet</u> before it is mentioned]

R18. A supporter of this doctrine claimed that it "rendered human life possible" and that "every truth and every action imply both an environment and a human subjectivity." Those words were given in a lecture claiming that this doctrine "Is a Humanism". This doctrine was supported by the journal Modern Times and by some phenomenologists such as Maurice Merleau-Ponty. A central text of this doctrine, which described a person as an "object-for-itself", was Being and Nothingness. Name this philosophical doctrine that became associated with absurdist literature, and which to a large extent centered on the works of Jean-Paul Sartre.

Answer: existentialism [accept word forms]

R19. After this person said "Oriental people, they're slowly taking over," he apologized for using the term Oriental but not for his message. In 2014, this man cast the sole vote against renaming a street for Nelson Mandela, later claiming that he pressed the wrong button while stretching his sore back. This person was released as the Don Bosco Catholic Secondary School football coach because of his drug problems. In September 2013, it was announced that this person would be treated for sarcoma. This person claimed that he was in a drunken stupor to explain why he smoked crack cocaine. Name this outgoing mayor of Toronto.

Answer: (Robert Bruce) Rob <u>Ford</u>

R20. This country's Dong Phayayen–Khao Yai forest complex is a watershed for most of its rivers. Its Mae Hong Son province has Karen refugees from Myanmar. Nakhon Ratchasima is the largest city in this country's Khorat Basin, which contains significant Khmer and Vietnamese minorities. In this nation's capital, a district called Rattanakosin Island features the Grand Palace building complex. The Isthmus of Kra connects two portions of this nation, one on the Malay Peninsula and the other in Southeast Asia. The Chao Phraya River flows through this nation's capital. Name this nation with a capital at Bangkok.

Answer: (Kingdom of) Thailand [or Prathet Thai or Ratcha Anachak Thai]