

# Scobol Solo 2017

## Packet 7 (Round 7)



1. One way to identify this chemical element is to place valin-o-mycin on an electrode because they bond so well. A solution made from a compound of this element and iodine is given to people who have been exposed to radiation to avoid a buildup of iodine in the thyroid gland. In a flame test, this element makes the flame burn lilac or purple. Jens Christian Skou [yenss kras-jan skuh] discovered an enzyme important in nerve conduction that pumps this ion into cells and pumps sodium out of cells. This element's name is based on a term for plant ashes, which were a source of this element. Name this alkali metal located just below sodium on the periodic table, whose symbol is K.

Answer: potassium [accept K before the end]

2. In one novel by this writer, a woman cries soon after the man she is with utters a cry of rapture towards nature. In that novel, the narrator reads *The Prisoner of the Caucasus* with Lizaveta Kirillovna [lee-zah-VEH-tah keh-ril-LOHV-nah]. In a story by this writer, the foolish landowner Polutykin [pol-YOO-tuh-kin] employs the intelligent peasants Khor and Kalinych. In a novel by this author, Nikolai at first welcomes his son and his son's friend to his house after they graduate from the University of Petersburg, but Nikolai is eventually bothered by Bazarov and Arkady's nihilism [NY-hil-izm]. Name this Russian author of *The Diary of a Superfluous Man*, *A Sportsman's Sketches*, and *Fathers and Sons*.

Answer: Ivan (Sergeyevich) Turgenev [tur-"GAIN"-yef]

3. This person was convicted after saying at trial "I bring a curse upon you and your posterity, and the mouth of the Lord hath spoken it." This person was detained at Joseph Weld's house between a civil trial and a church trial [pause] and was found guilty of "traducing the ministers and their ministry" soon after John Wheelwright was also found guilty. That happened during the Antinomian Controversy, which came to a head under the governorship of John Winthrop. This person went to Aquid-neck Island and helped start Portsmouth, Rhode Island with the support of Roger Williams after being banished from Massachusetts Colony. Name this Puritan woman.

Answer: Anne (Marbury) Hutchinson [accept either underlined name]

4. In some countries, the night before this holiday is Chaand Raat [[chahnd raht](#)], during which women decorate their hands with henna. On this holiday it is common to eat a dish combining vermicelli [[vur-mih-CHEL-lee](#)] and dates, called *sheer khurma*. Depending on the country, greetings on this holiday could be “Mutlu Bay-ram-lar” or “Selamat Lebaran”. This holiday is considered less holy than a similar holiday called the Sacrifice Feast. The name of this holiday means “festival of breaking the fast”. This holiday takes place on the first day of Shawwal, which is the tenth month in the Islamic calendar. Name this holiday that marks the end of Ramadan.

Answer: Eid al-Fitr [accept Eid al-Adha before “Selamat Lebaran”]

5. The so-called “current mass” of these objects is found using their Dirac [[deer-ak](#)] field and Lagrangian [[luh-GRAHN-zhee-un](#)], and is different than the “constituent” mass of these particles. The existence of these particles was postulated based on an organization of more complicated particles into the Eightfold Way. Each of these objects has a charge of either  $+2/3$  or  $-1/3$ . Attempts to isolate these particles end up creating mesons [[MEE-zahns](#)], which are a combination of these particles with their anti-particles. Three of these particles form a baryon [[BARE-ee-ahn](#)] such as a proton or neutron. Name these particles that come in six flavors: up, down, top, bottom, strange, and charm.

Answer: quarks

### ***Check the score.***

6. This person wrote a poem that begins “I find no peace and have no arms for war.” His best known collection originally had a name meaning “Fragments of vernacular matters” and was also known as “Scattered Rhymes”. This person’s coronation speech when he was made the second poet laureate is given credit for sparking the Renaissance, and he was called the Father of Humanism. The poems in his *Il Canzoniere* [[eel kahn-“zone”-YAIR-ay](#)] demonstrated an obsession with Laura. Name this 14th-century Italian poet whose gives his name to the type of sonnet formed by an octave and a sestet.

Answer: Petrarch [[PET-rark](#)] [or Francesco Petrarca]

7. A few weeks before this battle, one of its leaders sailed from Harfleur [[ar-floor](#)] to Milford Haven and moved towards his opponent, who was stationed in Leicestershire [[LICE-tur-shur](#)]. This battle strengthened the wealthy Welshman Rhys [[reese](#)] ap Thomas. This battle reversed the results of the battles of Barnet and Tewkesbury, which had solidified the power of Edward IV. In a parking lot in 2013, people found the body of someone killed in this battle who was nicknamed the “hunchback king”; that last Plantagenet [[plan-TAJ-uh-nit](#)] king was Richard III. Name this battle at the end of the War of the Roses that established the Tudor dynasty.

Answer: Battle of Bosworth Field

8. For the forward-most person in this painting, the bright light striking his left hand contrasts with the darkness of his right hand, which is holding a baton. That person wears a black outfit with a red sash in this painting, while the person closest to him wears white with a white hat. There is a drummer to the far right of those two people and a person preparing a musket to the left. 18 of the people in this painting are named on a shield in the background. The people at its foreground are Willem van Ruytenburch [[vil-em van ROY-ten-burk](#)] and Frans Banning Cocq [[“Coke”](#)]. Identify this 17th-century painting whose usual name is inspired by its dark varnish, a work by Rembrandt.

Answer: The [Night Watch](#) [or De [Nachtwacht](#); or The Shooting (or Militia) [Company of](#) Captain Frans Banning [Cocq](#) and Lieutenant Willem van Ruytenburch; or The [Militia of](#) Captain Frans Banning [Cocq](#) and Lieutenant Willem van Ruytenburch; or De [compagnie van kapitein Frans Banning Cocq en luitenant Willem van Ruytenburgh maakt zich gereed om uit te marcheren](#)]

9. In October 2017, nine Republican Senators led by Dean Heller wrote a letter to this agency’s acting director, Thomas Brandon, asking him to review a decision this agency made in 2010. The Obama Administration did not appoint a director of this agency to avoid a hearing focused on Operation Fast and Furious. After the 9/11 attacks, this agency was moved from the Department of the Treasury to the Department of Justice and was given additional authority over explosives. This agency was asked to review its position on bump stocks following the Stephen Paddock attack in Las Vegas. Name this federal agency often criticized by the National Rifle Association.

Answer: [ATF\(E\)](#) or Bureau of [Alcohol, Tobacco, Firearms and Explosives](#) (Brandon was asked to review the agency’s decision to allow bump stocks.)

10. Euler’s [[OY-lur’z](#)] gamma constant is defined as the limiting difference between this function and a partial sum of the harmonic series. An infinite product converges if and only if the sum of this function of its factors converges. The derivative of this function of  $f(x)$  [[“f of x”](#)] is the percent change in  $f$  and is used in this function’s namesake differentiation. The number of primes less than the positive integer  $n$  is approximately  $n$  divided by this function of  $n$  according to the prime number theorem. The derivative of this function of  $x$  is  $\frac{1}{x}$  [[“1 over x”](#)]. Name this inverse of the function  $e^x$  [[“e to the x”](#)].
- Answer: natural [logarithm](#) (of  $x$ ) [or [logarithm base e](#) (of  $x$ ); accept [ln](#) (of  $x$ )]

**Check the score.**

11. In one novel by this author, a cheer for a high-school athlete states that his name rhymes with “The Love”. That character, “Swede” Levov, is discussed by his brother Jerry at a high school reunion in a novel by this author. A novella by this author has a name based on a record that Ron Patinkin listens to and is narrated by Neil Klugman, who falls in love with Ron’s sister Brenda. In another novel by this author, a character tells his therapist about his sexual obsessions and Jewish identity. Name this author of *Goodbye, Columbus* who wrote about Nathan Zuckerman in *American Pastoral* and also wrote *Portnoy’s Complaint*.

Answer: Philip (Milton) [Roth](#)

12. A famous meeting in this city brought together the Jagiellonian [YAHG-yel-OH-nee-un] brothers King Ladislaus [LAH-dees-“louse”] II of Hungary, Sigismund I of Poland, and Holy Roman Emperor Maximilian I, strengthening the Habsburg dynasty. In the early 20th century, there was a political rivalry in this city between Georg Ritter von Schönerer [GAY-ork RIT-ur fawn SHURN-ur-ur] and Mayor Karl Lueger [LOO-gur], two anti-semites whom Adolf Hitler praised. Another meeting in this city featured Karl Robert Nessel-ro-de and Karl August von Hardenberg, whose countries formed the Holy Alliance with that meeting’s leader, who was later given the title “Prince” and was named Klemens von Metternich [MEH-tur-nik]. Name this site of that “Congress”, the capital of Austria.  
Answer: Vienna, Austria [or Wien]
13. This person responded to a question by Reverend Johann Friedrich Zöllner [YOH-hahn FREED-rik ZOHL-nur] by stating “Immaturity is the incapacity to use one’s intelligence without the guidance of another.” That’s how this person answered the question, “What is Enlightenment?”. In another essay, this philosopher called for all states to have a republican form of government, and for the abolition of standing armies, in order to create *Perpetual Peace*. This person also wrote “Live your life as though your every act were to become a universal law”, which is called his categorical imperative. Name this German philosopher who said he denied knowledge to make room for faith in his *Critique of Pure Reason*.  
Answer: Immanuel Kant
14. This type of rock was used to make the recently-discovered ancient tombs of Kam·han·tik in the Philippines. Zechstein [ZEK-styne] dolomite [DOH-luh-“might”] rocks in northern England are referred to as the magnesian [mag-NEE-zhun] type of this rock. This sedimentary rock often occurs near streams and waterfalls in the forms of tufa [TOO-fuh] and travertine [TRAV-ur-teen]. This rock is a primary component of Portland cement. This type of rock contains both calcite [KAL-“site”] and aragonite [uh-RAG-un-ite]. Chalk is a form of this rock. Name this rock formed from skeletal remains of sea creatures, and comprised of calcium carbonate.  
Answer: limestone [prompt on calcium carbonate before the end]
15. Nettie McCormick often commissioned this architect, and one of the buildings that resulted were a woman’s dormitory at Tusculum College called Virginia Hall. This person’s last job was the façade for a music store and apartment in Chicago, the Krause Music Store. This architect also designed the tombs for Martin Ryerson and Carrie Eliza Getty that are in the Graceland Cemetery, also in Chicago. The building named for this architect is in downtown Chicago and used to be called the Carson, Pirie, Scott and Company Building. Name this “father of skyscrapers” who partnered with Dankmar Adler and mentored Frank Lloyd Wright.  
Answer: Louis (Henry) Sullivan

**Check the score.**

16. This person's attempt to capture his country's president, Carlos Andrés Pérez, failed when this person was trapped in a Military History Museum; he then made a national address saying he would not take over the country "for now". A few years later, this person defeated Henrique Salas Römer [ayn-REE-kay sah-lahss ROH-mair] in a presidential election. A coup replaced this person with Pedro Carmona for 36 hours in 2002 before this person returned to power. This South American leader used his country's oil money on social programs and claimed he led a Bolivarian Revolution. Name this leader who in 2013 was replaced by Nicolás Maduro as the president of Venezuela.

Answer: Hugo [OO-goh] (Rafael) Chávez (Frías)

17. In 1811, the British explorer David Thompson explored this river with the ship *Tonquin*, only to find that the United States had claimed its mouth. Water from this river was used to create Banks Lake, on whose shore is Electric City. One of the artificial lakes along this river is Lake Revel-stoke, which covers the site of the Big Bend Gold Rush. Franklin D. Roosevelt Lake was formed from the construction of the Grand Coulee [KOO-lee] Dam on this river, which meets the Willamette ["will-AM-it"] River in Portland. Name this river that flows from Western Canada before emptying into the Pacific Ocean along the Oregon-Washington border.

Answer: Columbia River

18. Research over the past few decades has conflated this traditional animal phylum with a more complex phylum, the Lo-pho-tro-cho-zoa [LOH-foh-troh-kuh-ZOH-uh]. Like gastrotrichs [GAS-truh-tiks], which are called hairy-backs, this phylum contains unsegmented protostomes [pro-toe-STOMES] that are not Gnathifera [nath-IF-ur-uh]. Members of this phylum cause a common tropical disease that freshwater snails spread to humans, schisto-somiasis [shis-tuh-soh-MY-uh-sis]. Several other flukes and tapeworms from this phylum cause diseases of the digestive system. Name these animals named for the shape they must take because they lack a lung cavity, so to receive oxygen, all of their cells need to be close to the skin.

Answer: flatworms or Platyhelminthes or Plathelminthes [prompt on worms]

19. One theme in this musical piece has six descending notes and two ascending notes at constant tempo. This piece was originally written for three violins and basso continuo [BAHSS-oh kohn-TEEN-oo-oh] and is commonly performed by three violins and a cello. Jean-Fran cois Paillard [zhahn fran-swah py-yar] altered this piece and popularized it almost 300 years after it was written. It is often published with a gigue [zheeg] from the original composer. The name of this piece is the compositional form it takes, in which the violins play the same notes starting at different times. During the last few decades, this song has become very common for wedding processions. Name this 17th-century composition by Johann Pachelbel [PAH-kul-bel].

Answer: Pachelbel's Canon in D [accept answers that additionally mention Gigue]

20. In one novel by this author, Louis says that he intensely resents the power of Percival, who is friends with the six characters who give soliloquies. In an essay, this author opines that money and the title location are necessary for women to write fiction, and she discusses William Shakespeare's hypothetical sister Judith. In a novel by this author, James and his mother are having their portrait painted by Lily Briscoe; that novel about the Ramsays is one of several in which this author uses inner monologues, which is her version of a stream of consciousness. Name this author of *The Waves*, *A Room of One's Own*, and *To the Lighthouse*.

Answer: (Adeline) Virginia (Stephen) Woolf [accept either underlined name]

***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.***

- <sup>TB</sup>21. In one story by this writer, a Jew tells a story about a man who inherits a ring and has two similar ones made so that each of his sons can have his ring. This writer had that story featuring Melchizedek [mel-KIZ-ih-dek] and Saladin narrated by Neifile [nay-FEE-lay]. In another story by this writer, a friar gives a sermon praising a wicked man who has duped him, leading that wicked man to be known as Saint Ciappelletto [chap-peh-LET-toh], as told by Panfilo. This 14th-century author's major work has ten narrators and is set just outside Florence during the Black Death. Name this Italian writer whose collection of 100 tales is called *The Decameron*.

Answer: Giovanni Boccaccio [joh-VAHN-nee bohk-KAHT-choh]

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

- <sup>TB</sup>22. Though Fort Meigs is not in this state, some of this state's land was taken from Native Americans in the Treaty of Fort Meigs, which was negotiated in part by its then-territorial governor Lewis Cass. Wallace Fard Muhammad started the Nation of Islam in this state. The Seventh-Day Adventist Church was also started in this state, and several early members of the church popularized breakfast cereal in the late 18th century. This state is also where the United Auto Workers started, and it contains the headquarters of both General Motors and Ford. Name this state that before gaining statehood ceded the Toledo Strip to Ohio in exchange for most of the Upper Peninsula.

Answer: Michigan

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

- <sup>TB</sup>23. This superhero was created by Bob Kane and Bill Finger. This character decides to fight crime after witnessing the murder of his parents, Dr. Thomas and Martha Wayne. This character fights The Penguin, Catwoman, and The Joker. This character was portrayed by Adam West, and he was voiced by Will Arnett in a Lego movie. Name this superhero who saves Gotham and sometimes teams up with Robin.

Answer: Batman

***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.***