

New Trier Scobol Solo 2013

Replacements



- R1. This person's Caltech lectures were the basis of his books *Six Easy Pieces* and *Six Not So Easy Pieces*. This person worked with Murray Gell-Mann to explain the weak interaction, and he extended work by Paul Dirac on path integrals. This person shared a Nobel Prize with Schwinger and Tomonaga for his work on quantum electrodynamics, and much later he investigated the Space Shuttle Challenger explosion. He included a space axis and a time axis and often showed two arrows meeting a squiggly line in his namesake diagrams. Name this practical joker who wrote the autobiography *What Do You Care What Other People Think?*.

Answer: Richard **Feynman**

- R2. Birds, but not humans, have a renal portal type of this anatomical object, which makes their kidney usage more varied. One of these objects in humans is located by the bow and arrow sign at the end of a colonoscopy. That object and its associated sphincter muscle form the boundary between sections of the small intestine. In addition to the ileocecal [ILL-ee-oh-SEE-kul] example of these objects, humans have two of these that are located at the bases of major arteries and two that are atrioventricular, the mitral and the tricuspid. Name these objects that allow liquids such as blood to flow in only one direction.

Answer: **valves**

- R3. The only example of one of these types of orbitals being filled in violation of Madelung's rule is in lawrencium. Examples of these orbitals are generally expressed using a single subscript of x , y , or z , and these have no density at points where the variable matching its subscript equals zero. Pictures of this tend to look like two balloons being pushed together. This orbital corresponds to a value of one for the angular momentum quantum number. Name this orbital type containing three pairs of electrons at each principal quantum level after the first, a dumbbell-shaped orbital contrasted with s , d , and f orbitals.

Answer: **p** orbital(s)

R4. The first of these objects to successfully begin a mission did so on July 20, 1976, 16 days later than planned. The most northern located of these objects, named *Phoenix*, began operating in 2008, and discovered the presence of a perchlorate [per-KLOR-ayt]. One of these objects can be found in an area named Utopia Planitia [plan-EE-sha], while another made it to the ground using airbags in a tetrahedral configuration, and is now named for Carl Sagan. The most recent one used a skycrane as part of its deployment in 2011. Name these spacecrafts, exemplified by the *Viking* ones, that went to the Red Planet.

Answer: **Mars landers** [accept similar answers mentioning **Mars** and the notion of a lander; prompt on Mars **probe**; do not accept answers including “rover”; accept **Viking** before “Phoenix”]

R5. For a point in a reference circle, this corresponding point is found by expanding the radius of the circle through the point until the new segment’s length is the radius squared divided by the distance from the original point to the center of the circle. For a statement, this is found by negating the two clauses or by finding the contrapositive of the converse. For functions, this is found by swapping the inputs and outputs. Name this construct which has an additive type that can be found by multiplying a given number by negative one and which has a multiplicative type equal to a given number’s reciprocal.

Answer: **inverses**

R6. One consequence of this law was the creation of a town named after the President pro tempore of the senate. That man supported this law, which may have helped him hold off a challenge for his seat from Thomas Hart Benton, and during this law’s implementation he organized the Border Ruffians. Though supported by David Atchison, this law was heavily criticized by Abraham Lincoln during his failed Senate campaign, and this act repealed sections of the Compromise of 1850 and Missouri Compromise. Name this 1854 law supported by Stephen Douglas that led to the creation of two new states.

Answer: **Kansas-Nebraska** Act [or **Nebraska-Kansas** Act]

R7. During this event, many people found refuge in the Moorfields. It was exacerbated by Thomas Bloodworth’s indecisiveness and the fact that due to an ongoing war, fears of a French and Dutch invasion ran high. This disaster supposedly originated in Thomas Farriner’s bakery on Pudding Lane. In its aftermath, Sir Christopher Wren re-planned St. Paul’s Cathedral. Samuel Pepys [“peeps”] documented what 1666 conflagration that destroyed the capital of England?

Answer: Great **Fire of London** [accept equivalents mentioning **fire** and **London**]

- R8. This country was headed by the True Whig Party for 100 years, including the pro-Western William Tubman's regime, until the assassination of William Tolbert in 1980. Tolbert's successor, who was killed ten years later, was Samuel Doe. Doe was opposed by the National Patriotic Front, which supported Charles Taylor. This country elected Joseph Jenkins Roberts as its first president soon after its declaration of independence from the United States in 1847. Name this western African country that became a colony in 1821 when a ship arrived from the United States bringing former slaves.

Answer: (Republic of) **Liberia**

- R9. This conflict began after the forces of Munuza and Al Qama were ambushed in a valley by the Visigoth leader Pelayo, who had refused to pay a tax. During it, the Disaster of Alarcos was avenged with the capture of the city of Calatrava and the defeat of the Almohads at the Battle of Las Navas de Tolosa. This period ended after Muhammad the twelfth surrendered Granada to Ferdinand and Isabella, who had recently united their kingdoms of Aragon and Castile. Name this period during which Christian forces expelled Muslim kingdoms from the Iberian Peninsula.

Answer: **Reconquista** [or **Reconquest** or **unification** of Spain; prompt on descriptive answers about the Christian conquest of Muslim Spain]

- R10. This author wrote about Cross Damon's murder of Gilbert Blount in his novel *The Outsider*. His story "The Man Who Was Almost a Man" appears in the collection *Uncle Tom's Children*. In an autobiographical novel, this author recalls such instances as killing a cat and accidentally burning down his family's Mississippi home. In his most famous work, Bigger Thomas frames the communist Jan Erlone for the murder of Mary Dalton after writing a fake ransom note. Name this author of *Black Boy* and *Native Son*.

Answer: Richard **Wright**

- R11. In this novel, one character verifies his story to a group of men, including a Medicine Man, a Psychologist, and a Journalist, by producing two flowers from his pocket. The protagonist of this novel notices that a red rock is actually a giant crab, and the protagonist had previously entered the Palace of Green Porcelain and believed that he was in a communist society. The protagonist saves Weena from drowning while in that society, which is made up of ape-like Morlocks and fragile Eloi. Name this H. G. Wells novel in which the protagonist travels to the future.

Answer: *The* **Time Machine**

R12. One character created by this author is born as the boat *Wilhelm Gustloff* sinks. That character, Konny Pokriefke, is the protagonist of *Crabwalk*. Another novel features a character whose Adam's apple is attacked by a cat and who is fascinated by the remains of a minesweeper. This author wrote about a man who falls in love with Roswitha Raguna and considers himself to have two fathers, one of whom dies after defending a post office, and the other of whom joins the Nazi Party. Name this writer whose *Danzig Trilogy* includes *Cat and Mouse* and his tale of Oskar Matzerath titled *The Tin Drum*.

Answer: Günter (Wilhelm) Grass

R13. The title character of this poem rides a “white mule” which “would draw from her...approving speech” in the same way as a “bough of cherries” from “some officious fool”. The narrator of this poem asks “Who’d stoop to blame / This sort of trifling?” just after lamenting that the gift of his “nine-hundred-years-old name” is given no more weight than any other gift. The title person of this poem “had a heart...too soon made glad” and appears in a painting by Frá Pandolf, “looking as if she were alive”. Name this poem about the Duke of Ferrara and his previous wife, by Robert Browning.

Answer: “My Last Duchess”

R14. Both the sun and the moon appear with faces at the top of a work by this painter. A bare-breasted woman in a red skirt is the subject of this artist’s *La fornarina*, purportedly a depiction of his mistress. John the Evangelist appears on the right behind a kneeling Mary Magdalene in this painter’s *Mond Crucifixion*. His most famous work includes a depiction of Michelangelo leaning on a desk; to Michelangelo’s right, Diogenes is slouching halfway up a staircase. In the center of that painting appears a man in a red robe pointing to the sky; that is Plato. Identify this painter of *The School of Athens*.

Answer: Raphael(lo Sanzio da Urbino) [or Raphael Santi; accept any underlined name]

R15. This man included the movements “In the Generalife” and “Distant Dance” in a work that borrows folk melodies from his native country. This composer included the *Ritual Fire Dance* and the *Will-o'-the-Wisp* in a work that details the love story between Candela and Carmelo. Sergei Diaghilev commissioned a ballet by this composer, for which Pablo Picasso designed the set. That ballet, based on a work by Pedro Alarcón, tells the story of a magistrate who tries to fool the miller and steal his wife. Name this Spanish composer of the ballets *El Amor Brujo* and *The Three-Cornered Hat*.

Answer: Manuel de Falla (y Matheu)

R16. One work by this person shows John Ruskin seated with a book in his right hand, and his bronze bust of Lincoln is at the Smithsonian Museum of American Art. Chicago displays this person's statues of John Altgeld and General Sheridan. Augustus Lukeman completed a work that this person abandoned showing Stonewall Jackson, Jefferson Davis, and Robert E. Lee. An assistant to this person, Korczak Ziolkowski [KOR-chahk zee-ohl-KAWFF-skee], began work on the Crazy Horse Memorial. Name this sculptor whose most famous work, located in the Black Hills of South Dakota and showing four presidents, is Mount Rushmore.

Answer: (John) Gutzon (de la Mothe) **Borglum**

R17. This deity blew the sun and moon into motion, and his rule over the world was ended after humans were transformed into monkeys and killed by a hurricane. He immolated himself after either seeing his enemy's face reflected in a mirror or drunkenly sleeping with his virgin sister. This deity and his brother Xolotl [SHOH-loh-tuhl] ground up bones to create a new race of humans, after which this rival of Tezcatlipoca [TEZ-kaht-lee-POH-kah] departed from the world on a raft of snakes. Name this feathered serpent from Aztec mythology.

Answer: **Quetzalcoatl** [KET-zahl-koh-AH-tuhl] [prompt on **Ehecatl**]

R18. After briefly stating the importance of its subject, this work lists five fundamental factors and seven considerations, the last of which is proper rewards and punishments. This book later lists flight, insubordination, collapse, ruin, disorganization, and rout as poor outcomes that can be blamed on a poor leader. After describing nine situations, this work ends with advice on the use of fire and the use of spies. Traditionally dated to about 500 BCE, this book was translated to English by Lionel Giles the same year that he translated the *Analects*. Name this work by Sun Tzu giving advice to generals.

Answer: *The* **Art of War** [or **Sūnzǐ Bīngfǎ**]

R19. The debate over this bill included a November 2013 post by Jonathan Chait titled "Barack Obama Is a Terrible Blogger". Dean Heller became the 60th senator to support this bill, meaning that it would not be filibustered, but the chances of this bill becoming law were weakened when aides to Speaker Boehner [BAY-nur] stated that he does not support it. For nonreligious employers with at least 15 employees, this bill would add a protected class. Name this bill designed to help people who would be punished for their sexual orientation or gender identity.

Answer: **ENDA** [or **Employment Non-Discrimination** Act]

R20. The northernmost part of this state is the Apostle Islands, the largest of which is Madeline Island. A path following a moraine across this state is the Ice Age Trail. Like Missouri, it contains a Lake Winnebago, and this state's version is surrounded by towns such as Neenah and Fond du Lac. Its east coast includes the towns of Manitowoc and Sheboygan, and Washington Island is just past the end of its Door Peninsula. The town of LaCrosse is on its western border with Minnesota. Name this state bordering the Upper Peninsula of Michigan that contains the city of Milwaukee.

Answer: **Wisconsin**