



1. Emile Durkheim's *Elementary Forms of the Religious Life* used a test of social role to distinguish this phenomenon from religion. It was the last of three phenomena studied "among the Azande" (uh-ZAHN-day) by Edward Evans-Pritchard, who outlined a type of "thinking" known by this term, and it was grouped with (*) "science and religion" in a Bronislaw Malinowski paper. According to James Frazer, this phenomenon always precedes religious belief. For 10 points, identify this phenomenon of manipulating the natural world with incantations and rituals.

ANSWER: magic [or word forms]

019-14-102-10101

BONUS: What frequent Supreme Court swing voter wrote the opinion that invalidated the Defense of Marriage Act in *U.S. v. Windsor*?

ANSWER: Anthony Kennedy

015-14-102-1010-11

2. This man was photographed by Gaetano Faillace (fye-LAH-chay) standing next to an enemy general. He was unsuccessfully targeted in the Kyujo Incident, and his surrender message referenced a "new and most cruel" weapon with "incalculable" damage. This man gave the "Jewel Voice Broadcast" to signify his country's unconditional (*) surrender, and was then forced to renounce his divinity by Douglas MacArthur. This ruler was never tried for war crimes, unlike his military leaders such as Hideki Tojo. For 10 points, name this Emperor of Japan during World War II.

ANSWER: Hirohito [or the Showa Emperor]

052-14-102-10102

BONUS: What lengthy retreat across China was performed by Mao Zedong's Red Army from 1933 to 1935?

ANSWER: Long March

015-14-102-1010-11

3. This country's Dynamo Stadium has been the locus of protests, and several unofficial gangs known as "titushki" have attacked political opponents here. The Pravy Sektor is an extreme nationalist group in this country that opposes closer ties with Europe. Government restrictions on demonstrations in this country were defied with mass demonstrations in the (*) Maidan (my-DON). This country's prime minister Mykola Azarov and president Viktor Yanukovich were opposed in February 2014. For 10 points, name this country that has seen mass protests in its capital city of Kiev.

ANSWER: Ukraine

030-14-102-10103

BONUS: What young outfielder for the Angels has finished second in American League MVP voting for two consecutive years?

ANSWER: Mike Trout

015-14-102-1010-11

4. **The reaction of these things to stressful forces is called tenacity. Adding a drop of hydrochloric acid and seeing whether these things fizz can be used to test whether they contain carbonate. The color these things display in a powdered form is called (*) streak. Their crystal lattice determines their properties of parting, fracture, and cleavage. The vast majority of Earth's crust is made up of the silicate type of these things. For 10 points, name these constituents of rocks.**

ANSWER: minerals [prompt on crystals until "crystal lattice" is read]

066-14-102-10104

BONUS: This is a 30-second calculation question. If angle theta is in quadrant II and sine theta is two over the square root of 29, what is sine of two theta?

ANSWER: -20/29

037-14-102-1010-11

5. **The point group for this molecular geometry has a symmetry order of twenty-four and is called T sub d. This geometry is present in every carbon atom of cyclohexane (SIKE-lo-HECKS-ain), but none of the carbon atoms of benzene. The polyatomic ions sulfate and phosphate have this geometry. All (*) alkanes have this geometry, and although it is not bent, molecules with this geometry have bond angles of 109.5 degrees. For 10 points, identify this geometry with four attached atoms and no lone pairs, which is the geometry of methane.**

ANSWER: tetrahedral geometry

239-14-102-10105

BONUS: What equation is used to calculate the pH of a buffer solution from the pKa of the constituent and the concentrations of base and acid?

ANSWER: Henderson-Hasselbalch equation

048-14-102-1010-11

6. **The system described by this set of statements has a conserved quantity called the Laplace-Runge-Lenz vector. One of these statements holds that a body's areal velocity is constant, while another relates the square of the sidereal period to the cube of an (*) ellipse's semimajor axis. Isaac Newton used calculus to rigorously prove these laws, which were based on examinations of data taken by Tycho Brahe. For 10 points, identify this set of three laws, named for a German astronomer, that describe how planets move.**

ANSWER: Kepler's laws of planetary motion

132-14-102-10106

BONUS: What quantity is the rotational analogue of force?

ANSWER: torque

014-14-102-1010-11

7. **One character in this story refers to a home with a secret panel in which silver was hidden from Sherman's troops. In this story, a restaurant is advertised with a series of highway signs that read, "A VETERAN!" and "THE FAT BOY WITH THE HAPPY LAUGH." That restaurant's owner, Red Sammy Butts, is insulted by June Star in this story, in which the (*) cat Pitty Sing causes a car accident. For 10 points, name this short story in which a criminal called The Misfit murders a family on a road trip, written by Flannery O'Connor.**

ANSWER: "A Good Man Is Hard to Find"

030-14-102-10107

BONUS: What is the name for the voice register above bass but below tenor?

ANSWER: baritone

015-14-102-1010-11

8. This story's narrator measures out his room by attaching a torn piece of clothing to the wall and counting his paces along the perimeter. This story ends with the arrival of the French army under Lasalle. It occurs in a room whose walls heat up and contract. The Spanish Inquisition imprisons the protagonist of this story, who saves himself by attracting (*) rats to chew through his bonds. For 10 points, name this Edgar Allan Poe story about a prisoner nearly executed by a periodically-swinging scythe.
ANSWER: "The Pit and the Pendulum"

080-14-102-10108

BONUS: Phidias sculpted a depiction of Athena, its dedicatee, for what Greek temple?
ANSWER: the Parthenon

190-14-102-1010-11



SET A:

1. BONUS: The battles of Brandywine and Germantown allowed the British to capture what city during the Revolutionary War?

ANSWER: **Philadelphia**

080-14-102-1010-12

2. BONUS: This is a 30-second calculation question. The two roots of a second degree polynomial P are i and negative i . If the y -intercept of the graph of P of x is 2, what is the polynomial in standard form?

ANSWER: **$2x^2 + 2$**

190-14-102-1010-12

3. BONUS: Oseltamivir is a treatment for what virus that comes in swine, bird, and Spanish varieties?

ANSWER: **influenza** virus [or **flu** virus]

048-14-102-1010-12

4. BONUS: What term describes narratives in which the surface characters and events are extended metaphors with a second meaning, as seen in *The Pilgrim's Progress*?

ANSWER: **allegory**

014-14-102-1010-12

SET B:

1. BONUS: This is a 20-second calculation question. The variance of a non-uniform data sample is ten times its standard deviation. What is the variance?

ANSWER: **100**

190-14-102-1010-12

2. BONUS: What American city has neighborhoods called Bernal Heights, the Castro, Fisherman's Wharf, Haight-Ashbury, and the Tenderloin?

ANSWER: **San Francisco**

015-14-102-1010-12

3. BONUS: What British monarch presided over the British presence in the Crimean War during her sixty-three year reign?

ANSWER: Queen **Victoria**

015-14-102-1010-12

4. BONUS: What author of *Dirty Hands* wrote a play in which Estelle and Inez join a room with Garcin, who exclaims "Hell is other people?"

ANSWER: Jean-Paul **Sartre**

140-14-102-1010-12



9. A member of this family said his presidential campaign had "Big Mo," a reference to momentum, and used the phrase "voodoo economics" to denounce his party rival. That member of this family used the expression "a thousand (*) points of light" to discuss civic involvement. Another member of this family was President when the Partial-Birth Abortion Ban Act, the No Child Left Behind Act, and the Patriot Act were passed. For 10 points, name this family which produced the 41st and 43rd Presidents of the United States, a father-son pair.

ANSWER: Bush

052-14-102-10109

BONUS: What rap-rock band fronted by Chester Bennington released the album *Collision Course* in 2004?

ANSWER: Linkin Park

015-14-102-1010-11

10. In Jean-Antoine Watteau's painting *Pierrot*, a man of this profession can be seen with a donkey. A member of this profession, Franklin West, is taking notes in a painting that depicts a woman shielding her eyes. A melancholy man rests his face on his hand in (*) Van Gogh's portrait of one of these men, Paul Gachet (guh-SHAY). In another painting, a man from this profession holds a needle near the corpse of the executed robber Aris Kindt. For 10 points, name this profession of Rembrandt's subject Nicolaes Tulp and Samuel Gross, whose clinic was depicted in a painting by Thomas Eakins.

ANSWER: doctor [or equivalents, such as physician]

030-14-102-10110

BONUS: The New Madrid earthquakes had their epicenter in what state, where slavery was allowed as a condition of Maine entering the Union as a free state?

ANSWER: Missouri

190-14-102-1010-11

11. A song by Arthur Herzog and this singer notes that, "Them that's got shall get, Them that's not shall lose." Frank O'Hara wrote a poem about the day this singer died. This singer received her nickname from her frequent collaborator Lester Young. She sang about (*) "Blood on the leaves and blood at the root" in a song by Abel Meropool that she popularized. For 10 points, name this jazz singer who was nicknamed "Lady Day," wrote *Lady Sings the Blues*, and sang the anti-lynching piece "Strange Fruit."

ANSWER: Billie Holiday [or Elinore Harris; prompt on Lady Day until it is read]

030-14-102-10111

BONUS: Fur magnate John Jacob Astor founded the city of Astoria in what territory, whose northern boundary was set at the 49th parallel despite James K. Polk's campaign slogan of "Fifty-Four Forty or Fight?"

ANSWER: Oregon Territory [or Oregon Country]

080-14-102-1010-11

12. The second item on this list is "samudaya" (sah-moo-DIE-uh), which is later elucidated to include killing, lying, stealing, and other forms of "attachment." This list begins with "dukkha" (DOO-kuh) and ends with "magga." These tenets were revealed at (*) Sarnath and are recorded in the text *The Setting in Motion of the Wheel of Dharma*, and they constituted the first sermon given after the enlightenment under the Bodhi tree. The last of these beliefs says that the Eightfold Path is the way to reach nirvana. For 10 points, identify this set of core beliefs of Buddhism.

ANSWER: Four Noble Truths [or Chattari-ariya-saccani; or Chatvari-arya-satyani]

019-14-102-10112

BONUS: John Unger visits Percy Washington's home that rests atop a giant diamond in "The Diamond as Big as the Ritz," a short story by what creator of Nick Carraway?

ANSWER: F. Scott Fitzgerald

121-14-102-1010-11

13. In a novel by this man, the title character discovers a phage (FAYJ) that destroys bacteria, shortly after his wife dies of the bubonic plague. A character created by this author is an alcoholic lawyer who becomes a Methodist minister in (*) Zenith, a city in Winnemac. He wrote about Paul Resiling, who shoots his wife Zilla, in one of his novels. This author of *Arrowsmith* and *Elmer Gantry* also created Carol Kennicott, who becomes dissatisfied with Gopher Prairie, Minnesota. For 10 points, name this American author of *Babbitt* and *Main Street*.

ANSWER: Sinclair Lewis

186-14-102-10113

BONUS: What law states that the partial pressure of a solute in a gas above a solution is equal to the concentration of the solute times the law's namesake constant?

ANSWER: Henry's law [do not accept "Raoult's law"]

048-14-102-1010-11

14. This city is the headquarters of the organization that administers Earthwatch, an environmental information clearinghouse among governments. This home of the United Nations Environment Program is five miles north of a national park with the same name that includes an "animal orphanage." This city receives water from the (*) Sasumua (sah-suh-MOO-uh) Dam, which dams the Tana River. At least sixty-seven people were killed in this city's Westgate Mall by al-Shabab gunmen in 2013. For 10 points, name this capital city of Kenya.

ANSWER: Nairobi

030-14-102-10114

BONUS: The friction force for an object is proportional to what force that is perpendicular to the surface?

ANSWER: normal force

014-14-102-1010-11

15. This man wrote the lines "Everybody knows where you go when the sun goes down" and "I wasted my time when I would try, try, try." Another song by this man describes a train "rollin' 'round the bend," heard by a man who "shot a man in (*) Reno, Just to watch him die." Those songs were sung by Joaquin Phoenix in a biopic of this man's romance with June Carter. His signature song opens "I keep a close watch on this heart of mine." For 10 points, name this country musician who wrote "I Walk the Line."

ANSWER: John R. "Johnny" Cash [or J.R. Cash]

020-14-102-10115

BONUS: What Jewish holiday commemorates the events recounted in the Book of Esther?

ANSWER: Purim

014-14-102-1010-11

16. **Howard Jarvis successfully advocated for an amendment to this state's constitution that limited the maximum level of property taxes. Over sixty percent of voters supported that ballot initiative here, which was known as Proposition 13. A man who promised to make the (*) "welfare bums" work defeated Pat Brown for the governorship here in 1966. Brown won its 1962 election running against Richard Nixon, and his son Jerry is the current governor of this state. For 10 points, name this state, where Ronald Reagan was governor in the 1960s.**

ANSWER: California

121-14-102-10116

BONUS: Clara Peggotty, Mr. Micawber, and Mr. Murdstone appear in what autobiographical Charles Dickens novel?

ANSWER: David Copperfield

014-14-102-1010-11



17. This experiment partially contradicted the earlier Hoek (WHO-K) experiment, the results of which had been explained by a dragging coefficient. An early version of this experiment observed a shift of 0.018 fringes. This experiment was modified with an asymmetrical apparatus in the (*) Kennedy-Thorndike experiment. This experiment's apparatus was designed around a half-silvered mirror and perpendicular arms, and rested upon a pool of mercury which rotated. For 10 points, name this experiment conducted at Case Western that disproved the existence of the luminiferous aether.

ANSWER: Michelson-Morley experiment

187-14-102-10117

BONUS: What American author wrote about Edna Pontellier in *The Awakening*?

ANSWER: Kate Chopin

014-14-102-1010-11