

1. The speaker of one poem by this man claims to hear "water lapping with low sounds by the shore...in the deep heart's core," and many of this man's poems were inspired by Maud Gonne. This poet of "The Lake Isle of Innisfree" also wrote of revolutionaries who are "changed, changed utterly" in a poem which claims that "a terrible beauty is born" entitled "Easter, 1916." This poet also wrote a poem in which (*) "things fall apart; the center cannot hold" and a "rough beast...slouches towards Bethlehem to be born." For 10 points, identify this Irish poet of "The Second Coming." ANSWER: William Butler Yeats

126-11-41-01102

2. This man was almost deposed by Kristof Vernard, and was once replaced in his most notable position by Zorba. This man achieved world domination after using Purple Man's mind control powers, but relinquished it after being bored by mindless obedience. After an accident at Empire State University involving a machine to communicate with the dead, this absolute monarch of the nation of Latveria began wearing a (*) metal mask. For 10 points, name this archenemy of the Fantastic Four.

ANSWER: Doctor **Doom** [or Victor von **Doom**]

137-11-41-01103

3. One of these structures, designed by Stanford White and located in Kenmore Square, was the site of the meeting that led to the Black Sox scandal. Examples of them in Dubai include the sail-shaped Burj Al-Arab and the underwater Hydropolis. Another of these buildings was designed to float on alluvial mud, which helped it survive the Great (*) Kanto Earthquake. For 10 points, name this type of building, exemplified by Frank Lloyd Wright's Imperial one in Tokyo, as well as by numerous Hiltons. ANSWER: <a href="https://doi.org/10.1007/journal.org/10.1007/journa

048-11-41-01104

4. Lugol's solution primarily consists of this element. A popular clock reaction mixes hydrogen peroxide with atoms of this element, resulting in the production of its triatomic form which is then reacted with thiosulfate. This element is commonly used to detect starch in solution, and a vapor of it can be used to develop thin-layer chromatography plates. It (*) sublimates at relatively low temperatures, and the thyroid gland relies on it. For 10 points, name this element with atomic number 53 and symbol I.

ANSWER: iodine

048-11-41-01105

5. Hicks and Marshall each theorized forms of this quantity. The typical trend for this quantity is reversed for Veblen goods, and potatoes were cited as form of a similar change in this quantity as a (*) Giffen good. A curve measuring this quantity slopes downward, indicating that lower prices cause this quantity to rise. For 10 points, name this quantity that measures the amount of desire for a good or service, often graphed against supply.

ANSWER: demand

6. This country's Central Plateau is divided by rivers such as the Thur and the Aar. Its highest point is Monte Rose, which is the second highest mountain in the (*) Alps. This country includes the city that is the home of the International Olympic Committee, Lausanne. For 10 points, name this country divided into cantons with capital at Bern and its largest city at Zurich.

ANSWER: <u>Switzerland</u> [or <u>Swiss</u> Confederation; or Confederation <u>Suisse</u>; or <u>Schweizerische</u> Eidgenossenschaft; or Confederazione <u>Svizzera</u>; or Confederaziun <u>Svizra</u>]

088-11-41-01107

7. During the last phase of this event, a legislative branch was created in two houses called the Council of the Five Hundred and the Council of Ancients. One man put down demonstrators during this event with "a whiff of grapeshot." A leader during this event was known as "the Incorruptible" and was the leader of the Committee of Public Safety. This event started after the (*) Third Estate formed the National Assembly and saw the storming of the Bastille. For 10 points, name this twelve year event that overthrew Louis XVI and included many deaths by guillotine.

ANSWER: French Revolution

147-11-41-01108

8. In one novel, this author described the evil dwarf Daniel Quilp's takeover of the title establishment inhabited by Nell Trent and her grandfather. This author of *The Old Curiosity Shop* followed an orphan whose mysterious benefactor is revealed to be the convict Abel Magwich in a novel about (*) Pip. He created Charles Darnay in a novel which begins, "It was the best of times, it was the worst of times." For 10 points, name this British novelist of *Great Expectations* and *A Tale of Two Cities*.

ANSWER: Charles Dickens

014-11-41-01109

9. Groups in this country practiced agricultural systems of buhake and bukonde. French troops entered this country as part of Operation Turquoise. Romeo Dallaire led one unsuccessful force in this country, which lost its longtime president Juvenal Habyarimana when his plane was shot down. That incident led to groups such as the (*) Interahamwe acting up in this country and broadcasts saying to "cut down the tall trees." For 10 points, name this country where, in 1994, a genocide was led by the majority Hutu against the Tutsi.

ANSWER: Republic of **Rwanda** [or Republika y'u **Rwanda**]

023-11-41-01110

10. This value can be measured using a wire immersed in HCl ["H-C-L"] and measuring the potential across a glass membrane. Substances that keep this value constant are described by the Henderson-Hasselbach equation. Mixing with a substance whose value for this property is above 8 turns phenolphthalein purple, and other (*) indicators of this property include litmus. It is the negative log of hydrogen ion concentration. For 10 points, name this scale that goes from 0 to 14, a measure of acidity.

ANSWER: **<u>pH</u>** [or <u>**p**</u>ower of <u>**h**</u>ydrogen]

11. One composer of this surname served as president of the Reichsmusikkammer ("RIKES"-moo-zik-kam-er) under Nazi Germany. That composer of this surname composed the tone poem *Till Eulenspiegel's Merry Pranks*, in addition to a piece that opens with the notes C-G-C and serves as the opening theme to (*) 2001: A Space Odyssey. For 10 points, give the common surname of the composer of Also Sprach Zarathustra, Richard, and the Waltz King who composed the Blue Danube, Johann.

ANSWER: Strauss

080-11-41-01112

12. This author presented most of one work as a manuscript by a woman who confides in the housekeeper Mrs. Grose. He wrote a novella in which Henrietta Stackpole attempts to steer the title character toward the suitor Caspar Goodwood, but is unable to break her love for Gilbert Osmond. In addition to that work about Isabel (*) Archer, he wrote a story in which Miles dies in the arms of his governess, who attributes the death to the ghost of Peter Quint. For 10 points, name this author of *The Portrait of a Lady* and *The Turn of the Screw*.

ANSWER: Henry **James**

020-11-41-01113

13. Thalassemia (thal-lah-SEE-me-ah) occur when this protein's components are expressed in abnormal ratios. 2,3-BPG ("B-P-G") is a regulator of this molecule, whose fetal form contains gamma chains. A glutamate to valine mutation in its beta chain causes a notable disease. It has a sigmoidal binding curve and four subunits. Its cofactor is a porphyrin (POOR-fih-rihn) molecule with a central (*) iron atom. For 10 points, name this protein that is mutated in sickle cell anemia, the oxygen-carrying molecule in the blood.

ANSWER: hemoglobin

048-11-41-01114

14. As Chancellor of the Exchequer under Stanley Baldwin, this man returned his country to the Gold Standard. This man had a plan to liberate Poland called Operation Unthinkable, and he sent in troops to deal with the Mau Mau Uprising. This man resigned as the First Lord of the Admiralty in the Asquith government following the disastrous Gallipoli campaign, which he sponsored. This man signed the (*) Atlantic Charter with Franklin Roosevelt. For 10 points, name this Prime Minister of Great Britain during World War II.

ANSWER: Winston Leonard Spencer Churchill

149-11-41-01115

15. These figures blinded Thamyris for his hubris, and another one of them gave birth to Rhesus after being raped by Strymon. A fountain created by Pegasus, called Aganippe, was a favorite hangout for them, and they lived in the Corcyran Cave on Mount Parnassus. One of them holds a globe and compass, while another one of them was the mother of Linus and Orpheus, whom she taught to play the lyre. They are the daughters of Zeus and (*) Mnemosyne and include Calliope and Melpomene. For 10 points, name this set of nine gods which govern poetry and music.

ANSWER: Muses

16. This man lived for a time with monks in Malaga in Spain after Captain Thomas Hunt tried to sell him into slavery. This man returned from Europe on a ship with Captain Thomas Dermer, which is where he first met Samoset. Samoset was responsible for introducing this man to a group that included Edward Winslow and (*) William Bradford, for whom this man interpreted during their negotiations with the Wampanoags. For 10 points, name this Patuxet Indian whose knowledge of fertilizing and cultivating maize greatly aided the Pilgrims.

ANSWER: **Squanto** [or **Tisquantum**]

023-11-41-01117

17. One of this artist's paintings shows a red sunset reflected on the ocean while a tugboat tows the title warship into a harbor. This man showed sick men being thrown overboard while a typhoon approaches to destroy the title vessel in another work. He also depicted a (*) locomotive crossing the Maidenhead Railway Bridge. For 10 points, name this British landscape painter known for blurry paintings like *The Fighting Temeraire*, *The Slave Ship*, and *Rain*, *Steam*, *and Speed*.

ANSWER: Joseph Mallord William Turner

040-11-41-01118

18. This figure's sister relieves her boredom by taking a Latin course by correspondence in a friend's name. Elizabeth, or "Bep," brings this figure books from the library every Saturday. This figure has a crush on Peter Schiff, but later transposes that affection onto Peter van Daan. She lives in the (*) "Secret Annex" with her father Otto, but their location is betrayed in August, 1944. For 10 points, name this Jewish girl whose *Diary of a Young Girl* was published as a Holocaust narrative. ANSWER: Anne Frank [or Anne Frank]

080-11-41-01119

19. The personification of evil in this religion commands Jahi, who afflicts women with menstrual cycles, and is opposed by the Bountiful Immortals. This religion's texts include the Yasna and a series of hymns known as the Gathas, which appear in the (*) Zend Avesta. This religion is based on the conflict between the evil Ahriman and the good Ahura Mazda. For 10 points, name this dualistic Persian religion named after its prophet.

ANSWER: Zoroastrianism

048-11-41-01120

20. The Joule-Thompson process keeps this quantity constant, and in the Van't Hoff equation, the negative change in this quantity is divided by the ideal gas law. For an isobaric process, the change in this quantity is equal to the heat added. It is equal to the internal energy plus (*) pressure times volume, and the change in this quantity plus the temperature times the change in entropy is equal to the change in the Gibbs Free energy. For 10 points, name this thermodynamic quantity symbolized H. ANSWER: enthalpy

048-11-41-01121

21. One person from this country was the first to give the name of Natal to the area surrounding Durban Bay. That person met the Sultan of Mozambique by pretending to be a Muslim from Morocco. In 1494, this country and its eastern neighbor agreed to partition their colonial possessions in the Treaty of Tordesillas (TOR-deh-SEE-uss). This nation established a trading post at (*) Macao, and Henry the Navigator helped develop its exploration. For 10 points, name this Iberian country whose explorers, such as Bartholomew Diaz and Vasco da Gama, set sail from the port of Lisbon.

ANSWER: Portugal [or Portuguese Republic; Republica Portuguesa]

22. In one play by this author, the Ghosts of the Yellow Dog drown a man who commissions carvings on the central object, which is owned by the Doaker Charles household. He also wrote about a character who loses his wife's support by having an affair with Alberta, who dies giving birth to Raynell. This author of *The* (*) *Piano Lesson* wrote a play about the football player Corey, the son of the garbage man Troy Maxson. For 10 points, identify this African-American author whose "Pittsburgh Cycle" includes *Fences*.

ANSWER: August Wilson

020-11-41-01123

23. When this principle is applied with the continuity equation to a constricted region, the equation for the Venturi effect results. Pitot tubes exploit this principle to measure the difference between the top and bottom of an airplane wing. This principle is stated as (*) "one half times rho times v squared plus rho times g times h plus p is constant." For 10 points, name this equation that relates changes in potential energy or pressure to the speed of fluid flow, named for a Swiss mathematician.

ANSWER: **Bernoulli's** principle [or **Bernoulli's** equation]



1. This President ran for re-election under the slogan "He kept us out of war." For 10 points each:

[10] Name this President for the duration of World War I, who developed the Fourteen Points and promoted the development of the League of Nations.

ANSWER: Thomas Woodrow Wilson

[10] This leading enemy of Wilson's, a senator from Massachusetts, claimed to support the Treaty of Versailles, but with fourteen reservations. His efforts helped stop the U.S. from ratifying the treaty or joining the League of Nations.

ANSWER: Henry Cabot **Lodge**

[10] This man served as Wilson's first Secretary of State. He was succeeded by Robert Lansing, and also lost some elections as a Democratic and one-time Populist candidate.

ANSWER: William Jennings Bryan

120-11-41-01201

2. Snug, Francis Flute, and Tom Snout are three of the Mechanicals in this play who perform *Pyramus and Thisbe*. For 10 points each:

[10] Identify this play by Shakespeare that focuses on a quartet of Athenians: Lysander, Helena, Demetrius, and Hermia.

ANSWER: A Midsummer Night's Dream

[10] A Midsummer Night's Dream also features this mischievous servant of Oberon, who applies a special flower to the wrong pair of eyes.

ANSWER: **Puck** [or **Robin** Goodfellow; or Robin **Goodfellow**]

[10] This figure appeals to a law allowing Athens to put his daughter Hermia to death if she does not marry Demetrius.

ANSWER: **Egeus**

020-11-41-01202

3. The ceremony in which these individuals are selected used to involve a blow to the cheek and is known as accolade. For 10 points each:

[10] Identify these Western European mounted soldiers who earned spurs and were nominally beholden to chivalry.

ANSWER: knights

[10] Sons of knights were sent off to a castle to become these errand-boys for veteran knights. These individuals became squires after seven years of service.

ANSWER: pages

[10] One important order of knights was this one, which later splintered into the orders of St. Lazarus and St. John and initially cared for sick pilgrims in Jerusalem.

ANSWER: Knights **Hospitaller**s

- 4. This market structure has a kinked demand curve, and examples include the beer industry and the cell phone industry. For 10 points each:
- [10] Name this type of market which is dominated by a few producers.

ANSWER: oligopoly

[10] Oligopolies are sometimes created when the parties perform this illegal action, in which they make an agreement to limit competition. A common example is price fixing.

ANSWER: collusion

[10] The region above the kink in the kinked demand curve has a high degree of this quality, which is the ratio of the percentage changes of two variables.

ANSWER: elasticity

048-11-41-01204

- 5. This work got its name because it was not a straightforward "view of Le Havre." For 10 points each:
- [10] Name this work that includes a diagonal line of three boats in the water, as well as some ships in the distance against the sky described in the title. This work provided the name of a certain art movement.

ANSWER: *Impression, Sunrise* [or *Impression, soleil levant*]

[10] *Impression, Sunrise* is a work of this Frenchman, who also painted series depicting "poppies near Argenteuil", the Houses of Parliament, and water lilies in his garden.

ANSWER: Claude **Monet** [or Oscar-Claude **Monet**]

[10] Monet also created several paintings of a Japanese footbridge near his home, which was located in this village.

ANSWER: Giverny

142-11-41-01205

- 6. Boccherini's ninth concerto for this instrument was horribly orchestrated by Friedrich Grutzmacher, while Lalo's concerto for this instrument is in D minor. For 10 points each:
- [10] Name this string instrument played by Pablo Casals and Yo-Yo Ma. It is played upright with the musician in a sitting position.

ANSWER: cello

[10] This Czech composer wrote a Cello Concerto in B Minor, though he is probably more famous for his *Symphony No. 9: From the New World*.

ANSWER: Antonin **Dvorak**

[10] At the suggestion of his publisher Fritz Simrock, Dvorak composed this group of sixteen nationalistic pieces based on the rhythms of such dances as the furiant, the dumka, and the mazurka.

ANSWER: the *Slavonic Dances*

048-11-41-01206

- 7. Each section of this work ends with the word "stars," and it has a total of one hundred cantos. For 10 points each:
- [10] Name this long three-part poem in which Dante travels to hell, purgatory, and paradise.

ANSWER: The <u>Divine Comedy</u> [or La <u>Commedia Divina</u>]

[10] This Roman poet, a resident of Limbo, guides the protagonist through hell to the top of Mount Purgatory, at which point he departs and Beatrice appears.

ANSWER: **Virgil** [or Publius **Vergil**ius Maro]

[10] *The Divine Comedy* is written in this stanzaic form, where the first and third lines of each three-line stanza rhyme with the middle line of the previous stanza.

ANSWER: terza rima

- 8. These particles are produced in processes like beta decay. For 10 points each:
- [10] Name these particles detected by the Super Kamiokande detector, large numbers of which are emitted by the sun.

ANSWER: neutrinos

[10] Neutrinos have a very small but nonzero value for this quantity, which is related to energy by a factor of c squared according to an equation due to Einstein.

ANSWER: mass

[10] The three "flavors" of neutrinos are named for the electron, the tauon, and this particle, which experiences an extension of its 2.2-microsecond lifetime due to relativistic time dilation.

ANSWER: muon

132-11-41-01208

- 9. He founded the group f-64 ("f-stop 64") alongside Edward Weston, and his photographs of the Manzanar relocation camps appeared in his book *Born Free and Equal*. For 10 points each:
- [10] Name this photographer famous for his natural scenes of the American West.

ANSWER: Ansel Easton Adams

[10] Ansel Adams took several pictures at this national park, including *Moon and Half-Dome* and *Clearing Winter Storm*

ANSWER: **Yosemite** National Park

[10] A 1936 show of Ansel Adams's works was put on by this founder of the Photo-Secession movement, an American photographer who married Georgia O'Keeffe.

ANSWER: Alfred Stieglitz

048-11-41-01209

- 10. This empire was founded by Jayavarman II, and in 1203 this empire conquered the Champa kingdom. For 10 points each:
- [10] Name this empire once ruled by Suryavarman II, who order the creation of Angkor Wat. It partially shares its name with a Communist Party later present in its nation.

ANSWER: **Khmer** Empire

[10] The Khmer Empire and Khmer Rouge were located in this modern-day kingdom, where Angkor Wat still stands.

ANSWER: Kingdom of **Cambodia** [or Preahreacheanachakr **Kampuchea**]

[10] This man was Brother Number One in the Khmer Rouge, and he was responsible for the millions that died during the Cambodian genocide.

ANSWER: **Pol Pot** [or **Saloth** Sar]

048-11-41-01210

- 11. Answer some questions about a technique that uses a silica plate, for 10 points each:
- [10] Silica plates are used in the thin-layer form of this chemical technique, which separates the component of a mixture based on binding to a stationary phase. Gas, liquid, and column varieties exist.

ANSWER: chromatography

[10] Thin-layer chromatography works by separating constituents based on this property. This property is roughly the separation of charge within a molecule.

ANSWER: **polarity** [accept word forms]

[10] A form of thin-layer chromatography uses this substance, which is a linear polymer of d-glucose. This substance is a major component of both plant cell walls and paper.

ANSWER: cellulose

- 12. The title character of this novella claims to be comforted in the aftermath of an incident in which he spills his soup. For 10 points each:
- [10] Name this novella about a sailor aboard the *Indomitable* whose last words are "God bless Captain Vere!"

ANSWER: Billy Budd

[10] Billy Budd was written by this American novelist of Moby-Dick.

ANSWER: Herman Melville

[10] Billy is executed for killing this master-at-arms when he is confronted with false accusations of

plotting mutiny.

ANSWER: John Claggart [or John Claggart]

014-11-41-01212

- 13. These representations are often used to solve problems involving force. For 10 points each:
- [10] Identify these diagrams that depict the direction of all forces acting on an object.

ANSWER: **free body** diagrams

[10] These forces that are present in non-inertial reference frames may be included in free body diagrams in certain problems. Examples include the centrifugal force, but not the centripetal force.

ANSWER: <u>fictitious</u> forces [or <u>pseudo</u> forces; or <u>d'Alambert</u> forces; or <u>inertial</u> forces]

[10] One example of a fictitious force is this one, named for an effect in which the Earth's rotation causes deflection of moving objects.

ANSWER: **Coriolis** force [or **Coriolis** effect]

020-11-41-01213

- 14. These are activated during germination, and in angiosperms it contains a triploid nutritive tissue known as endosperm. For 10 points each:
- [10] Name this plant reproductive structure which contains an embryo and is derived from the ovule. In a dicot (DIE-cot) this structure has two embryonic leaves.

ANSWER: seed

[10] This plant hormone is responsible for promoting seed dormancy, in opposition to gibberellins (gih-bih-REH-lins). It is synthesized via the MEP ("M-E-P") pathway.

ANSWER: abscisic acid [or abscisin II; or dormin]

[10] A seed contains this preliminary root-like structure that is the first part to emerge during germination.

ANSWER: radicle

048-11-41-01214

- 15. Answer the following about some August 2011 riots, for 10 points each:
- [10] The riots ensued in this country after police officers shot suspected drug dealer Mark Duggan in Tottenham.

ANSWER: <u>UK</u> [or <u>United Kingdom</u> of Great Britain and Northern Ireland; or <u>Great Britain</u>; or <u>England</u>]

[10] This man, the current Prime Minister of the United Kingdom, cut short his holiday to return to London to deal with the riots. A Conservative, his Deputy is the Liberal Democrat Nick Clegg.

ANSWER: David Cameron

[10] A writer for this British tabloid suggested rap music was a causal factor in the riots. This tabloid was a frequent rival of *The Sun* and was once owned by Robert Maxwell and edited by Piers Morgan.

ANSWER: Daily Mirror

- 16. A character named Mr. Tench converses with the protagonist of this novel, directing him to a dying woman's house and causing him to miss his boat. For 10 points each:
- [10] Identify this novel set in the Mexican village of Carmen, in which "the mestizo" meets the "whiskey priest."

ANSWER: The **Power and the Glory**

[10] *The Power and the Glory* was written by this author, who employed Catholic themes in other novels such as *Brighton Rock* and *The Heart of the Matter*.

ANSWER: Henry Graham Greene

[10] In another novel, Graham Greene described Alden Pyle, a native of this country. Ezra Pound and T. S. Eliot emigrated to the United Kingdom from this country.

ANSWER: <u>United States</u> of America [or <u>US</u>A; or <u>America</u>]

020-11-41-01216

- 17. This man defeated his rival Pompey the Great at the Battle of Pharsalus. For 10 points each:
- [10] Name this Roman general and leader who was assassinated on the Ides of March in 44 BC.

ANSWER: Gaius Julius Caesar [prompt on "Caesar"]

[10] The plot to assassinate Caesar was instigated by this man, who recruited his brother in-law Brutus and died leading forces at the Battle of Philippi.

ANSWER: Gaius Cassius Longinus

[10] This third wife of Caesar allegedly had a vision of the assassination, but was unable to convince him of its truth.

ANSWER: Calpurnia Pisonis

015-11-41-01217

- 18. Like Apollo, this figure fell in love with Hyacinthus, and after being spurned he killed Hyacinthus with a discus. For 10 points each:
- [10] Name this god of the west wind in Greek mythology. His Roman equivalent is Favonius.

ANSWER: **Zephyr**us

[10] Zephyrus was presumably subordinate to Aeolus, the chief wind god. Aeolus gave this Greek hero a bag containing all of the winds, but this hero's crew opened the bag, thus delaying his return to Ithaca.

ANSWER: **Odvsseus**

[10] The other wind gods include Boreas, the god of the north wind. Name either the god of the east or west wind.

ANSWER: **Notes** or **Eurus**

048-11-41-01218

- 19. One tributary of this river is the Mitta Mitta River. For 10 points each:
- [10] Name this longest river on the continent of Australia. Along with the Darling River, it forms a significant basin in the interior of southeastern Australia.

ANSWER: Murray River

[10] The Murray River serves as the effective border between the states of New South Wales and Victoria. The capital of New South Wales is this largest city in Australia.

ANSWER: **Svdnev**

[10] The Murray River also flows through South Australia, whose capital is this city, which is also the site of Mount Lofty. It was designed by Colonel William Light.

ANSWER: Adelaide

- 20. This work criticizes John Locke's proposed constitutional monarchy. For 10 points each:
- [10] Name this pamphlet which advocated for American rebellion against British rule and also suggested the Continental Charter.

ANSWER: Common Sense

[10] Common Sense was written by this man, who also created The American Crisis and The Rights of Man.

ANSWER: Thomas Paine

[10] This other work by Paine supports deism. This work's attacks on Christianity resulted in Paine being labeled an atheist by contemporaries.

ANSWER: The Age of Reason

088-11-41-01220

- 21. A new theory of this body postulates that it collided with a much smaller companion, causing the observed discrepancy that its visible side contains low-lying lava plains while the farside is composed of highlands. For 10 points each:
- [10] Name this celestial body where rilles and wrinkle ridges are commonly found and whose highlands are called terrae (TEH-ray).

ANSWER: the Earth's **Moon**

[10] This is the name given to the large basaltic plains that fill the Moon's impact basins. Their name comes from the Latin for "sea."

ANSWER: lunar mare [or lunar maria]

[10] The first humans to visit the moon were part of this 1969 NASA mission.

ANSWER: **Apollo 11** [prompt on **Apollo**]