

Scobol Solo 2015

Packet 11 (Round 11)



1. Combining either this compound or light naphtha with oxygen gives acetaldehyde [uh-see-TAL-duh-“hide”], which is used to make acetic [uh-SEE-tik] acid. The percentage of gasoline made of this compound increases from about 2% during the spring and summer up to about 10% in the fall and winter, which is part of the reason for seasonal changes in gas prices. This compound is an isomer of methyl-propane, but it has a linear structure. This hydro-carbon has replaced naphtha in lighters, and either this compound or propane is used in blowtorches. Name this alkane with ten hydrogen atoms and four carbon atoms.

Answer: butane [BYOO-tayn] [accept C4H10 before “ten [hydrogen atoms]”]

2. The Carrera siblings played a prominent role in this country during the 19th century, including Javiera [hah-vee-AIR-ah], who sewed its first flag, and José Miguel, who led its first governing council during its Patria Vieja [vee-AY-hah] period. Since 1990, this country’s politics have been dominated by the Concertación [kohn-sair-tah-see-OHN] coalition. After this country was headed by a Marxist in the early 1970s, the CIA supported a coup during which Salvador Allende [ah-YEN-day] killed himself and was replaced by Augusto Pinochet [pee-noh-SHAY], who caused many of his opponents to “disappear”. It was liberated by Bernardo O’Higgins and is now headed by Michelle Bachelet [bah-shay-LAY]. Name this country whose capital is Santiago.

Answer: Chile

3. One of this author’s title characters tries to gain custody of his daughter June after receiving a letter saying she was locked in a car by Valentine Gersbach. That character eventually returns home to Ludeyville, Massachusetts and decides to stop writing letters. Another of his characters has his upbringing dominated by a boarder from Russia, Mrs. Lausch. That character goes to Mexico with Rhea and eventually goes to France with his wife Stella. The real-life philosopher Allan Bloom had a lot in common with this author’s last title character, *Ravelstein*. Name this author of *Herzog* and *The Adventures of Augie March*.

Answer: Saul Bellow [or Solomon Bellows]

4. This composer included Hanon's finger exercises in his second piano concerto. His first piano concerto was originally planned as a trumpet concerto, and it maintained a trumpet part. There is some confusion over which of this composer's pieces should be called Waltz Number Two after a 1999 discovery of his second *Suite for Jazz Orchestra*. Some critics claimed that he mocked holidays in his "First of May" and "To October" symphonies. This composer withdrew his fourth symphony before it was performed due to state criticism. His seventh symphony was *Leningrad*. Name this Soviet composer who wrote his 10th through 15th symphonies after Stalin died.

Answer: Dmitri Shostakovich

5. An effort to determine whether these particles are Dirac or Majorana fermions involves looking for double beta decay that does not involve these particles. Several hours before Supernova 1987A was seen, some of these particles were detected. These particles were first hypothesized to explain the energy level of electrons in beta decay. The discovery of oscillations of these particles explained why fewer of them than expected were found coming from the Sun and led to the 2015 Nobel Physics Prize being awarded to Kajita and McDonald. Name these extremely light particles, postulated by Wolfgang Pauli, that are paired with the tau, muon, and electron, which are the other three leptons.

Answer: neutrinos

Check the score.

6. This god's son was the god of justice and reconciliation, For-set-i. Though she is married to this god's blind twin in some stories, this god's wife is generally considered to be Nanna. This god owned Hringhorni ["ring-horny"], the greatest of all ships. This god's twin brother Hod oversaw darkness and winter, and Hod was killed by Vali after this god died. Hermod made a deal with Hel to bring this god back to the land of the living, but the deal was foiled by Thokk, who was actually Loki ["LOW-key"] in disguise. Name this god of light and joy who was protected from harm from all creatures except one small tree, the mistletoe.

Answer: Balder

7. In this novel, Romeo Lussich plays a cycle of Mozart sonatas after General Ignacio [eeg-NAH-see-oh] Maria dies from a cerebral hemorrhage, which occurs when the doctor in this novel is too drunk to treat patients. That doctor, who classifies the suicide of Jeremiah de Saint-Amour as death from natural causes and has an affair with Barbara Lynch, dies while trying to capture his escaped parrot. Towards the end of this novel, the doctor's wife resumes a much earlier relationship on a boat flying a yellow flag. Name this novel about Flor-en-ti-no Ariza and Fermina [fair-MEE-nah] Daza that was written by Gabriel García Márquez.

Answer: Love in the Time of Cholera [or El amor en los tiempos del colera]

8. This event was precipitated by the *Four Ordinances of Saint-Cloud*. After this event, Victor de Broglie [duh broy] came to power with the support of the Doctrinaires. This event occurred soon after a group led by Adolphe Thiers [tyair] started a daily paper, *Le National* [luh nah-tee-oh-nahl]. That paper and the Address of the 221 were critical of Prime Minister Jules de Polignac [zhool duh poh-leen-yahk]. This event is sometimes referred to as the Three Glorious Days, and it was immediately followed by the end of the Bourbon Restoration. During this event, the Orleanists replaced Charles X [10] with the “Citizen King” Louis Philippe [loo-ee fil-leep]. Identify this event named for the month in 1830 when it occurred.

Answer: July Revolution [or Second French Revolution; or French Révolution de Juillet; or July Days; accept French Revolution of 1830 before 1830 is mentioned; accept Three Glorious Days or Trois Glorieuses before “Three”; do not prompt on “French Revolution”]

9. The retino·blast [REH-tin-oh-“blast”] protein suppresses tumors by preventing this phase’s progression. CDK2 binds to cyclin [SYKE-lin] E at the beginning of this phase. This phase’s restriction point usually leads to a process in which Okazaki [oh-kah-zah-kee] fragments are formed. New research indicates that spindle pole bodies start duplicating *before* this phase. Transition into the quiescent G0 [G zero] phase may occur during this phase. Within this phase, the Gap 1 and Gap 2 phases are separated by the S phase, in which DNA replication occurs. This phase is immediately preceded by telo·phase [TEE-loh-“phase”]. Name this phase of the cell cycle in which most of a cell’s time is spent, and in which mitosis [my-TOH-sis] does not occur.

Answer: interphase [accept G1 or S, or Gap 1 before “Gap 1”]

10. The western part of this island includes Macquarie [muh-KWOR-ee] Harbour. This island also contains a mountain named for the Greek Mount Ossa in Cradle Mountain-Lake St. Clair National Park. The northwest part of this island, which is near Three Hummock Island, includes the temperate rainforest Tarkine [tar-kine]. This island’s most populous city is near Storm Bay and straddles the Derwent River. Its most populous inland city, located where the Esk Rivers join to form the Tamar River, is Launceston [LAWNSS-tun]. Just south of the Bass Strait, this island is a state of Australia. Name this island whose capital is Hobart and which is southeast of mainland Australia.

Answer: Tasmania

Check the score.

11. A painting by Max Ernst of a “mechanical” example of this animal also shows both a mechanical device on top of it with an eye and a headless mannequin in the corner of the painting. That painting is sometimes called *Celebes* [SEH-luh-beess]. Several of these animals are carrying buildings behind a white horse in Salvador Dalí’s *The Temptation of St. Anthony*. A different Dalí painting named for these animals shows two of them with very long legs. These animals are seen underwater in another Dalí painting in which they are the reflections of swans. One of these animals scares a donkey in lion’s skin in a political cartoon by Thomas Nast. Name these animals whose heads are used in depictions of the Hindu god Ganesha [guh-NEE-shuh].

Answer: elephants

12. Cass Sunstein called the *Chevron* decision the counter of this decision. The majority decision in this case praised the judge in the *The King v. Baker et al* decision from 1266. Levi Lincoln, who had simultaneously served as Attorney General and acting Secretary of State, at first refused to answer questions during this case. The court decided not to issue a writ of mandamus [man-DAY-muss] due to discrepancies between the Judiciary Act and the Constitution. This case was brought by a “midnight appointment” who was offered a job at the end of the Adams administration. Name this case, written by John Marshall, which established judicial review.

Answer: Marbury v. Madison [prompt on Madison]

13. One of the Millennium Prize problems is equivalent to asking whether, if this type of mathematical entity models the number of steps necessary to *check* a solution for certain types of problems, it also describes the number of steps necessary to *find* a solution. Galois [gal-wah] theory arose around finding solutions to these mathematical objects, leading to Abel’s [AH-bul’z] impossibility theorem, which says that there is no general solution for some of them. Descartes’ [day-“carts”] rule of signs limits how many zeroes they may have by counting sign changes within their co-efficients. Name these expressions made from adding and multiplying variables, which might be classified as “cubic” or “binomial.”

Answer: polynomials [accept polynomial time]

14. In this play, the warning “O unhappy youth, Come not within these doors; within this roof” is given by the servant Adam to warn his master from entering his master’s brother’s house. Also in this play, Amiens [AM-yenz] and Jaques [JAY-kweez] sing songs for each other. Jaques later gives a monologue similar to lines from Antonio in *The Merchant of Venice*, describing the seven ages of man after stating “All the world’s a stage.” At the end of this play, several marriages are performed, including that of the country wench Audrey to the jester Touchstone. Name this Shakespeare play set largely in the Forest of Arden, featuring rivalries between the brothers Oliver and Orlando and the brothers Duke Frederick and Duke Senior.

Answer: As You Like It

15. Based on a Molière play, this composer wrote the opera *Le medecin malgre lui* [*lay may-day-seen mal-gruh lwee*], or *The Doctor in Spite of Himself*. That work followed his opera in which the title character was murdered by Ludorf, *La nonne sanglante* [*lah nohn sawn-glawn-tay*] or *The Bloody Nun*. In another one of this composer’s operas, Siebel sings “Faites-lui mes aveux [”fate“ lwee may ah-voov]” when leaving flowers for a woman. That woman in an opera by this composer later sings about the King of Thule [“tool”], and then about her beauty, in the *Jewel Song*. This composer wrote an operatic version, in his native French, of *Romeo and Juliet*. Name this 19th-century composer who, like Hector Berlioz, wrote an opera about *Faust*.

Answer: Charles(-François) Gounod [*goo-noh*]

Check the score.

16. This writer connected Thomas Jefferson to modern feelings of repression and suppression in his lecture series “Dimensions of a New Identity”. This Freudian used the three domains of physical, social, and personal order as *soma*, *polis*, and *psyche* [*SY-kee*] in *The Life Cycle Completed*, which was completed by his wife Joan. In this writer’s book *Childhood and Society*, this person said that adults need to work on avoiding stagnation during their working years and then despair in their later years. He said that the fundamental question of an infant is “Can I trust the world?”. Name this psychologist who coined the phrase “identity crisis” and whose eight stages included the conflict of identity vs. role confusion.

Answer: Erik (Homburger) Erikson

17. This equation can be modified to describe non-equilibrium situations, which turns it into the Butler-Volmer equation. A different generalization of this equation considers multiple ions and is used to find cell membrane potentials. This specific case of the Goldman equation contains a term equal to approximately 0.0592 at STP [*S-T-P*]. This equation subtracts $R T$ over $n F$ times the natural log of the reaction quotient from a reference potential to give voltage. Name this equation that calculates the reduction potential of an electrochemical cell.

Answer: Nernst equation

18. One of the generals in this war was nicknamed “Reverse Buller” after defeats at Stormberg and Colenso, a part of this war called “Black Week” by the British. Though Buller’s assistant Charles Warren was able to make advances in this conflict, Buller was demoted to make room for Lord Kitchener and Lord Roberts. Buller then won the Battle of Bergendal before the other side turned to guerilla warfare. The British were able to withstand sieges during this war at Ladysmith and Kimberley. Name this war at the turn of the 20th century in which the British fought against Dutch-speaking settlers in the Orange Free State and Transvaal in what is now South Africa.

Answer: Second Boer War

19. Robert Bly wrote that no one was there to hold this type of person on his wedding day. Charles Bukowski wrote that this type of person made him “decide to become a bum” and “was a truly amazing man”. This type of person got up early in the Robert Hayden poem “Those Winter Sundays”. Sylvia Plath wrote that she has a picture of this type of person at a blackboard with a cleft in his chin, and in the same poem Plath wrote that she thought every German was him and that she may well be a Jew. Name this type of person that King Lear was in relation to Goneril, Regan, and Cordelia.

Answer: father [accept equivalents such as daddy; accept longer answers; prompt on less specific answers]

20. In 2015, this organization admitted that its former leader had died in 2013 of tuberculosis. That leader’s oldest son, Mohammed Yaqoob, and brother, Abdul Manan, eventually endorsed Akhtar Mansoor as this group’s new leader. This group is allied with the Haqqani network, which held U.S. soldier Bowe [boh] Bergdahl until a 2014 prisoner exchange. This group killed 30 people in a September 2015 attack on an air force base in Pakistan, and it occupied the part of Pakistan where Malala Yousafzai [YOO-suf-ZYE] grew up. Name this group that controlled Afghanistan before the 2001 U.S. invasion, and which worked with leaders of al-Qaeda.

Answer: Taliban

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.

- ^{TB}21. In a short story by this writer, Mr. Guizac tries to arrange for his cousin to move to America to marry Sulk, whom he had caught earlier stealing a turkey. In another story by this writer, Harry Ashfield pretends that his name is Bevel after learning that he is being taken to see a faith healer with that name. This author of “The Displaced Person” and “The River” wrote another story about Julian escorting his mother on a bus to an exercise session. In yet another story by this writer, June Star insults a restaurant run by Red Sammy Butts and his wife, and Bailey crashes his car on the way to Florida before being approached by The Misfit. Name this writer of “Everything That Rises Must Converge” and “A Good Man Is Hard to Find”.

Answer: (Mary) Flannery O’Connor

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

- ^{TB}22. This person’s final words were “Strive on, untiringly.” Shortly after being born in Lum·bi·ni, this person took seven steps and stated “I alone am the World-Honored One.” His first sermon was delivered in a deer park to five of his former companions. Those companions were at first critical of this person because he had given up fasting, but they accepted his advice to follow the Middle Way. His teachings include the Five Aggregates, Noble Eightfold Path, and Four Noble Truths. He spent 49 days meditating under a Bodhi tree to find enlightenment. Name this founder of a major non-theistic religion popular in Thailand, Cambodia, and China.

Answer: Siddhartha Gautama [or the Buddha; accept any underlined name]

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

^{TB}23. This state's governor is Pat McCrory. This state's senators are Richard Burr and Thom ["Tom"] Tillis. This state is south of Virginia. Name this state whose cities include Asheville, Raleigh, and Charlotte.



Answer: North Carolina

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.