

New Trier Scobol Solo 2013

Round 11



1. Molecules can only be used effectively for this purpose when they are above their Krafft temperature, and low concentrations of these form a layer named for Irving Langmuir and Katharine Blodgett. These substances are often added to fluids flowing through pipes to prevent corrosion, and they are added to windows and lenses to prevent them from fogging up. William Griffin and J. T. Davies devised measurements of the hydrophilic-lipophilic balance of these substances, based on the fact that molecules of these chemicals have soluble and insoluble ends. Name these chemicals, used in soaps, which lower surface tension.

Answer: **surfactants** [or **surface-active** agents or **surface-acting** agents]

2. These people developed a tactic of spinning enemies with their shields and shouting “I have eaten!” One leader of these people ordered his warriors to dance on thorny ground. In battles, their reserve forces faced away to stay calm while their main forces encircled the enemy as part of the “buffalo horns” formation. Their *assegai* spears were revised into shorter *iklwa* spears that Cetshwayo [ket-SHWY-oh] used to great effect in their victory over the British at Isandlwana [ih-san-dul-WAH-nah], though they were later defeated at their capital, Ulundi [yoo-LUN-dee] in 1879. Name this South African people unified into a kingdom in 1816 by Shaka [SHAH-kah].

Answer: ama**Zulu** [do not accept “kwaZulu”]

3. An example of this person’s ornamented bases can be seen in the Bayard-Condict Building in New York City. This person and Daniel Burnham got into a dispute during the 1893 World’s Columbian Exposition because this person’s design for the Transportation Building did not fit in with the other buildings. He spent the last part of his career designing banks and the first part of his career working with Dankmar Adler. This architect designed the Chicago Stock Exchange building, whose entrance was reconstructed at the Art Institute of Chicago, and also helped design the Wainwright Building. Name this architect who mentored Frank Lloyd Wright.

Answer: Louis (Henry) **Sullivan**

4. One character created by this author fervently reads Schopenhauer’s *The World As Will and Representation* and is the father of the sickly Hanno. Torre di Venere is the setting of an anti-fascist novella by this author in which the title character kills the hypnotic Cipolla [chee-POHL-lah]. This author also wrote about a writer inspired to travel after a man with red hair stares at him. This author of *Mario and the Magician* and *Buddenbrooks* wrote about a widower who becomes obsessed with a Polish teen while traveling to a place suffering a cholera epidemic. Identify this German author who wrote about Tadzio and Gustav von Aschenbach in *Death in Venice*.

Answer: (Paul) Thomas **Mann**

5. Under this ruler, the Free Economic Society for the Encouragement of Agriculture and Husbandry was established and held essay contests over the future of serfdom. One attempt to end serfdom was weakened when Johann Michelson defeated rebels at the Battle of Kazan. This leader's successor and son was killed by a group led by Generals Bennigsen and Yashvil after refusing to abdicate; that son was Paul the First. Name this leader who was fooled over the wealth of southern Russia by Grigory Potemkin, and who had affairs with Grigory Orlov before and after the death of her husband Peter the Third in 1762.

Answer: **Catherine the Great** [or **Catherine II** or **Yekaterina Alexeevna** or **Yekaterina Belkaya** or **Yekaterina II**; prompt on partial answers]

6. One character in this novel is always late because "punctuality is the thief of time". The title character of this book is chased by a sailor after he hears someone refer to the title character as "the devil's bargain". The title character of this work forces scientist Alan Campbell to dispose of a man he stabbed to death after he is influenced by the "yellow book". That character had watched a performance of *Romeo and Juliet* involving his love interest, who later commits suicide by drinking acid and is named Sibyl Vane. Name this work in which Lord Harry Wotton inspires a character painted by Basil Hallward to pursue beauty and pleasure, the only novel by Oscar Wilde.

Answer: *The **Picture of Dorian Gray*** [do not accept answers including "Portrait"]

7. Inspired by the poetry of Théophile Gautier [tay-oh-feel goh-tee-ay], this composer wrote a song cycle titled *Les nuits d'été* [lay nwee det], or *Summer Nights*. This composer borrowed from his abandoned opera *Les francs-juges* [lay frahnk zhoog] to compose his *Grand Funeral and Triumphal Symphony*, which honored people who fought in the July Revolution. Another piece by this composer has a second movement that features harps and depicts a ball. This composer used a cor anglais and an oboe to depict two shepherds in that piece's "Scene in the Fields", while another movement depicts a "March to the Scaffold". Name this French composer who wrote *The Damnation of Faust* and *Symphonie Fantastique*.

Answer: Hector **Berlioz**

8. One of this man's sons was devoured when the supply of human flesh he had been feeding his horses ran out. This man found his nephew's corpse carried to shore by a dolphin, and his twin sons were killed by their mother Tyro. He marked his cattle's hooves to prove that they had been stolen, and then raped the thief's daughter, Anticlea [an-TEE-lee-ah]. This man left the Underworld after his wife Merope [MEH-roh-pay] failed to perform proper funeral rites; earlier, he had narrowly escaped death by chaining up Thanatos. Name this king of Corinth who was condemned in Tartarus to eternally push a boulder up a hill.

Answer: **Sisyphus**

9. This type of motion impacts climate by creating Milankovitch [mee-lahn-KOH-vich] Cycles. The axial type of this motion causes a Platonic [pluh-TAH-nik] year, which for Earth is almost twenty-six thousand times longer than a standard year. The apsidal [AAP-sih-dul] type of this motion is the change of an orbital path, and the theory of general relativity explained this type motion by the planet Mercury. Also observed in everyday objects, this motion can be explained by the conservation of angular momentum when a force acts at an angle to spinning motion. Name this motion seen in gyroscopes when there is rotation of a rotating axis.

Answer: **precession**

10. An argument for the cultural form of the anthropological approach with this name was subtitled “The Struggle for a Science of Culture” and was written by Marvin Harris. A philosophical approach with this name was opposed by George Berkeley [BARK-lee] and other idealists, and that approach has now become synonymous with physicalism. When Marx and Engels took the approach that Hegel [HAY-gul] had applied to ideas and applied it instead to historical developments, their approach was labeled as the dialectical [dy-ah-LEK-tih-kul] type of this. Give this label sometimes applied to people primarily interested in owning consumer goods.

Answer: **materialism** [or **materialistic**]

11. One work by this artist showing a man with his head leaning against his left hand, which has two fingers by his eye, is his *Portrait of Duranty*. A similar work showing a man with many open books is this painter’s *Portrait of Gustave Geffroy*. In the late 1880s, this painter painted Harlequin four times, including one with Pierrot [pyair-aw]. A decade later, this painter included skulls in several still lifes. This painter’s sister owned a house named Bellevue located in Provence from which this artist painted Mont Sainte-Victoire [sawn veek-twar]. Name this artist who in the early 1890s made a series of works showing card players, considered the father of cubism.

Answer: Paul **Cézanne**

12. This person headed the Landships Committee that promoted tank warfare after he saw the importance of breech-loaded weapons while fighting in the Malakand Field Force. His speeches were collected in the book *The Unrelenting Struggle*. This man served as Chancellor of the Exchequer under Prime Minister Baldwin after rejoining the Conservative Party, and he wrote the four-volume *A History of the English-Speaking Peoples*. Between his terms as prime minister, this person gave a speech at Westminster College that popularized the phrase “Iron Curtain”. Name this prime minister who led the United Kingdom during World War Two.

Answer: Sir Winston **Churchill**

13. A work by this poet describes how the title object “took dominion everywhere” and “did not give of bird or bush”. Another of his poems tells how one must “have been cold a long time / To behold the junipers shagged with ice”. In another work, this poet does “not know which to prefer, / The beauty of inflections / or the beauty of innuendos”. His poem “The Snow Man” is included in a collection whose two verses begin “Take from the dresser of deal” and “Call the roller of big cigars.” Name this poet whose collection *Harmonium* includes “Anecdote of the Jar”, “Thirteen Ways of Looking at a Blackbird”, and “The Emperor of Ice-Cream”.

Answer: Wallace **Stevens**

14. The organs of this body system are damaged by alpha-amanitin [ah-mah-NY-tin]. In flatworms, this system is composed of flame cells. Creatinine [kree-AT-ih-noon] clearance can be used to gauge the efficiency of this body system, whose dysfunction can result in gout. Malpighian [mal-PEE-gee-un] tubules [TOO-byools] in insects fulfill the role of this system, which diffuses ammonia in fish and produces dry uric acid in birds and reptiles. Name this body system that filters nitrogenous [ny-TRAH-jeh-nus] wastes from the blood, storing urine in the bladder after concentrating it in the kidneys, and is generally responsible for removing waste products.

Answer: **excretory** system

15. Some vegans complained about this company in 2012 because they had been unaware that it had been using Peruvian cochineal [koh-chih-NEEL] beetle extracts as food coloring. The food supplier to this company in the United Kingdom, Rich Products, became controversial when it trademarked the word “Duffin”. Dr. Alvin Yee is facing charges for selling painkillers in this company’s stores. In September 2013, this company took out full-page ads in many newspapers asking Americans not to bring guns into their stores. Name this company owned by Howard Schultz that owns Hear Music and whose baristas sell coffee at a lot of locations.

Answer: **Starbucks** Corporation [or **Starbucks** Coffee Company]

16. The ancient Greeks figured out how to square a circle and trisect an angle by drawing one of these figures. One of these shapes on the surface of a sphere is named for Seiffert, and plotting sine integrals versus cosine integrals generates one of these shapes named for Nielsen. The logarithmic type of this is equiangular and, like fractals, is self-similar. The class of these shapes that can be expressed by the equation $r = a + b\theta$ [“r equals a plus b theta”] is named for Archimedes [ar-kuh-MEE-dees]. Name these curves generated by a point that consistently increases or decreases its distance from the center as the point rotates around the center.

Answer: **spirals**

17. This province includes Lake Saint Joseph, which feeds the Albany River that flows past regions populated by the Mushkegowuk, who are part of the Nishnawbe Aski First Nation. Its southern boundary includes the Rainy and Pigeon Rivers towards the west and the Saint Clair River further east. One of this province's towns on the Saint Marys River is Sault Ste. Marie [soo "saint" mah-ree]. Its Point Pelee is the southernmost point in mainland Canada, extending into Lake Erie. This province also includes Windsor, which is very close to Detroit, and borders Niagara Falls. Name this most populous province of Canada that includes Ottawa and Toronto.

Answer: **Ontario**

18. The eruption of the Deccan traps may have contributed to the end of this geologic period, during which rudists were the most important reef-builders in the Tethys Ocean. The Laramide orogeny [aw-RAH-jeh-nee] began lifting the Rocky Mountains in this period that also saw the evolution of the first mammals and flowering plants. The White Cliffs of Dover formed during this period, whose characteristic chalk deposits give it its name, and the Chicxulub [CHIK-shoo-loob] crater in Mexico records the impact event that likely ended this period. It followed the Jurassic period and is noted for diverse dinosaur species. Name this final period of the Mesozoic era.

Answer: **Cretaceous** period

19. Before his famous action, this person confided in Henry, Hark, Nelson, and Sam. That action would have taken place on July 4th had this man not gotten sick. He claimed he was fighting against the Serpent when he described his actions to Thomas R. Gray. Born just before the death of Gabriel Prosser, who had a similar experience to this man, he claimed to find signs such as blood and hieroglyphics on stalks of corn. He unsuccessfully tried to lead his followers to Jerusalem, Virginia, after they had killed the Travis family and several others, but he was eventually captured and executed. Name this slave who gave his "Confessions" after leading an 1831 slave rebellion.

Answer: Nathaniel "Nat" **Turner**

20. In one of this author's works, the human-sized lizards Leslie and Sarah spy on the conversation of the elderly couple Charlie and Nancy. In another of his works, the peculiar couple Harry and Edna suddenly move into the house of their friends Agnes and Tobias. This author of *Seascape* and *A Delicate Balance* also wrote about Jerry, who accosts Peter at a bench in Central Park. In another play by this writer, associate history professor George and his wife Martha entertain the young couple Nick and Honey at their home. Name this playwright of *Zoo Story* and *Who's Afraid of Virginia Woolf?*.

Answer: Edward **Albee**

TB. One of this author's characters sees his mother die from choking on a fishbone and later marries the gorgeous Pamela Lovelace. A second character created by this author is a pickle factory owner who changes her name to Mrs. Braganza and is consumed with guilt for switching two characters at birth. In addition to creating Mary Pereira and Saladin Chimcha, this author wrote of a hijacked plane that explodes over the English Channel and of the telepathic Saleem Sinai. Identify this Indian author of *Midnight's Children* who was issued a fatwa for writing *The Satanic Verses*.

Answer: (Ahmed) Salman **Rushdie**

TB. This is the smallest number of which it can be said that every natural number can be written as the sum of this many perfect squares, which is based on a theorem named for Lagrange. This is also the largest number such that all polynomials with this degree can always be solved using radicals. Wolfgang Haken and Kenneth Appel proved that any planar map with contiguous regions and bordering regions with different colors can be drawn with this number of colors. This is also the number of faces of a tetrahedron. Name this number equal to the number of sides of a trapezoid, parallelogram, or square.

Answer: **4**

TB. Identify the color that names a 2004 revolution that made Viktor Yushchenko the president of Ukraine, marks the most widely used chemical defoliant of the Vietnam War, and names the fruit and its juice that is the official beverage of Florida.

Answer: **orange**