

1. This island was the site of the Bronze Age Torreen Culture, and it contains the Scandola Nature Reserve. This island's longest river, the Golo, begins near Monte Cinto, its highest point. In the eighteenth century, Pasquale (*) Paoli founded the world's first democracy on this island, although it was short lived. This island lies north of the Strait of Bonifacio and south of the Liguria Sea. With capital at Ajaccio, for 10 points, name this island north of Sardinia controlled by France, the birthplace of Napoleon. ANSWER: Corsica [or La Corse]

035-09-4-06102

2. In one of this author's works, the unveiling of a skeleton next to the words "Follow your leader" reveals a rebellion aboard the San Dominick to Amasa Delano. This author collected short stories like "The Lightning-Rod Man" in his *Piazza Tales*. In a novella by this author, the title character is taken aboard the Bellipotent, where he is accused of mutiny by John (*) Claggart. This author of "Benito Cereno" and *Billy Budd* wrote a novel whose narrator joins Queequeg and Ahab on a hunt for a white whale. For 10 points, name this American author of *Moby-Dick*.

ANSWER: Herman Melville

038-09-4-06103

3. During the new moon, this figure was considered to be blind and was known as Mekhenty-er-irty. The Greeks adapted him into the god of silence Harpocrates. His severed hands were recovered by Sobek, who also once saved this god's four sons, who guarded the canopic jars. He once tricked his most famous rival into using a stone boat in a race and into eating this god's (*) semen, which he had hidden in lettuce. This sky god came to power by avenging the death of his father and defeating his uncle Set. For 10 points, name this falcon-headed Egyptian god, the son of Isis and Osiris.

ANSWER: Horus

029-09-4-06104

4. This politician described the legislature serving during his term as the "do-nothing Congress." This man owed much of his success to the political machine of Tom Pendergast. This president desegregated the military, recognized Israel, and served during the passage of the Taft-Hartley act. One election won by this man featured an (*) erroneous headline that declared his defeat by Thomas Dewey. For 10 points, name this Democratic president, who won the election of 1948, ordered the bombing of Hiroshima, and instituted the Marshall Plan.

ANSWER: Harry Truman

038-09-4-06105

5. Extremely blocky, steep-sided types of these landforms occur when they form under glaciers, and are known as tuyas. Their activities can form cryptodomes, which, when moved from their original location, are known as coulees. Their actions are sometimes described as phreatic or (*) plinian depending on whether they create large amounts of steam. They can create flows of pahoehoe or aa, and they come in composite, shield, and cinder cone varieties. For 10 points, name these openings in the earth's crust that allow magma to come to the surface, exemplified by Krakatoa and St. Helens.

ANSWER: volcanos

6. One of this author's major poems includes a four hundred line speech by Pythagoras which criticizes eating the meat of animals. This author lamented being punished for "carmen et error" in his poem *Tristia*, and described the progress of his affair with Corinna in his (*) *Amores*. This poet's satirical guide for the best ways to commit adultery may have caused Augustus to exile him from Rome. Another of this author's poems describes Daphne turning into a laurel tree, among numerous other transformations. For 10 points, name this Roman poet of *The Art of Love* and *Metamorphoses*. ANSWER: Publius **Ovid**ius Naso [or Publius Ovidius **Naso**]

051-09-4-06107

7. This actor spoke the line "Look at this. Look at what they make you give." while his character was dying in *The Bourne Identity*, a movie where he played rival assassin The Professor. He appeared as Walter Raleigh in *Elizabeth: The Golden Age* and protected Monica Belluci from (*)Paul Giamatti's Hertz as Smith in *Shoot 'Em Up*. For 10 points, name this British actor who portrayed Dalton Russell in *Inside Man* and Dwight McCarthy in *Sin City* before starring in Alfonso Cuarón's *Children of Men*. ANSWER: Clive Owen

019-09-4-06108

8. One of this element's allotropes has a three hundred twenty atom unit cell, and each major allotrope feature in some capacity twelve-atom icosahedra. Stock and Pohland isolated a compound of this element and nitrogen that is isoelectronic and isostructural to benzene. Compounds of this element with hydrogen feature three center two electron bonds and are described by Wade's rules as hypho, arachno, nido, and closo. This element is isolated from (*) ulexite and borax. For 10 points, name this element with atomic number five and symbol B.

ANSWER: boron

022-09-4-06109

9. This opera's aria "Hell's vengeance boils in my heart" reaches a high F6, and is sung by a character who, along with Monostatos, tries to destroy a temple in the final scene. Another character is a birdcatcher who is reunited with his similarly-named lover at the end of this opera. During this opera, Sarastro sings a prayer to Isis and Osiris in order to protect (*) Tamino, who must undergo an ordeal to win Pamina. For 10 points, name this Mozart opera about the Queen of the Night, Papagena, and Papageno, who is given the title instrument.

ANSWER: The **Magic Flute** [or Die **Zauberflöte**]

024-09-4-06110

10. Pyotr Grinyov is the main character in this author's romanticized view of Pugachev's Rebellion, The Captain's Daughter. He adapted the story of Don Juan in The Stone Guest, which, like his play Mozart and Salieri, was collected in his collection Little Tragedies. After a storm floods the Neva, Evgeny curses a statue of the Peter the Great, causing it to come to life, in this author's poem The (*) Bronze Horseman. This author died after dueling his wife's lover, but not before writing a verse novel about the poet Vladimir Lensky's death in a duel. For 10 points, name this Russian author of Eugene Onegin. ANSWER: Aleksandr Pushkin

11. This ruler came to power with the backing of the Naryshkin family. He faced an early revolt by the musketeer division of his bodyguard, called the *streltsy*. After capturing Azov, he led the Grand Embassy westward to learn of other countries. To achieve that goal, he became a (*) carpenter in a Dutch East India Company shipyard. After returning home, he ordered the *boyars*, or nobles, to cut their beards. He also defeated Charles XII of Sweden in the Great Northern War. For 10 points, name this modernizing tsar of Russia.

ANSWER: Peter the Great [or Pyotr Veliky; or Peter I; or Pyotr Alekseyevich; prompt on Peter]

019-09-4-06112

12. Among the first animals to possess this structure were the fish Haikouicthys. Consisting of a core of glycoproteins enveloped by two helices of collagen fibers, it secretes the protein sonic hedgehog homolog, which is important in the development of neurons. It forms during (*) gastrulation by the epiblasts that comprise the floor of the amnion cavity, and it leads to the formation of the neural plate. Extending to the sphenoid bone, for 10 points, name this structure found in the embryos of all chordates, the precursor of the vertebral column.

ANSWER: notochord

040-09-4-06113

13. Norman Dello Joio provided the score for a work by this choreographer about the life of Joan of Arc, *Seraphic Dialogue*. The sculptor Izamu Noguchi designed a minimalist set for a solo piece by this choreographer intended to depict a pioneer woman. Along with (*) *Frontier*, this graduate of the Denishawn School of Dance choreographed dances for a composition that includes a set of variations on the Shaker hymn "Simple Gifts." For 10 points, name this American dancer and choreographer who choreographed Aaron Copland's piece *Appalachian Spring*.

ANSWER: Martha Graham

032-09-4-06114

14. One king of this name joined Conrad III to fight the Second Crusade. The eleventh king of this name annexed Burgundy after the death of Charles the Bold, and was opposed by the League of the Public Weal. A third king of this name declared the Duke of Anjou the king of Spain, sparking the War of the (*) Spanish Succession. The sixth king of this name was known as "the Fat," and the eleventh was known as "the Spider." Another king of this name ordered the construction of Versailles. For 10 points, give this name shared by eighteen kings of France, including one known as the "Sun King."

ANSWER: Louis

004-09-4-06115

15. This psychologist classified reactions as primary, secondary, and tertiary circular, and described mental structures that he called "schemas." He studied how children understand that things that can no longer be seen (*) still exist, a theory he called object permanence. His best-known theory classifies child maturation into four periods known as sensorimotor, preoperational, concrete operational and formal operational. For 10 points, name this Swiss psychologist known for his theory of cognitive development. ANSWER: Jean **Piaget**

16. According to one account, he captured the pirate Thomas of Longoville while journeying to France to ask Phillip IV for aid. That story comes from the "Actes and deidis" of this man composed by Blind Harry. Despite using the "schiltron" formation, he was crushed at the battle of (*) Falkirk. Earlier, he teamed with Andrew Moray to defeat the forces of John de Warenne at Stirling Bridge. He ceded his position to Robert the Bruce and was captured and drawn and quartered by Edward II. For 10 points, name this hero of Scottish independence.

ANSWER: William Wallace

015-09-4-06117

17. This phenomenon happens as a result of sound waves inducing density fluctuations in water in the Debye-Sears effect, while when involving x-rays and a crystal lattice this phenomenon is named for Bragg, and through a circular aperture it leads to a pattern named for Airy. Its far-field type is named for (*) Fraunhofer, while its near-field type involves integrals named for Fresnel. This phenomenon may be explained by the principle that every point on a wavefront is its own source, which is named for Huygens. For 10 points, name this optical phenomenon where a wave encounters an obstacle and bends around it. ANSWER: diffraction

022-09-4-06118

18. In the first section of To the Lighthouse, Mrs. Ramsay suddenly recalls this poem's line "Someone had blundered." This poem's sixth and final stanza asks "When can their glory fade?" Its fourth stanza states that "Cossack and Russian / Reel'd from the sabre stroke / Shatter'd and sunder'd." This poem asserts (*) "Theirs not to reason why / Theirs but to do and die, and begins "Half a league, half a league /Half a league onward /All in the valley of Death / Rode the six hundred." For 10 points, name this poem by Alfred, Lord Tennyson about an event during the Crimean War's Battle of Balaclava. ANSWER: "The Charge of the Light Brigade"

025-09-4-06119

19. Early in his reign, this ruler defeated and incorporated the Keriat, Merkit and Naiman peoples into his empire. This leader who created the Yassa law code died while campaigning against the Tanguts, although his last major campaign was against the Khwarezmian dynasty in Iran and Central Asia. This ruler employed generals such as Jebe and (*) Subotai, who used tactics developed by this man including psychological warfare and mass use of cavalry. He was the father of Ogedei and the grandfather of Batu, Hulegu, and Kublai. For 10 points, name this founder of the Mongol Empire

ANSWER: Genghis **Khan** [or **Temujin**]

035-09-4-06120

20. With two of his students, this man proposed a hidden-variables critique of quantum mechanics which involved a paradox named for him, Podolsky, and Rosen. He co-names a condensate of atoms cooled to near absolute zero that become a coalesced quantum mechanical entity with (*) Bose, and he argued for the existence of atoms by analyzing Brownian motion. His more famous theories include one that postulates the speed of light to be a constant and which was later expanded to include gravity. For 10 points, identify this scientist who formulated the equation e equals m c squared.

ANSWER: Albert **Einstein**

21. This author retold the <i>Odyssey</i> in her novella <i>The Penelopiad</i> and wrote a novel about Simon
Jordan, who researches the murder of Thomas Kinnear. Another of her novels ends with the
protagonist being taken by Nick away from the home of Serena Joy. This author of (*) Alias Grace,
The Robber Bride, and The Blind Assassin wrote a dystopian novel set in the Republic of Gilead which
centers on Offred ("of Fred"). For 10 points, name this Canadian author of <i>The Handmaid's Tale</i> .
ANSWER: Margaret Eleanor Atwood



1. Qanniq and aput are words in this language for snow. For 10 points each:

[10] Name this subgroup of the Eskimo-Aleut languages, spoken in Nunavut.

ANSWER: Inuit

[10] This language is the only derivative of Inuit that does not use Inuktitut syllabics, instead using Latin letters. It is spoken in Qaanaaq and Nuuk.

ANSWER: Greenlandic

[10] This Southwest American language of the Dine was heavily utilized by code talkers during World War II.

ANSWER: Navajo

036-09-4-06201

2. This branch of chemistry often requires the use of dimensional analysis. For 10 points each:

[10] Name this area of chemistry that deals with how much of a particular substance is needed for a reaction, or produced by that reaction, if the quantities of other reactants are known.

ANSWER: stoichiometry

[10] This is the name for the reactant that directly affects how much product can be made, as opposed to excess reactants, which are left over when this reactant is all used up.

ANSWER: <u>limiting</u> reactant [or <u>limited</u> reactant; or <u>limiting reagent</u>; or <u>limited reagent</u>]

[10] Stoichiometry is also used to find this quantity, which is roughly computed by dividing the amount of product made by the amount of product that should have been made.

ANSWER: percent yield

003-09-4-06202

3. Name things in philosophy related to ethics, for 10 points each:

[10] This Dutch philosopher wrote *Tractatus Theologico-Politicus* and slammed Descartes dualism and stated that virtue is the human's "nature of essence" in *Ethica*.

ANSWER: Baruch **Spinoza** [or Benedict(us) de **Spinoza**]

[10] Aristotle wrote this philosophical work named for his son that introduces the Doctrine of the Mean, advocating for moderation in all things except arete, or virtue.

ANSWER: Nicomachean Ethics

[10] This author of *On the Fourfold Root of the Principle of Sufficient Reason* claimed that Kant's "thing-in-itself" was multi-faceted and praised asceticism in *The World as Will and Idea*.

ANSWER: Arthur Schopenhauer

034-09-4-06203

4. Parts of this country include the Balearic Islands and Asturias. For 10 points each:

[10] Name this European country which also includes Castille and Aragon.

ANSWER: Spain or España

[10] Spain is also home to this independence-seeking region, whose capital is Barcelona, and which has a namesake dialect of Spanish.

ANSWER: Catalonia

[10] This region of western Spain is located near Portugal, and is famous for producing a disproportionate number of conquistadores. Both Cortes and Pizarro were from here.

ANSWER: Extremadura

- 5. He pioneered the ballade as a musical form, and wrote 21 nocturnes and a "Minute Waltz." For 10 points each:
- [10] Name this Polish composer of "Fantasie-Impromptu."

ANSWER: Frederic **Chopin**

[10] Chopin's Opus 10 and Opus 25 contain these types of pieces, and include pieces nicknamed "Black Key," "Winter Wind," and "Revolutionary."

ANSWER: etudes or studies

[10] This Russian composer composed mazurkas and etudes in the style of Chopin early in his career before moving on to writing synesthetic works like the "Black Mass" and "White Mass" sonatas.

ANSWER: Alexander Nikolayevich Scriabin

036-09-4-06205

6. He wrote about farm hands George and Lenny in *Of Mice and Men* and the Joad Family in *Grapes of Wrath*. For 10 points each:

[10] Name this American author.

ANSWER: John **Steinbeck**

[10] In this retelling of the Cain and Abel story by Steinbeck, Cathy gives birth to Cal and Aron before leaving Adam to run a brothel.

ANSWER: East of Eden

[10] This is the surname of Adam, Caleb, and Aron in East of Eden, which follows this development of this family along with the Hamiltons.

ANSWER: Trask

015-09-4-06206

- 7. When he visits the court of Utgard Loki, this god loses a race to Thialfi, who is actually Thought in disguise. For 10 points each:
- [10] Name this son of Odin and Jord and wife of Sif, the Norse thunder god.

ANSWER: Thor.

[10] Thor wears the belt Megingjord in order to wield this short-handled hammer that returns to its owner after being used.

ANSWER: Mjollnir

[10] Thor's chariot is pulled by Tanngrisnir and Tanngnjostr, a pair of these animals which can also grow back if eaten. Zeus's foster mother Amalthea is often depicted as one of these.

ANSWER: goats

015-09-4-06207

- 8. The latter part of this line is referred to as a "bass cadenza," and it is sounded "from marsh and mere" by a certain "humid race." For 10 points each:
- [10] Identify this onomatopoeic refrain that Charon and Dionysus are forced to endure while crossing the river Styx, sung by a chorus of the title characters of the play *The Frogs*.

ANSWER: "brekekekek ko-ax ko-ax" [be lenient about the number of "ke" syllables in the first word] [10] *The Frogs* was written by this Greek playwright, the author of such comedies as *The Knights* and *The Wasps*.

ANSWER: Aristophanes

[10] Aristophanes's play The Clouds satirizes this philosopher as a Sophist who runs the ridiculous Thinkery.

ANSWER: Socrates

- 9. Answer some questions about a composer, for 10 points each.
- [10] This composer's early operas include *Rienzi* and *The Fairies*, but his more famous operas include *The Mastersingers of Nuremberg*.

ANSWER: Richard Wagner

[10] This operatic cycle by Wagner consists of *The Rhinegold*, *The Valkyrie*, *Siegfried*, and *Twilight of the Gods*.

ANSWER: **Ring** Cycle [or The **Ring of the Nibelung**; or Der **Ring des Nibelungen**]

[10] In this last Wagner opera, the title character recovers the spear used during Jesus' crucifixion, which had been stolen by Klingsor.

ANSWER: Parsifal

024-09-4-06209

- 10. In one of this man's novels, Lucy Ashton is secretly betrothed to the Master of Ravenswood and goes insane on the day of her wedding to Frank Hayston. For 10 points each:
- [10] Name the author of *The Bride of Lammermoor*, as well as *The Lay of the Last Minstrel* and *The Heart of Midlothian*.

ANSWER: Sir Walter Scott

[10] In this novel by Sir Walter Scott, the title character defends the Jewish daughter of Isaac of York against charges of witchcraft, and ultimately marries Lady Rowena.

ANSWER: Ivanhoe

[10] Also known as MacGregor Campbell, this Scottish outlaw is the title character of another Scott novel, in which this character exposes the embezzlement of Rashleigh Osbaldistone.

ANSWER: Rob Roy

030-09-4-06210

- 11. Such exciting objects as plutinos and cubewanos can be found in this region. For 10 points each:
- [10] Name this region beyond Neptune's orbit that was once thought to be the source of short-period comets, sometimes also named for Edgeworth.

ANSWER: Edgeworth-Kuiper Belt

[10] Smaller than Pluto and Eris, this dwarf planet, which is named for a Polynesian god, is the third-largest object in the Kuiper Belt.

ANSWER: Makemake

[10] Members of this group of small planets lying mostly between Neptune and Jupiter have unstable orbits that degenerate within several million years. These planets, including objects like Pholus, might have originated in the Kuiper Belt.

ANSWER: Centaurs

032-09-4-06211

- 12. A massive revolution in this country against the Soviet government occurred on October 23, 1956. For 10 points each:
- [10] Name this Eastern European country whose Communist leaders include Matyas Rakosi and Imre Nagy, and which saw a forced relocation of 26,000 from its capital Budapest.

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

[10] The canonized first king of Hungary had this name, which is shared with an Orthodox Christian martyr who was stoned to death and with the current Prime Minister of Canada.

ANSWER: Stephen

[10] An earlier Hungarian revolt was led by Lajos Kossuth, who timed it to coincide with a Parisian revolt bringing Louis Napoleon to power in this popular year for European revolutions.

ANSWER: 1848

- 13. For 10 points each, name some things about an experimental technique:
- [10] The Taq type of this process's namesake enzyme functions at unusually high temperatures. During this process, thermal cycles enable primers to anneal to DNA templates and be extended to useful length.

ANSWER: **polymerase chain reaction** [or **PCR**]

[10] Once you have enough DNA thanks to PCR, you can use transformation to force foreign DNA into these circular DNA structures of bacteria.

ANSWER: **plasmid**s

[10] This is the term for transfer of DNA material between plasmids by direct bacterial contact.

ANSWER: conjugation

032-09-4-06213

- 14. One resident of this city, Mrs. Sinico, commits suicide after Mr. Duffy doesn't like her, while another resident, Jimmy Doyle, appears in the story "After the Race." For 10 points each:
- [10] Name this Irish city whose residents title a short story collection by James Joyce.

ANSWER: **Dublin**

[10] In this final story from *Dubliners*, Gabriel Conroy realized that his wife Gretta still loves Michael Furey.

ANSWER: The Dead

[10] Joyce's novel Ulysses follows a day in the life of this man, whose wife Molly has an affair with Blazes Boylan.

ANSWER: Leopold **Bloom** [or **Leopold** Bloom]

033-09-4-06214

- 15. This country's name, coined in the pamphlet *Now or Never*, is a neologism meaning "pure and clean" that is also an acronym for its constituent ethnic groups. For 10 points each:
- [10] Name this predominantly Islamic country that, since its 1947 creation during the partition of India, has been intermittently ruled by the Bhutto family.

ANSWER: Islamic Republic of <u>Pakistan</u> [or Jamhuryat Islami <u>Pakistan</u>]

[10] This leader of the Muslim League and advocate of Hindu-Muslim cooperation was known as the "Great Father" of Pakistan for shepherding the state's creation.

ANSWER: Mohammed Ali Jinnah

[10] In a 1971 war, Mujibur Rahman's Awami League proclaimed the independence of this province of Pakistan under the new name of Bangladesh.

ANSWER: **East Pakistan** [or **Mashriqi Pakistan**]

019-09-4-06215

- 16. This principle of least time directly implies Snell's law. For 10 points each:
- [10] Name this principle that light travels the fastest available path, thereby defining the angles it will take between two media with different properties.

ANSWER: **Fermat**'s principle

[10] This other optical principle states that every point on a wavefront is the origin of a wave.

ANSWER: Fresnel-Huygens principle

[10] Both Fermat's principle and the Huygens principle help explain this optical phenomenon, the bending of light rays.

ANSWER: refraction

- 17. An infant John the Baptist prays towards the infant Jesus, who is sitting near the angel Uriel, in this painting. For 10 points each:
- [10] Name this painting with both Louvre and National Gallery versions, that depicts Mary, sitting on the namesake natural features with the other three figures, during the flight into Egypt.

ANSWER: *Madonna of the Rocks* [or *Virgin of the Rocks*]

[10] This painter of the *Madonna of the Rocks* also created a mural for the Santa Maria delle Grazie monastery called *The Last Supper*.

ANSWER: Leonardo da Vinci

[10] This Leonardo drawing demonstrates that architectural principles can be applied to the human form, which, in ideal proportion, is enclosable in a square and a circle.

ANSWER: Vitruvian Man

019-09-4-06217

- 18. The army instituted the "don't ask, don't tell policy" during his administration and he was investigated by Kenneth Starr for his dealings with the Whitewater developers. For 10 points each:
- [10] Name this president who was impeached for perjury when he lied about his relationship with Monica Lewinsky. He made his wife Hillary head a committee to develop universal health insurance.

ANSWER: William Jefferson Clinton

[10] This man served as House Minority whip until 1994, when his help in drafting the anti-Clinton "Contract with America" led to a Republican majority in the House. He then served as its speaker.

ANSWER: Newt Gingrich

[10] This man nicknames a bill that created a five day waiting period to buy handguns that was passed during Clinton's administration. He was shot during the attempted assassination of Reagan.

ANSWER: James **Brady**

027-09-4-06218

- 19. He defeated Andre Agassi in the final of the 2002 US Open to win his fourteenth grand slam. For 10 points each:
- [10] Name this American tennis player who won the Wimbledon's Men's Singles title seven times.

ANSWER: Pete Sampras

[10] This tennis player defeated Andy Roddick to win Wimbledon in 2009 and top Sampras's grand slam record.

ANSWER: Roger Federer

[10] This Swede won Wimbledon five consecutive times, the last by beating John McEnroe in 1980.

ANSWER: Bjorn Borg

036-09-4-06219

- 20. This event in animal cells is tied to the formation of a contractile ring, which creates a cleavage furrow. For 10 points each:
- [10] Name this partitioning of a cell's cytoplasm into two daughter cells.

ANSWER: cytokinesis

[10] Since plant cells have a cell wall, instead of a contractile ring, this structure forms during cytokinesis. It begins as a fusion tube network and ends as a fenestrated sheet.

ANSWER: cell plate

[10] Cytokinesis generally occurs during this final stage of mitosis.

ANSWER: telophase

- 21. The title figure of this poem stands "at our sea-washed, sunset gates" and cries "with silent lips" "keep, ancient lamps, your storied pomp!" For 10 points each:
- [10] Identify this sonnet that ends with the line "I lift my lamp beside the golden door!" Its title figure asks for "your tired, your poor/your huddled masses yearning to breathe free."

ANSWER: "The New Colossus"

[10] "The New Colossus" was written by this American poet, who also wrote "In the Jewish Synagogue at Newport."

ANSWER: Emma Lazarus

[10] This poet described a seagull flying "over the chained bay waters Liberty" in his magnum opus, The

Bridge.

ANSWER: Hart Crane