NEW TRIER SCOBOL SOLO 2012

ROUND 8

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- 1. This author wrote about a relationship between Stephanie and the officer Pieter van Vlaanderen which leads to the destruction of his career. In another novel by this author, Johannes Pafuri is accused of planning a robbery that leads to murder. John—a politician who works with Dubula and Tomlinson—worries about the impact of the murder on his career since the murderer was his nephew, who may have been assisted by John's son Matthew. The victim is Arthur, who is the son of James Jarvis; and the murderer is Absalom, who is the son of Stephen Kumalo. That crime takes place in Johannesburg. Name this author who wrote *Too Late the Phalarope* and *Cry, the Beloved Country*. ANSWER: Alan (Stewart) Paton [PAY-tun]
- 2. This is the ratio of the hypotenuse length to the length of the shorter leg in the only right triangle whose side lengths form a geometric progression, often called the Kepler triangle. This number's continued fraction expansion consists entirely of ones, and the ratio of successive Fibonacci numbers approaches this. A rectangle with a spiral in it is often used to show this concept visually, the positive solution to the equation x squared minus x minus one equals zero. It is equal to the quantity 1 plus the square root of 5, close quantity, over 2. Name this number about equal to 1.618, often considered aesthetically pleasing.

ANSWER: golden ratio [or phi or golden section or golden mean; accept extreme and mean ratio or medial section or divine proportion or divine section or golden proportion or golden cut or golden number or mean of Phidias; prompt on $(1 + \sqrt{5})/2$ or mathematical equivalents]

3. This person was visiting his family while en route to Philadelphia to protest the promotion of junior officers when the Battle of Ridgefield broke out, leading to his promotion to major general. He unsuccessfully commanded a fleet at the Battle of Valcour Island, was briefly relieved of command after successfully leading troops at Saratoga, and was wounded in the leg at Bemis Heights. While he recuperated, it was through intermediaries Joseph Stansbury and Peggy Shippen, that this man made contact with Shippen's former boyfriend, a major in the British army. Identify this American military figure who barely escaped when it was learned he was preparing to turn over West Point to the British Army.

ANSWER: Benedict Arnold (V)

4. This city is home to a shopping center designed by Jean Nouvel and known as One New Change. Sir Norman Foster designed a controversial building in this city that critics called "the Gherkin" due to its cucumber-like shape. This city is home to the tallest building in Europe, a skyscraper designed by Renzo Piano called "The Shard" that sits in its Southwark district. Anish Kapoor designed a red spiral-shaped observation tower called the ArcelorMittal [arsel-or-mi-TAL] Orbit in this city, whose churches were restored by Christopher Wren after the Great Fire in 1666. Name this city that is home to Buckingham Palace and several monuments commemorating the 2012 Olympics. ANSWER: London, England

5. This element can be used by itself or in an alloy with potassium for liquid metal cooling in submarine nuclear reactors. Its spectrum is notable for its two D-lines, and it can be created along with hydrogen in carbon fusion. Its hypochlorite is bleach, and its hydroxide is caustic soda. Three ions of this element are pushed out of a cell for every two potassium ions pulled in to maintain resting potential in animal cells by their namesake pumps. It is more dense than potassium despite being located above it on the periodic table, where it is below lithium. Name this alkali metal that bonds with chlorine to form table salt.

ANSWER: sodium

6. This character asks "Why do you dress me in borrowed robes?" In a soliloquy, he says "Life's but a walking shadow, a poor player that struts and frets his hour upon the stage and then is heard no more"; that speech is often called "Tomorrow and tomorrow and tomorrow." He also asks whether Neptune's ocean could wash the blood from his hands after his wife assures him that a little water can do it. This man becomes Thane of Cawdor in fulfillment of a prophecy, and he then murders Duncan so that he can become king. Name this title character of Shakespeare's Scottish play.

ANSWER: Macbeth

7. In this book of the Bible, Jesus describes himself as the true vine, the living bread, and the good shepherd who lies down his life for the sheep. He also causes controversy by telling a man to carry his bed on the Sabbath after healing him at the pool of Bethesda, and he travels to Bethany to heal Lazarus. It ends by stating that if all of the acts of Jesus were written, the world could not contain all the books, and it opens "In the beginning was the Word, and the Word was with God, and the Word was God." It is generally placed as the fourth book in the New Testament. Name this non-synoptic gospel that follows Matthew, Mark, and Luke.

ANSWER: John [accept variations mentioning John]

8. This document referred to "An Act to make an additional Article of War", which was a directive for U.S. troops, and it was encouraged by an editorial titled "The Prayer of Twenty Millions". The follow-up to this work, which exempted certain Louisiana parishes and Virginia counties, stated that affected people will be received into the armed service, and it enjoined them to abstain from all violence and labor faithfully for reasonable wages. It was opposed by Copperheads and supported by Vice-President Hannibal Hamlin. This document was issued on September 22, 1862, just after the Battle of Antietam, and only impacted states that joined the Confederacy. Name this executive order issued by Abraham Lincoln that, to some extent, freed slaves.

ANSWER: Emancipation Proclamation

9. This instrument was the focus of a concerto by Leopold Mozart, and Joseph Haydn's only concerto for this instrument was in E flat major and for his friend Anton Weidinger. A solo by this instrument opens Mahler's fifth symphony, and for fifty-three years the principal player on this instrument for the Chicago Symphony Orchestra was Adolph "Bud" Herseth. Three of these instruments play *Fanfare for St. Edmundsbury* by Benjamin Britten, and two of them play *Fanfare for a New Theater* by Igor Stravinsky, and though it is not unusual for a fanfare to use cornets or french horns, this is the most common instrument for them. Name this brass instrument played by Wynton Marsalis and Miles Davis.

ANSWER: trumpet

10. In a fluid, this quantity equals the opposite of the pressure gradient divided by volume, and one unit of this is the poundal. Free body diagrams are sometimes named for this quantity, and one type of this is caused by the exchange of W and Z bosons. It is integrated with respect to time to find impulse, or with respect to distance to find work, and it equals the derivative of momentum with respect to time. Newton's first law describes what happens when this has a net value of zero, and Newton's third law states that one of these always accompanies an opposite one. Name this vector quantity that can be measured in dynes or Newtons.

ANSWER: force

- 11. This country's Salling Peninsula is located near its islands of Fur and Mors. Its principal port city, which changed the spelling of its name in 2011, is Aarhus. Egeskov Castle and the city of Odense are located on its Funen Island, which is attached by the Great Belt Bridge to its largest island of Zealand, which in turn is connected by the Øresund Bridge to Sweden. Zealand [ZEH-laan] and the island of Amager share its capital and largest city, which contains Tivoli Gardens. Name this country that includes the Jutland Peninsula and has its capital at Copenhagen. ANSWER: Kingdom of <u>Denmark</u> [or Kongeriget <u>Danmark</u>]
- 12. An attempt using the Hubble Telescope to find rings around this object led to the new discovery of moons orbiting it in 2011 and 2012. Two other moons moving around this were discovered by the Hubble Telescope in 2005. In 2015, it will be visited by the New Horizons spacecraft. This was originally discovered because of a search encouraged by a miscalculation of the orbit of two planets; that discovery took place at the Lowell Observatory in 1930 by Clyde Tombaugh. Its moons discovered in 2005 are Nix and Hydra, and its moon that is about half its size is Charon. Name this object occasionally within the orbit of Neptune that used to be considered a planet but is now classified as a dwarf planet.

ANSWER: Pluto

13. Seebohm Rowntree wrote about the primary and secondary types of this phenomenon after studying families in York, and Henry George wrote a book on progress and this. Tavis Smiley and Cornel West wrote a manifesto about this, and Muhammad Yunus wrote a book about creating a world without it. Some sociologists claim that a culture of this concept is passed on from generation to generation, preventing success, and studies have correlated it with low birth weight and low test scores. Most countries applying for IMF or World Bank debt relief must present a plan for the reduction of this. The One Campaign is part of a movement to make it history, and Lyndon Johnson launched a war on this. Give this term for the condition of being poor.

ANSWER: **poverty** [accept answers mentioning **poor**, or other logical equivalents, before the end]

- 14. Suidas claims that this person played a major role in overthrowing Lygdamis after returning home from Samos, and this person's visit to Egypt can be dated because of his description of skulls shortly after the attempted rebellion by Inaros. His description of gold-digging ants has been controversial, and his primary work is now arranged into nine sections, each named after a muse. That work, which begins with the rapes of Io, Europa, Medea and Helen, describes the lives of four Persian kings. Name this world traveler born in Halicarnassus, known as the "Father of History". ANSWER: Herodotus
- 15. In one story by this author, Mr. Stovall kicks Nancy in the mouth when she asks him "When you going to pay me, white man?" In addition to "That Evening Sun", he wrote a story in which Boon Hogganbeck and Sam Fathers train a dog named Lion to attack a bear named Old Ben. That story appears in a work about the McCaslin family: Go Down, Moses. Another novel by this author includes Jason's description of Good Friday and then events at a colored church narrated by the servant Dilsey. In that book, Quentin—who attends Harvard—is the brother of the mentally challenged Benjy Compson. Name this author who wrote the novel *The Sound and the Fury* and set his fiction in Yoknapatawpha County.

ANSWER: William Faulkner

16. Some of the earliest clinical experiments using these were in the treatment of Stargardt disease, a genetic macular degeneration that causes severe vision loss. Mesenchymal [mes-un-KY-mul] types are being tried in an effort to protect pancreatic beta islet cells in patients with type 1 diabetes, and hematopoietic [hee-maa-toe-poh-EE-tik] types are used to treat bone marrow cancer. They undergo asymmetric cell division, creating one cell identical to the parent and another that is not. Their ability to specialize into any of the three germ layers is known as pluripotency. Name these cells, many of which are found in the blastocyst [BLAAS-toh-sist] of an embryo and have been politically controversial.

ANSWER: **stem** cell(s)

17. This artist dug a trench so that he would not have to change his eye level while painting his early work Women in the Garden. Some of his paintings were set along the Epte River, showing the long tall poplars on its banks, and during the winter of 1874 he painted several scenes set at Argenteuil [ar-zhehn-twee]. Some of his works had subtitles such as White Frost Effect, Sun in the Mist, and Midday, and he made several paintings showing Rouen Cathedral. Several of his paintings show a Japanese foot-bridge in Giverny [zhih-vair-nee]. Name this painter of Impression: Sunrise who often depicted wheatstacks and water lilies.

ANSWER: (Oscar-)Claude Monet [do not accept "Manet"]

18. This writer once asked "Are you nobody too? Then there's a pair of us!". Another work is about an animal that licks the valleys up and stops to feed itself at tanks. Most of this poet's works were published posthumously by mentor Thomas Wentworth Higginson after being discovered by this poet's sister Lavinia. This poet of "I like to see it lap the Miles" set a work at the speaker's funeral that begins "I heard a fly buzz when I died". First lines were used as titles of her poems, since she did not title them herself. Name this Amherst, Massachusetts poet who wrote "Because I could not stop for Death, he kindly stopped for me."

ANSWER: Emily (Elizabeth) Dickinson

19. The probability that an element in a list will be within a certain distance of this value is given by Gauss's inequality. This quantity is used to calculate Pearson's first skewness coefficient but not the second one. According to Pearson's rule of thumb, it can be represented as three times the second quartile minus two times the arithmetic mean. This number is at the vertex of a triangular distribution, and it is the maximum point on the frequency graph of any distribution, but it is possible for a distribution to have more than one of these. Name this value that has the highest frequency in a list, often contrasted with the mean and median.

ANSWER: mode(s)

20. This leader attempted to explain his ruling philosophy in the papers On Practice and On Contradiction. While he was in power, his country went to war with India because he refused to accept the McMahon Line agreed to in the Simla Accord. At one point, he moved recent high school graduates from cities to remote areas in the Down to the Countryside Movement. His leadership role increased when he orchestrated a major retreat from Nationalist forces in the mid 1930s. His effort to quickly industrialize his country is believed to have caused tens of millions of deaths around 1960, and his wife was arrested soon after his death as part of the Gang of Four. Name this leader responsible for the Cultural Revolution, Long March, and Great Leap Forward in China.

ANSWER: (Chairman) <u>Mao</u> Zedong [or <u>Mao</u> Tse-tung; prompt on <u>Zedong</u> or <u>Tse-tung</u>]

TB1. This character claims he was asked what he thought of the name Howard. In his first appearance, he states that he rode home at ten miles per hour from Yonkers after his car kept going onto the shoulder of the road. He is referred to by the words "He don't put a bolt to a nut, he don't tell you the law or give you medicine"; those words are delivered by Charley, his next door neighbor whose son Bernard is a lawyer. One of this man's sons is an assistant to an assistant buyer, and the other failed math, ruining his chances at a football scholarship. Name this husband of Linda and father of Happy and Biff in Arthur Miller's *Death of a Salesman*.

ANSWER: Willy Loman [accept either]

TB2. This country nicknamed Roberto Francisco Chiari Remón as "el presidente de la dignidad" since he broke off diplomatic relations with the United States after January 1964 riots now remembered as Martyrs' Day. Guillermo Endara became its president in 1989 after a United States invasion removed its leader. It gained independence shortly after the failure of the Hay-Herran Treaty, and almost as soon as it became independent it agreed to the Hay-Bunau-Varilla Treaty. The major consequence of the Torrijos-Carter Treaties are that the United States does not control a zone in it since 1999. Name this country once ruled by Manuel Noriega that seceded from Colombia just before a canal was built through it.

ANSWER: Republic of <u>Panama</u> [or República de <u>Panamá</u>]

TB3. This is the birth month of Betsy Ross, Robert E. Lee, and Elvis Presley. Name this month featuring Epiphany and Martin Luther King Day that precedes February.

ANSWER: January