



1. Later in his career, this author has begun frequently to use Jewish themes, such as in his novel about the lynching of Leo Frank titled *The Old Religion* and his defense of Israel in *The Wicked Son*. His earlier plays include one about a failed attempt to make a book about the dangers of radiation into a movie, which led Karen to sleep with Bobby Gould. He also wrote a play in which a fake burglary of an office is perpetrated by (\*) Shelley Levene, who works with Ricky Roma at a shady real estate firm. For 10 points, name this author of *Speed-the-Plow* and *Glengarry Glen Ross*.

ANSWER: David Mamet

019-11-41-03102

2. One character in this novel becomes upset when Luster takes him near a golf course. Herbert Head divorces another character in this novel when he learns she is pregnant with Dalton Ames's child. That child, who is named for an uncle who jumped into the Charles River, runs away from her uncle Jason. In this novel, the loss of their disowned sister (\*) Caddy devastates both the mentally retarded Benjy and suicidal Quentin. For 10 points, name this novel by William Faulkner about the Compson family.

ANSWER: *The Sound and the Fury*

105-11-41-03103

3. In one scene of this opera, the Vendor's Trio is sung by a woman selling strawberries, a man selling honey, and a man selling crabs. Early on in this opera, Robbins is killed during a game of craps and Happy Dust is sold by the drug dealer Sportin' Life. The chorus of one song from this opera states that "Fish are jumpin' / And the cotton is high," and "the (\*) livin' is easy." Set in Catfish Row and containing the piece "Summertime," for 10 points, name this opera by George Gershwin.

ANSWER: *Porgy and Bess*

020-11-41-03104

4. Upon coming to power, this man issued the Decree of Unification, merging all political parties into his. An accomplished soldier during the Rif War in Morocco, this man was essentially exiled to the Canary Islands by a government that was overthrown in a revolt led by Emilio Mola and this man. That revolt would expand into a war that saw this man merge the (\*) Carlist and Falange parties as well as the bombing of Guernica. Replaced by Juan Carlos I upon his death, for 10 points, name this man who became dictator of Spain following his victory in the Spanish Civil War.

ANSWER: Francisco Franco y Bahamonde

141-11-41-03105

5. The ApoE4 mutation and malfunction of the gamma-secretase complex have been linked to this disease. Treatments include cholinergics like donepezil and galanthamine. This disease is caused by a buildup of microtubule-associated protein tau and the formation of plaques of beta-amyloid. It first results in the loss of abstract thinking and (\*) attention, followed by memory loss and dementia. For 10 points, name this neurological disorder that affects the elderly named for a Frenchman.

ANSWER: Alzheimer's disease

048-11-41-03106

6. **This character declares, “She should have died hereafter; there would have been a time for such a word” upon hearing of his wife’s death. In that speech, he calls life “a tale told by an idiot, full of sound and fury, signifying nothing.” This character, who is killed by a man born via Caesarian section, fears the coming of (\*) Birnam wood to Dunsinane and orders the murder of Banquo. For 10 points, name this Shakespearean title character who is slain by Macduff after he murders Duncan to become King of Scotland.**

ANSWER: King Macbeth

014-11-41-03107

7. **This game replaced the Active Time Battle with Conditional Turn-Based Battle system and introduced the Sphere Grid leveling system to its franchise. The religion of the gameworld is based on the teachings of the Yevonites, who keep the secret of the Final Summoning to prevent the masses. The story begins with the destruction of Zanarkand by what turns out to be the main character’s father, (\*) Jecht. In it, various residents of Spira like Rikku and Wakka assist the summoner, Yuna, in confronting and destroying Sin. For 10 points, name this entry of a popular Square Enix franchise featuring the Blitzballer Tidus.**

ANSWER: Final Fantasy X [do not accept or prompt on "Final Fantasy"]

147-11-41-03108

8. **This psychologist referred to people who used other people to communicate with desired targets as "cyranoids" and people who are observed repeatedly but not interacted with as "familiar strangers." Letters were given by this psychologist to participants in Boston and Omaha as a test of the (\*) "small-world problem." Another of his experiments involved "learners" receiving what "teachers" believed to be real electric shocks. For 10 points, name this Yale psychologist who conducted namesake "obedience experiments."**

ANSWER: Stanley Milgram

130-11-41-03109

9. **Sigmund Freud claimed that this painter hid a vulture in the robe of St Mary in one of his paintings. Another of his paintings depicts Uriel holding John the Baptist and sitting opposite from Mary and the infant Jesus. Ludovico Sforza commissioned this artist of *Madonna of the Rocks* to create a fresco depicting shocked triads of men during an event in the (\*) Upper Room. For 10 points, name this artist of *The Last Supper* who painted a famously enigmatic smile for his *Mona Lisa*.**

ANSWER: Leonardo di ser Piero da Vinci [or Leonardo di ser Piero da Vinci]

002-11-41-03110

10. **Early in this man's reign, he experienced a series of revolts against his rule known as the Fronde. One war fought by this ruler came about after a will gave a kingdom to another member of his family, Philip V. That war started after the long awaited death of Charles II and ended with a separation of the House of Bourbon. This ruler was advised early on by (\*) Cardinal Mazarin, and he was unsuccessful in the War of the Spanish Succession. For 10 points, name this builder of Versailles who ruled for seventy-two years as the "Sun King" of France.**

ANSWER: Louis XIV of France [or Louis the Great; or Louis the Grand Monarch; or Louis le Grand Monarque; prompt on Louis]

141-11-41-03111

11. This man added "solid or impenetrable" to the Cartesian definition of bodies as solid in order to distinguish them from space. This man excluded atheists from the argument of another work because they do not believe in covenants. This author of *A Letter Concerning Toleration* stated the right to (\*) life, liberty, and property in one work and explained the tabula rasa in another. For 10 points, name this philosopher who wrote *Two Treatises on Government* and *An Essay Concerning Human Understanding*.  
ANSWER: John Locke

105-11-41-03112

12. This man celebrated the outcome of the Battle of Vitoria in his orchestral piece *Wellington's Victory*. He reused music from his ballet *The Creatures of Prometheus* in his third symphony. This composer of "For Elise" opened his fifth symphony with a (\*) short-short-short-long motif that has been compared to "fate knocking at the door." For 10 points, identify this composer of the *Eroica* symphony, a deaf German whose Ninth Symphony concludes with a setting of "Ode to Joy."  
ANSWER: Ludwig van Beethoven

020-11-41-03113

13. This country's constitution was created in a convention headed by Howell Cobb, and explicitly granted the power of line-item veto and prohibited protective tariffs. Judah P. Benjamin served as Secretary of War in this country, which also had as a Vice President Alexander Stephens. The leader of this country's government was (\*) captured in Irwinville, Georgia a month after the fall of its capital in Richmond. For 10 points, name this government led by Jefferson Davis that surrendered at Appomattox Court House after losing its war for secession from the United States.  
ANSWER: Confederacy [or Confederate States of America; or CSA]

048-11-41-03114

14. This city's Emerald Necklace includes Olmsted Park and Jamaica Pond. This city's boundaries are formed in part by the Neponset, Mystic, and Charles Rivers. Buildings in this city include (\*) Faneuil (fuh-NOOL) Hall and Quincy Market, while its skyscrapers include One International Place, Prudential Tower, and Hancock Place. For 10 points, name this city, the capital of Massachusetts.  
ANSWER: Boston, Massachusetts

088-11-41-03115

15. Among the initiators of this process are NF kappa B, sigma boxes, and TATA boxes. The product of this process is spliced to remove introns and is augmented with a poly A tail. This process is catalyzed by RNA polymerase (poh-LIHM-eh-ase) II and sees the nucleotide (NEW-klee-oh-tide) uracil replace thymine (THIGH-meem). The resulting product of this process is sent to a (\*) ribosome to produce a peptide chain during translation. For 10 points, name this biological process in which DNA is read and transformed into RNA.  
ANSWER: transcription [or gene expression]

048-11-41-03116

16. This figure's eyes gained the power to see through illusions after he was boiled in a cauldron for forty-nine days. After he failed to leap out of Buddha's hand, he was sealed under a mountain for five hundred years. He wields the "Compliant Rod," which he can extend to huge lengths or make small enough to store behind his ear. He is also called (\*) "Sun Wukong." For 10 points, name this animal companion who accompanies the monk Tripitaka on the "Journey to the West."  
ANSWER: The Monkey King [or Sun Wukong before it is read]

080-11-41-03117

17. One of these particle is posited to decay into an antimuon and a neutral pion in over 10 to the 33 years. A recent controversy from the Paul Scherrer Institute showed that their charge radius is much smaller than anticipated. About 90% of cosmic rays are composed of these particles. This particle consists of two up (\*) quarks and one down quark and determines the atomic number of an element. For 10 points name this positively charged particle found in the atomic nucleus alongside the neutron.

ANSWER: proton

048-11-41-03118

18. This country was led for twenty-six years during the Cold War by Urho Kekkonen. During World War II, this country was led by Risto Ryti and fought in both the Continuation War and the Winter War against its neighbor. Like France, this country built a defensive line before World War II, which became known as the (\*) Mannerheim Line and was intended to stop the Soviet Union to its east. For 10 points, name this country that in 2000 elected Tarja Halonen (TAR-yuh) to lead it from its capital city of Helsinki.

ANSWER: Republic of Finland [or Suomi; or Suomen tasavalta; or Republiken Finland]

120-11-41-03119

19. In one tradition, this man was thrown off a cliff by the residents of Delphi, who had framed him for stealing a golden bowl. One of his title characters flatters the other into trying to sing, thereby dropping him a piece of cheese. Another of his stories is the origin of the phrase "sour grapes," while another tells of a (\*) mouse who decides to live in the country rather than risk being eaten by a cat in the city. For 10 points, name this Greek slave, who wrote numerous moralizing fables.

ANSWER: Aesop

080-11-41-03120

20. Compounds with this functional group have a high enthalpy of vaporization because they dimerize via hydrogen bonding in solution. Pouring a solution of Grignard reagents over dry ice is one method of synthesizing them, as is oxidation of a primary alcohol or aldehyde. These compounds include one created by crushing ants and another that is the active ingredient in (\*) vinegar. For 10 points, name this functional group with formula COOH.

ANSWER: carboxylic acid or carboxylate

048-11-41-03121

21. This work concludes by noting how "the Muse shall consecrate to fame" the title object and "'midst the stars inscribe" the protagonist's name. This poem describes a trip to the "Cave of Spleen" by the gnome Umbriel and begins with the protagonist awakening from a dream wherein her guardian Ariel warned her of impending disaster. In this poem, the (\*) Baron completes his own rituals to ensure the success of his assault on Belinda after a tense game of cards. For 10 points, name this mock epic written by Alexander Pope about the cutting and theft of a piece of hair.

ANSWER: "The Rape of the Lock"

147-11-41-03122

22. This man spoke not "as a Northern man, but as an American" in his support for the Compromise of 1850 in his "Seventh of March" speech. This man was the only member of William Henry Harrison's cabinet not to resign after John Tyler vetoed an attempt to reestablish a national bank. By keeping his role as Secretary of State, this man was able to complete a treaty that established the border between (\*) Maine and New Brunswick with Britain's Baron Ashburton. For 10 points, name this mid-nineteenth century politician and orator from the state of Massachusetts.

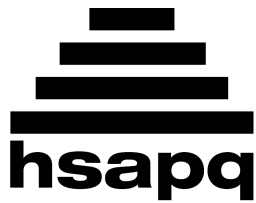
ANSWER: Daniel Webster

149-11-41-03123

23. The genes for Alport's syndrome and Lesch-Nyhan (LESH-NIE-han) syndrome map to this structure. Another gene on it codes for the protein FMR1 ('F-M-R-one), though if that gene acquires too many CGG repeats, this structure becomes fragile. A Barr body is formed if there are two of these in one cell. Factor VIII is also on this structure, which explains why most hemophiliacs (hee-moh-FILL-lee-acks) are (\*) male, since hemophilia is "linked" to it. For 10 points, name this chromosome, which females have two of and males have one of.

ANSWER: X chromosome

048-11-41-03124



1. A man plows furrows on a hillside in the foreground of this painting while a shepherd gazes up at the sky. For 10 points each:

[10] Name this painting in which no one pays attention to the title mythological figure plummeting into the ocean.

ANSWER: *Landscape with the Fall of Icarus*

[10] *Landscape with the Fall of Icarus* is a work by this Flemish painter whose other works include *The Triumph of Death* and *Peasant Wedding Feast*.

ANSWER: Pieter Bruegel the Elder

[10] This work by Bruegel depicts the title group returning to a wintery village with a pack of dogs.

ANSWER: Hunters in the Snow, February

124-11-41-03201

2. They were conquered by Francisco Pizarro. For 10 points each:

[10] Name this South American empire based in the Andes whose official language was Quechua.

ANSWER: Incans [or Inca Empire; or Tawantinsuyu]

[10] This leader of the Inca was killed despite fulfilling his ransom of a room full of gold and twice as much silver.

ANSWER: Atahualpa

[10] Part of the reason Atahualpa and the Incans lost to Pizarro was a civil war fought by Atahualpa with what brother of his for the three years prior to Pizarro's return to South America?

ANSWER: Huascar

147-11-41-03202

3. This model sometimes named for Verhulst and Pearl notably fails to account for the Allee effect. For 10 points each:

[10] Name this s-shaped curve that is used to model population growth in ecology. It is roughly exponential until the curve approaches the horizontal asymptote.

ANSWER: logistic curve

[10] The asymptote of the logistic map is this value symbolized K, which is the maximum size of a population that a particular ecosystem can support.

ANSWER: carrying capacity

[10] The population of a species can also be modeled with the Lotka-Volterra equations that describe the rate of change for both predators and this type of species hunted by a predator.

ANSWER: prey

048-11-41-03203

4. This son of Atreus quarreled with Achilles. For 10 points each:

[10] Name this king of Mycenae who was murdered by his wife Clytemnestra and her lover Aegisthus after he returned from Troy with Cassandra.

ANSWER: **Agamemnon**

[10] This son of Agamemnon avenged his father's death by killing his mother with the help of his sister Electra, for which the Furies hound him.

ANSWER: **Orestes**

[10] Clytemnestra was angry with Agamemnon because he had sacrificed this daughter of theirs to Artemis for safe passage to Troy. In some versions, Artemis switches this girl with a deer.

ANSWER: **Iphigenia**

105-11-41-03204

5. One ruler of this empire won the Battle of Chaldiran against the Safavid Dynasty. For 10 points each:

[10] Name this empire ruled by figures such as Suleiman the Magnificent, Bayezid the Thunderbolt, and Mehmed II.

ANSWER: **Ottoman** Empire

[10] Mehmed II conquered this city in 1453 after a very long siege. It was defended by the forces of Constantine IX, who extended a long chain across the Golden Horn to block Mehmed's ships.

ANSWER: **Constantinople** [or **Istanbul**]

[10] This battle, which was fought in 1389, saw Bayezid I defeat the forces of Prince Lazar after the death of his father Mehmed II. It led to Serbia becoming a vassal state of the Ottoman empire.

ANSWER: Battle of **Kosovo** Polje [or the Battle of the **Field of Blackbirds**]

048-11-41-03205

6. The longtime communist ruler of this country until 1989 was Janos Kadar. For 10 points each:

[10] Identify this country in which a 1956 anti-Communist revolution was suppressed by the USSR in Operation Whirlwind and started in this country's capital city, Budapest.

ANSWER: Republic of **Hungary** [or **Magyarország**; or **Magyar Koztarsasag**]

[10] This chairman of the Council of Ministers announced Hungary's withdrawal from the Warsaw Pact and criticized the USSR. After the revolution was put down, he was executed.

ANSWER: Imre **Nagy** (NAAJ)

[10] This Soviet premier's namesake doctrine stated that when one socialist country turns to capitalism, it is the concern of all socialist countries. He succeeded Khrushchev as General Secretary.

ANSWER: Leonid Ilich **Brezhnev**

048-11-41-03206

7. For 10 points each, answer the following about the islands of Indonesia.

[10] Indonesia's capital of Jakarta is found on this most populous island in the world.

ANSWER: **Java**

[10] Indonesia shares this small island with another nation whose capital is Dili.

ANSWER: **Timor**

[10] This large island is found east of Borneo and was formerly known as Celebes.

ANSWER: **Sulawesi**

064-11-41-03207

8. In biochemistry, this quantity is often measured in daltons. For 10 points each:

[10] Name this quantity computed by summing the atomic weights of the atoms in a molecule, the mass per amount of a substance.

ANSWER: **molar mass** [or **molecular weight**; or **formula weight**; prompt on **molecular mass**]

[10] Molar mass is often measured by the depression of this quantity in a solution, which is proportional to solute concentration and the cryoscopic constant.

ANSWER: **freezing point**

[10] Because it depends on the concentration of particles in solution, but not on their identity, freezing point depression is one of these properties.

ANSWER: **colligative** properties

132-11-41-03208

9. This principle helps to form the basis of the Copenhagen Interpretation of Quantum Mechanics, for 10 points each:

[10] This principle states that position and momentum cannot be simultaneously calculated.

ANSWER: **Heisenberg Uncertainty Principle**

[10] This other cornerstone of the Copenhagen Interpretation has a time dependent form that describes state vector of a physical system. Its time-independent version says that  $H\psi = E\psi$ .

ANSWER: **Schrodinger** Equation

[10] This man's path integral formulation of quantum mechanics helped to graphically depict the change in the wave function of particles.

ANSWER: Richard **Feynman**

135-11-41-03209

10. In his form as Nataraja, he is known as the lord of the dance, and this figure was the father of the war god Skanda. For 10 points each:

[10] Name this member of the Trimurti along with Brahma and Vishnu. He's known as the destroyer.

ANSWER: **Shiva**

[10] Shiva's consort was this goddess, who was also the mother of Ganesh. This figure became Shiva's wife after Sati immolated herself.

ANSWER: **Parvati**

[10] One of Parvati's many forms was as this warrior goddess, whose skin was jet black and who had a thirst for blood. She commonly leaps out of Durga's forehead.

ANSWER: **Kali**

048-11-41-03210

11. This man tried to boost his country's population by calling mothers of at least ten children "heroine mothers." For 10 points each:

[10] Name this Communist dictator who was ultimately overthrown in December 1989. He and his wife Elena were then executed on Christmas Day after trying to flee the capital.

ANSWER: Nicolae **Ceausescu** (CHOW-chess-coo)

[10] Ceausescu was the leader of this nation, whose revolution ultimately began with protests in the city of Timisoara (tee-mee-soar-ah) which spilled over into the capital, Bucharest.

ANSWER: **Romania**

[10] Romania was part of this organized defensive group with other countries behind the Iron Curtain, which served as a counterbalance to NATO.

ANSWER: **Warsaw Pact** [or **Warsaw Treaty** of Friendship, Cooperation, and Mutual Assistance]

052-11-41-03211



12. This quantity, which remains constant in isochoric processes, is proportional to temperature according to Charles' Law. For 10 points each:

[10] Name this quantity from chemistry, the amount of space that a system occupies.

ANSWER: **volume**

[10] According to Boyle's Law, volume is inversely proportional to this quantity.

ANSWER: **pressure**

[10] A constant representing the attraction between particles is divided by volume squared in this modification of the ideal gas law.

ANSWER: **van der Waals** equation

079-11-41-03212

13. This architect designed the East Wing of the National Gallery of Art. For 10 points each:

[10] Identify this Chinese-American architect whose other works include the JFK Memorial Library and Boston's Hancock Tower.

ANSWER: Ieoh Ming **Pei**

[10] Pei may be most famous in the United States for his design, featuring a glass pyramid protruding from a white tower, for this museum located on the shore of Lake Erie in Cleveland.

ANSWER: the **Rock and Roll Hall of Fame** and Museum

[10] A 1964 effort to "reinvent" this city led its mayor Erik Jonsson to commission Pei to redesign its City Hall. Pei also designed its Morton H. Meyerson Symphony Center and its Fountain Place Skyscraper.

ANSWER: **Dallas**, Texas

120-11-41-03213

14. This character is instructed by Holofernes and Joberlin Bride. For 10 points each:

[10] Name this character who helps his father Grangosier by defeating the army of Lerne and builds the Abbey of Theleme for Friar John.

ANSWER: **Gargantua**

[10] This other giant, the son of Gargantua, travels to an oracle with Friar John and his friend Panurge.

ANSWER: **Pantagruel**

[10] Gargantua and Pantagruel were created by this 16th-century French novelist.

ANSWER: Francois **Rabelais**

014-11-41-03214

15. One regiment formed by this man lost the Battle of Great Bridge. For 10 points each:

[10] Name this colonial governor whose namesake proclamation offered slaves freedom if they fought for the British during the Revolution. He left office after the Gunpowder Incident.

ANSWER: Lord **Dunmore** [or John **Murray**, 4th Earl of Dunmore]

[10] Lord Dunmore was the last colonial governor of this colony. Patrick Henry and Thomas Jefferson both served in this colony's House of Burgesses.

ANSWER: Commonwealth of **Virginia**

[10] Lord Dunmore's Proclamation led to the creation of a regiment named after this African country. Menelik II was a famous king of this country.

ANSWER: Federal Democratic Republic of **Ethiopia** [or **Ityop'iya** Federalawi Demokrasiyawi Ripeblik]

149-11-41-03215

16. They include one representing the female nature of males and the male nature of females. For 10 points each:

[10] Name these symbols of the unconscious experience that include anima, animus, and persona.

ANSWER: **archetypes**

[10] This Swiss psychologist and author of *Psychological Types* originated the idea of archetypes. He split with Freud over the nature of the unconscious.

ANSWER: Carl Gustav **Jung**

[10] Carl Jung's theories were the basis of the Minnesota Multiphasic inventory of this human quality. That test has results like ENTP and INTJ to describe the various types of this.

ANSWER: **personality**

048-11-41-03216

17. One character in this story reveals that his favorite Biblical character is King Herod. For 10 points each:

[10] Identify this story in which a kidnapping plot by Bill Driscoll and Sam Howard goes horribly awry.

ANSWER: "The **Ransom of Red Chief**"

[10] "The Ransom of Red Chief" was written by this author who loved twist endings, such as when Scudder is revealed to have been a con man in "Conscience in Art."

ANSWER: O. **Henry** [or William Sydney **Porter**]

[10] O. Henry also wrote this story in which Jim and Della sell their watch and hair, respectively, to buy each other a watch fob and set of combs for Christmas.

ANSWER: "The **Gift of the Magi**"

020-11-41-03217

18. Clyde Wynant is the title character of one of this man's novels, which features Nick and Norah Charles. For 10 points each:

[10] Name this author of *The Thin Man*, whose novels *The Dain Curse* and *Red Harvest* feature the Continental Op.

ANSWER: Samuel Dashiell **Hammett**

[10] Hammett also wrote this novel, in which Brigid O'Shaughnessy reveals that to Sam Spade that she killed his partner Miles Archer in a ploy to possess the title figurine for herself.

ANSWER: *The **Maltese Falcon***

[10] Hammett's characters Sam Spade, the Continental Op, and Nick Charles all belong to this crime-solving profession.

ANSWER: **detectives** [or **private investigator**; or **private eye**]

020-11-41-03218

19. Brahms wrote the songs "Satisfied Longing" and "Spiritual Lullaby," scored for this instrument and piano, for Joseph Joachim and his wife. For 10 points each:

[10] Identify this string instrument that is lower in pitch than the violin, but higher in pitch than the cello.

ANSWER: **viola**

[10] This composer expanded Niccolò Paganini's request for a viola solo into his second symphony *Harold in Italy*. His 1837 *Requiem* is scored for several brass instruments.

ANSWER: Hector **Berlioz** [or Louis-Hector **Berlioz**]

[10] Berlioz is best known for this opium-influenced programmatic symphony, which features such movements as "Scene in the Fields," "March to the Scaffold," and "Dream of a Witches' Sabbath."

ANSWER: ***Symphonie Fantastique: Épisode de la vie d'un Artiste...en cinq parties, Op. 14*** [or ***Fantastic Symphony: An Episode in the Life of an Artist, in Five Parts, Op. 14***]

020-11-41-03219

20. Identify the following about early English literature. For 10 points each:

[10] "Wulf and Eadwacer" [AID-WATCH-uhr] and "Caedmon's Hymn" were written in this language, which is more similar to German than to Modern English.

ANSWER: **Old English**

[10] The Pearl Poet wrote this Middle English romance, whose first title character stays at the castle of Bertilak de Hautdesert while traveling so that he can accept the second blow in a beheading contest.

ANSWER: **Sir Gawain and the Green Knight**

[10] This allegorical poem by William Langland describes Do-Well, Do-Better, and Do-Best, who are encountered by Will as he dreams in Malvern Hill.

ANSWER: William's Vision of **Piers the Plowman** [or *Visio Willelmi de Petro Plowman*]

020-11-41-03220

21. This process is described by the Fenske equation. For 10 points each:

[10] Name this chemical process whose fractional form is used in refining petroleum. Its also used to increase the alcohol content of fermented beverages.

ANSWER: **distillation**

[10] Distillation separates components of mixtures based on this property, which is one hundred degrees Celsius for water.

ANSWER: **boiling point** [accept obvious equivalents]

[10] Distillation is more difficult with these mixtures because their vapor and liquid phases have the same composition.

ANSWER: **azeotropes**

014-11-41-03221