



1. These compounds can be chlorinated using S-O-Cl_2 or brominated using P-Br_3 . Both PCC and the Jones reagent oxidize these compounds to ketones. Though not amines (AA-meenz), the number of carbon atoms attached to their defining functional group determines whether they are primary, secondary, or tertiary. An example of these compounds is generated along with carbon dioxide when yeast enzymes consume glucose. These compounds have a hydroxyl group bounded to carbon atom. For 15 points, name these compounds whose examples include methanol, ethanol, and a type of isopropyl.

ANSWER: alcohols

189-13-104-09101

BONUS: What school of philosophy that advocates the greatest good for the greatest number was founded by Jeremy Bentham and John Stuart Mill?

ANSWER: utilitarianism

030-13-104-0910-11

2. This is the ethnicity of a woman who hears about her rebellious aunt, the No-Name Woman, from her mother, Brave Orchid. This ethnicity of the author of *The Woman Warrior*, Maxine Kingston, is also that of Pearl Louie Brandt, who buys a figurine of the title goddess in *The Kitchen God's Wife*. The author of *Saving Fish from Drowning*, who belongs to this minority, wrote a series of sixteen vignettes about immigrants in San Francisco who meet up to play board games. For 15 points, name this ethnic minority chronicled in Amy Tan's *The Joy Luck Club*.

ANSWER: Chinese-Americans [prompt on Asian-Americans; or Han Chinese]

080-13-104-09102

BONUS: In October 2013 elections, what country's FPV-PJ coalition won both legislative houses using a platform based on the policies of President Christina Kirchner?

ANSWER: Argentina [or Argentine Republic; or Republica Argentina]

153-13-104-0910-11

3. This event inspired Leo Ryan to spend a week as a substitute teacher. Former CIA director John McCone chaired a namesake commission after this event. This event, which occurred after the passage of Proposition 14, was instigated by Lee Minikus pulling over a car containing Donald and Marquette Frye. Police Chief William Parker compared its participants to "monkeys in the zoo" and called in the National Guard. The city where this event took place was later hit by the similar Rodney King Riots. For 15 points, name this 1965 riot in Los Angeles.

ANSWER: Watts riot [do not accept or prompt on "Los Angeles riots"]

048-13-104-09103

BONUS: Edward Jenner popularized a method of conferring immunity against what disease, using a virus that primarily infected cows?

ANSWER: smallpox

140-13-104-0910-11

4. This author created a businessman who begins randomly assaulting people after reading that he is the only real human in a horde of robots. This creator of Dwayne Hoover and Eliot Rosewater also created the fictional religion of Boknonism in a dystopian novel. In his most famous book, Billy Pilgrim becomes "unstuck in time," possibly a metaphor for his post-traumatic stress after viewing the firebombing of Dresden. For 15 points, name this author of *Breakfast of Champions*, *Cat's Cradle*, and *Slaughterhouse Five*.

ANSWER: Kurt **Vonnegut**

080-13-104-09104

BONUS: What country was where the Rum Rebellion took place in 1808 against William Bligh, and where prime minister Harold Holt disappeared while swimming in 1967?

ANSWER: Commonwealth of **Australia**

186-13-104-0910-11

5. The "picker-up of learning's crumbs" narrates a poem by this man that describes a meeting with Lazarus. This author of "Karshish, the Arab Physician" wrote another poem in the voice of a man who blows a slug-horn after reaching a building he learned about from a "hoary cripple." In another of his dramatic monologues, the speaker speculates what Fra Pandolf might have said to the title person, who had a heart "too soon made glad." For 15 points, name this author of "Childe Roland to the Dark Tower Came" and "My Last Duchess."

ANSWER: Robert **Browning** [or "**Karshish**, the Arab Physician" until it is read]

121-13-104-09105

BONUS: What school of psychology advocated by Wolfgang Kohler and Max Wertheimer emphasized the importance of wholeness?

ANSWER: **Gestalt** psychology

227-13-104-0910-11

6. Crossdating these things is commonly done with a skeleton plot. Portions of these structures that occur early in a season are typically lighter than portions later in a season, allowing for visual identification of their boundaries. These things are the primary object of interest in the field of dendrochronology. Because the width of these things varies mostly as a result of precipitation, they can be used to construct past precipitation records. For 15 points, identify these patterns visible in a cross-section of a tree trunk.

ANSWER: tree growth **rings**

066-13-104-09106

BONUS: What surname labels a distribution for trials with two possible outcomes and a principle that an increase in a fluid's velocity decreases its pressure?

ANSWER: **Bernoulli**

023-13-104-0910-11

7. A holder of this position replaced the corrupt Simon Cameron and established a specially operated telegraph system and railway lines. The Tenure of Office Act was used to prevent that man, Edwin Stanton, from being removed from this post by the Andrew Johnson administration. After the close of World War II, this position's responsibilities were folded into the newly created Secretary of Defense. For 15 points, name this defunct Cabinet position that, prior to 1947, was in charge of most of the U.S. military.

ANSWER: secretary of **War** [do not accept "Secretary of Defense"]

121-13-104-09107

BONUS: What university lost four students to gunfire from the Ohio National Guard during a 1970 campus protest of the Vietnam War?

ANSWER: **Kent State** University

023-13-104-0910-11

8. An actress from this country controversially swam naked in the 1932 film *Bird of Paradise*. A painter from this country depicted workers at Ford Motor Company in *Detroit Industry* and redid an artwork after the Rockefeller family objected to its depiction of Lenin. This country is the birthplace of the artist of *Man at the Crossroads*, whose wife often painted self portraits with monkeys and sported a unibrow. For 15 points, name this North American country home to the muralist Diego Rivera.

ANSWER: United States of **Mexico** [or **United Mexican States**; or **Estados Unidos Mexicanos**]

186-13-104-09108

BONUS: What Arab nationalist ideology names the party that controlled Iraq under Saddam Hussein and Syria since the rise of the Assad family?

ANSWER: **Ba'athism** [or **Ba'ath Party**]

019-13-104-0910-11

9. The instruction "Go home and write / a page tonight" opens a poem by this writer written as an assignment for English B. This author wrote about a singer on Lennox Avenue who "slept like a rock or a man that's dead" in "The Weary Blues." In another of his poems, he offered "stink[ing] like rotten meat" and "sag[ging] like a heavy load" as possible outcomes for a dream deferred. The speaker "bathed in the Euphrates when dawns were young" in a poem in which this man "speaks of rivers." For 15 points, name this Harlem Renaissance poet.

ANSWER: Langston **Hughes** [or "**Theme for English B**" before "writer" is read]

080-13-104-09109

BONUS: What 2013 Disney film concerns the princess Elsa, who uses her powers to animate a snowman and create an eternal winter?

ANSWER: **Frozen**

015-13-104-0910-11

10. One of this author's novels consists of several transcribed tape recorder conversations, followed by an "Imitation of the Tape." The title character of that novel, *Visions of Cody*, appears in another book by him, in which the narrator first meets him "not long after my wife and I split up." This author's most famous novel was originally written on a long scroll of tracing paper. This man fictionalized his friend Neal Cassady as Dean Moriarty and himself as Sal Paradise in that novel. For 15 points, name this Beat author of *On the Road*.

ANSWER: Jack **Kerouac**

020-13-104-09110

BONUS: What German playwright and friend of Goethe (GUR-tuh) wrote *The Robbers* and *William Tell*?

ANSWER: Friedrich **Schiller**

014-13-104-0910-11

11. A Cold War museum known as the Diefenbunker is located in this city, and this city's Tulip Day commemorates this city's harboring of the Dutch royal family in World War II. This city is linked to a nearby city by the Chaudiere and Interprovincial Bridges, and the Peace Tower is located here. This city lies at the confluence of the Gatineau, Rideau, and its namesake river and is located on the border with Quebec. For 15 points, name this city in Ontario, the capital of Canada.

ANSWER: **Ottawa**

030-13-104-09111

BONUS: This is a 30-second calculation question. Find the point of intersection of the lines given by the equations " $2x + 5y = -1$ " and " $3x - y = 7$ ".

ANSWER: **(2, -1)**

003-13-104-0910-11

12. The main character of this novel tries to help a man using the alias Provis escape from Arthur Compeyson. A character in this novel is engaged to Bentley Drummle. This novel's protagonist befriends Herbert Pocket and receives help from Mr. Jaggers. The blacksmith Joe Gargery takes in the main character of this novel before he goes to live with Miss Havisham and Estella, and then travels to London with money from Abel Magwitch. For 15 points, name this coming-of-age novel about the orphan Pip that was written by Charles Dickens.

ANSWER: ***Great Expectations***

023-13-104-09112

BONUS: This is a 30-second calculation question. The median of a set of three numbers is three larger than the mean. 6 is the unique mode of the set. What is the smallest number in the set?

ANSWER: **-3**

003-13-104-0910-11

13. This author wrote about a character who is proclaimed dead by his family while he gambles at Monte Carlo. This author of *The Late Mattia Pascal* wrote about a character who falls off a horse and awakens thinking that he is Henry IV. In a play written by this author, the Step-Daughter works as a prostitute for Madame Pace and the Boy commits suicide with a revolver. For 15 points, name this Italian author of *Six Characters in Search of an Author*.

ANSWER: Luigi **Pirandello**

227-13-104-09113

BONUS: This is a 20-second calculation question. If the cosine of $2x$ is equal to $.5$, give all possible values for the sine of x .

ANSWER: **.5** and **-.5** [or **1/2** and **-1/2**]

080-13-104-0910-11

14. The head of this company attempted to create the South Improvement Company to control its shipments. Three ships belonging to this company were destroyed in the Panay incident. A political cartoon shows a baby Teddy Roosevelt wrestling with a snake representing this entity. A series of articles about this company published in *McClure's* magazine were written by Ida Tarbell. This company was found to be in violation of the Sherman Antitrust Act, leading to its split into companies including Conoco and Chevron. For 15 points, name this company headed by John D. Rockefeller.

ANSWER: **Standard Oil** Company

048-13-104-09114

BONUS: What English poet described men who are “bent double, like old beggars under sacks” during an attack with poison gas in his “Dulce et Decorum Est?”

ANSWER: Wilfred **Owen**

227-13-104-0910-11

15. Peter Cooper created this product, but he and Pearle B. Wait failed to popularize it before Orator Woodward succeeded. A 1993 test at Saint Jerome Hospital in Batavia confirmed the claim of Adrian Upton that an EEG on this substance could display the same brain waves as a human. Cecil B. DeMille used this product in *The Ten Commandments* to depict the parted waters of the Red Sea. This official state snack of Utah was once available in celery flavor, but its original four flavors were lemon, orange, strawberry, and raspberry. For 15 points, name this Kraft-brand gelatin.

ANSWER: **Jell-O** [prompt on **gelatin** until it is read]

023-13-104-09115

BONUS: This is a 20-second calculation question. If the sine squared of x is equal to $.7$, what is the tangent squared of x ?

ANSWER: 7/3 [or 2.33]

080-13-104-0910-11

16. During this show's fifth season, three characters got work at the Spotlight Diner. Marley developed an eating disorder on this show after Kitty altered a costume to make her think she was gaining weight. On this show, Principal Figgins works with the Jane Lynch-played Sue Sylvester, who coaches the Cheerios and has a feud with Will Schuester. Members of the New Directions on this show often get slushed in the face. For 15 points, name this TV show about a Lima, Ohio, show choir.

ANSWER: Glee

023-13-104-09116

BONUS: What abstract expressionist painter gained notoriety for his method of dripping paint directly onto a canvas?

ANSWER: Jackson Pollock

140-13-104-0910-11

17. While fighting this monster, its killer had to contend with a crab sent by Hera, which later became the constellation Cancer. This creature's blood was poisonous, and its killer dipped his arrows in it to help kill such enemies as the centaur Nessus. It was killed in the second labor of Heracles, whose nephew used a firebrand to burn this monster's neck stumps. For 15 points, name this ancient Greek monster who had many heads that would regenerate if cut off.

ANSWER: Lernaean Hydra

052-13-104-09117

BONUS: The sulfate of what element, commonly called Epsom salt, is used as a drying agent?

ANSWER: magnesium [or Mg]

239-13-104-0910-11

18. This organism contains vesicular structures called Berkeley bodies, which are involved in the CTV pathway. Its vacuoles contain phosphate-rich "dancing bodies". This organism releases A- and alpha-factors during mating, and since it cannot metabolize nitrate, this organism requires supplemental ammonia and urea to promote growth. This organism is one of the smallest in the phylum Ascomycota, and it was the first eukaryote to have its genome sequenced. For 15 points, identify this single-celled fungus commonly used to leaven bread and make beer.

ANSWER: Baker's yeast [or Saccharomyces cerevisiae]

234-13-104-09118

BONUS: This is a 20-second calculation question. What is the area of a rhombus with two sixty degree angles and sides of length 2?

ANSWER: 2 times the square root of 3

233-13-104-0910-11

19. The most efficient implementation of Dijkstra is done using a Fibonacci one of these structures. Priority queues are typically implemented using a binary of them. A $n \log n$ sorting algorithm that uses these data structures adds elements to one, maintaining their namesake property, and then removes the elements while again maintaining that property. For 15 points, identify this data structure similar to a tree except parent nodes must either always be less than or always greater than their children.

ANSWER: heaps

066-13-104-09119

BONUS: BCS theory attempts to explain what phenomenon in which a material's electrical resistance drops to zero?

ANSWER: **superconductivity**

014-13-104-0910-11

20. These interactions are accounted for by the sixth-power term in the Lennard-Jones potential, and they are the reason lighter halogens are gases and heavier halogens are solids and liquids. These forces are the only ones present in non-polar molecules and become stronger as the sizes of atoms and molecules get larger. They are a subset of the van der Waals (ven-dur-VAHLZ) forces. For 15 points, name these weak intermolecular forces formed between instantaneous induced dipoles, which are named for a German scientist.

ANSWER: **London** dispersion **forces** [or **van der Waals forces** until "gases" is read; prompt on **dispersion forces**; prompt on **LDFs**]

226-13-104-09120

BONUS: Caravaggio was a practitioner of what painting technique, in which light and dark are highly contrasted?

ANSWER: **chiaroscuro**

140-13-104-0910-11

21. Teresa Stolz was the star soprano in many operas by this composer. An opera by this composer includes a canzone about the flightiness of women sung by the Duke of Mantua. This composer created an opera featuring the jealous Amneris and conquering hero Radames. This composer of the aria "La donna e mobile" wrote an opera that had live camels and elephants on stage during its 1871 premiere in Cairo. For 15 points, name this Italian composer of operas about the hunchbacked jester *Rigoletto* and Ethiopian princess *Aida*.

ANSWER: Giuseppe **Verdi**

023-13-104-09121

BONUS: What equation, named for a German physicist and a French physicist, predicts the shape of curves on a phase diagram?

ANSWER: **Clausius-Clapeyron** equation

239-13-104-0910-11

22. From 1966 to 2009, France boycotted the administrative structure of this organization, which was established by the 1949 Washington Treaty and is currently led by Danish Secretary General Anders Fogh Rasmussen. This organization's first-ever invocation of Article 5 of its charter, which provides for a collective response to an attack against one member, occurred after 9/11. For 15 points, name this mutual defense alliance among the U.S., Canada, and Western Europe.

ANSWER: **NATO** [or the **North Atlantic Treaty Organization**]

019-13-104-09122

BONUS: What process that takes place at convergent tectonic plate boundaries occurs when one plate slides under another?

ANSWER: **subduction**

014-13-104-0910-11

23. In September 2013, the Senate website came under fire for questioning if this amendment protected a collective or individual right. Concerns that this amendment would be infringed upon helped stop a 2013 bill sponsored by Patrick Toomey and Joe Manchin to introduce stricter background checks. This amendment is supported by Wayne LaPierre, the executive vice president of the NRA. For 15 points, name this amendment from the Bill of Rights that protects the right to bear arms.

ANSWER: **Second** Amendment

023-13-104-09123

BONUS: What name is given to the sections into which many epic poems are divided, most famously those of Dante?

ANSWER: **canto**

014-13-104-0910-11

24. In Spanish, this construction may be introduced with forms of the verbs "sostener," (sohs-ten-AIR), "explicar" (ecks-plee-KAR), or "añadir" (ahn-yah-DEER). When the tense of a Spanish sentence's main verb is in the future, verbs in this kind of construction use the conditional forms. The German "special" or "newspaper" subjunctive is used to form this construction, which uses infinitive verbs plus accusative nouns in Latin. For 15 points, identify this construction which communicates what another person said, and is accomplished in English with phrases such as "she said that he is guilty."

ANSWER: **indirect** speech [or **indirect** statement]

019-13-104-09124

BONUS: In Archie comics, teenager Archie Andrews is torn between loving the blonde Betty and what rich, brunette girl?

ANSWER: **Veronica** [prompt on **Lodge**]

052-13-104-0910-11

25. This man's "Ancient Valor is Not Yet Dead in Italic Hearts" was used by Machiavelli to end *The Prince*. He wrote about his lover dying without suffering and revealing that she always loved him in his "Triumph of Death." This man wrote an epic poem about the Second Punic War entitled *Africa*. He wrote a book about Roman heroes called *De Viris Illustribus*, and he also wrote the *Canzoniere*. For 15 points, name this Italian poet who is the namesake of a type of sonnet and is known for his poems addressed to Laura.

ANSWER: Francesco **Petrarcha**

030-13-104-09125

00--20-0910-11

26. A document central to this case contained part of the Thirteenth Amendment and implored the reader to "Assert your rights." This case's holding was replaced by *Whitney v. California*'s "bad tendency" test and *Brandenburg v. Ohio*'s "imminent lawless action" test. The defendant in this case was arrested for mailing leaflets against the draft, and Oliver Wendell Holmes's holding in this case created the "clear and present danger" test. For 15 points, name this Supreme Court case which stated that there is no right to actions such as "shouting fire in a crowded theatre."

ANSWER: **Schenck v. U.S.**

048-13-104-09126

00--20-0910-11



27. The fortress of Oreshek was built on the shore of this body of water. The north-flowing Volkhov River is a tributary of this body of water. The ancient Valaam Monastery is located on the largest island in this lake. Trucks carried supplies across the frozen "Road of Life" on this lake during World War II. This lake is connected to the Gulf of Finland by the Neva River. It is the largest lake in Europe. For 15 points, name this lake outside of St. Petersburg.

ANSWER: Lake **Ladoga**

080-13-104-09127

00--20-0910-11

28. As this character dies, he says farewell to his servant Strato before telling a dead man that "I killed not thee with half so good a will." During a funeral oration, another character continually, if sarcastically, says that this person is an "honorable man." After this man's wife Portia kills herself, he sees a ghost telling him "thou shalt see me at Philippi." He is proclaimed "the noblest Roman of them all" by Mark Antony. For 15 points, name this man who conspires with Cassius to assassinate the title character in *Julius Caesar*.

ANSWER: Marcus Junius **Brutus**

052-13-104-09128