

1. It is not commonly thought to have been a commissioned portrait, as, contrary to convention, the person in the painting appears in the act of turning her head toward someone or something she has just noticed. Though appearing entirely black today, due to aging, the background of this work was initially deep green, though the reason for this remains a mystery to art scholars. FTP, name this masterpiece by Jan Vermeer, which focuses the viewer's attention to the titular object in the center of the painting.

Answer: *Girl with a Pearl Earring* or *Het Meisje met de Parel*

2. Sorin's health is slowing deteriorating and he lives on an estate tended by Shamrayef. Shamrayef does not approve of the Medvedenko, the suitor and later husband of his daughter Masha, who herself has a crush on another character, Konstantin, the son of Arkadina, the sister of Sorin. Konstantin is obsessed with Nina, who herself has a crush on Akradina's lover, Trigorin. FTP, name this Anton Chekhov play which ends with Konstantin killing himself, echoing the death of the title creature in the second act.

Answer: *The Seagull*

3. Like Woodrow Wilson's Fourteen Points, it called for freedom of the seas and reaffirmed the rights of all peoples to establish territorial changes through self-determination. At a meeting in London, it was accepted by the governments-in-exile of numerous states occupied by Nazi Germany and was used by the militarist faction of the Japanese government to promote an attack on the US. FTP, name this document signed in Newfoundland in 1941 by Churchill and Roosevelt, which established Allied plans for the post-World War II world.

Answer: *Atlantic Charter*

4. Often following the dissipation of or immediately preceding the development of a thunderstorm, strong electric potentials buildup on objects. As electrons which have built up during the storm are attracted to that object, they resultantly produce a low-temperature plasma with a bluish-white glow. Often observed around church spires and ship masts, this is, FTP, what electrical phenomenon named after Erasmus of Formiae, the patron saint of sailors?

Answer: *St. Elmo's Fire*

5. In one Sumerian epic, he is credited with creating the various languages of the earth and he was the father of Uttu, by his daughter Ninkurra, whom he fathered with another daughter, Ninsar. He was a god of wisdom and magic, but was also associated with the creation of beer and with semen. In one myth, he counseled Numma and Ninmuh to create the first men; while in another myth, he used the blood of the dragon Tiamat, which had been slain by his son Marduk, to create them. FTP, name this Sumerian and Babylonian water god and source of the Tigris and Euphrates.

Answer: *Enki* or *Ea*

6. The Eastern branch is attested only by the existence of a single language, which went extinct around the 10th Century, though a Crimean variant may have existed until the 1700s. One language, Lombardic has been classified in the Eastern Branch, as well as the Western Branch. All of the languages of this branch underwent various sound changes, most specifically those described by Grimm's Law. FTP, name this branch of the Indo-European language family, which includes English, Danish, and its namesake language.

Answer: *Germanic* Languages

7. Under this man's rule, his nation was the first to sign a mutual defense agreement with the United States, but because of economic sanctions from the US and other states, he was toppled, following his nation's role in the assassination of Romulo Betancourt of Venezuela. He renamed his nation's capital city after himself following a destructive hurricane in 1936 and also supported a policy of *blanquismo*, in which he invited European refugees to his country in order to counter the mixed-race heritage of Haiti. FTP, who is this Dominican dictator, who ruled that country from 1930 to 1961?

Answer: Rafael Leonidas *Trujillo*

8. In monocots, they are generally found equally between the two epidermes, but they are far more likely to be found on the abaxial side than the adaxial side in dicots. Their function is performed directly by the cuticle in plants with floating or submerged leaves and they are surrounded by two specialized parenchyma cells, often called guard cells. FTP, what are these tiny openings found on leaves which take in carbon dioxide and release oxygen?

Answer: Stoma or Stomata

9. Robert Picardo, later of *Star Trek: Voyager* fame provided the voice of the computerized taxi service, Johnnycab. Robert Costanzo plays Harry, who is either Doug's friend, or a spy hired by Cohaagen to monitor Doug's activities. When Doug decides to go for a virtual vacation, Harry tries to kill him, setting off a chain of events which lead to Doug toppling a corrupt corporation and creating an atmosphere on Mars. Based on Philip K. Dick's novella *We Can Remember It for You Wholesale*, FTP, name this 1990 Arnold Schwarzenegger science fiction film.

Answer: Total Recall

10. The title character is originally serving aboard the *Rights-of-Man*, a merchant vessel, but quickly earns the friendship of several upon his new vessel, including Dansker, who explains to him that Claggart holds a grudge against him. After viewing another sailor being whipped, the protagonist vows never to suffer the same fate and works to be the best sailor he can. In the end, Captain Vere dies uttering his name, after that man had been hanged for the murder of Claggart, whom he punched once following slanderous charges of leading a mutiny. FTP, name this Herman Melville novella.

Answer: Billy Budd, *Sailor* (or *Foretopman*)

11. The first two versions were only two acts, but the final version, which is performed today, is in three acts. The end of the opera sees a bear frighten the residents of the town, before it is revealed that he is one of the title character's suitors, and the one chosen by Krušina. She, on the other hand, does not like that choice, Vašek, and prefers instead Jeník, who makes a bargain with Kecel whereby he will give up his claim to her for a price. In the end, it is learned that he is Vašek's long-lost half-brother, and he marries Mařenka. FTP, name this comedic opera by Bedřich Smetana.

Answer: *The* Bartered Bride or Prodaná Nevista

12. Its third-largest city, Cochabamba, which is located in a namesake department in the center of the country, was racked by large-scale protests and rioting following the privatization of that city's water supply in 2000. This country is also home to El Cerro Mutún, the world's largest iron ore deposit, and the world's largest salt flat, Salar de Uyuni. This all describes, FTP, what South American nation, also unique because it has two capitals, La Paz and Sucre?

Answer: Bolivia

13. The narrator mentions four specific instances of the titular objects, including one which he "bathed in... when the dawns were young," one whose "muddy bosom" he has seen "all golden in the sunset" and one which he says "I built my hut near... and it lulled me to sleep." Twice he says that his soul has grown deep like them and talks about their age. FTP, name this poem by Langston Hughes in which he talks of knowing the Euphrates, the Nile, the Congo and the Mississippi.

Answer: *The* Negro Speaks of Rivers

14. All of the stars of this category are Population I, distinguishing them from the similar, but older, W Virginis stars. They are less common, but more luminous, than RR Lyrae stars, which are used by astronomers in a similar fashion. The recent discovery of the third star in the Polaris system is believed to be helpful in establishing the masses of these stars, the luminosity of which vary in a very discernible pattern relative to their absolute luminosity. FTP, name these variable stars which are used to establish the distances between the earth and interstellar objects found near them.

Answer: Cepheid Variable

15. With the explosive growth of the railroad industry following the Civil War, plans were made to develop the Northern Pacific Railroad, a transcontinental line that would feed into Duluth, Minnesota. However, as the chief financiers had overextended themselves, and were forced to declare bankruptcy, 89 other railroads and over 18,000 businesses were forced to follow suit, prompting the Long Depression which carried into the 1890s. FTP, name this economic depression which was caused by the bankruptcy of the financiers Jay Cooke and Company.

Answer: Panic of 1873

16. Upon first being initiated into this religion, one held the rank of Corax, while the highest rank was the Pater. Its central figure's name is derived from the Indo-Iranian word for "agreement" or "covenant", and he is depicted often as the bearer of the heavens or as emerging from the world egg at creation. Many of its rites were performed in caves or in buildings which were designed and decorated to look like caves. FTP, name this Persian religion popular in ancient Rome, especially among the soldiery.

Answer: Mithraism

17. Joseph Proust noted in 1797 that iron and oxygen tended to combined in set ratios that differed among the iron oxides; John Dalton furthered this concept to define elements as consisting of one type of atom, with compounds containing discreet numbers of each type of atom. FTP, what is this law that says that the ratios of the masses of each type of atom in a particular compound will always be the same, regardless of how the compound was created?

Answer: Law of Definite Proportions or Definite Composition or Constant Composition

18. In April 2006, he became the first player to record a hit in the Cardinals' new Busch Stadium and he hit a home run in his first Major League at-bat in 1999. He spent his first 6 years with the White Sox, where he earned the nickname El Caballo, before being traded to the Brewers in 2004. In his only two seasons with the Brewers, he recorded two All-Star appearances, but was traded to the Texas Rangers at the end of last season, despite having 28 home runs, the third most of any player traded at midseason. FTP, who is this outfielder, who signed with the Houston Astros this offseason?

Answer: Carlos Lee

19. In her short story *Rape Fantasies*, Estelle discusses the title objects with her friends and explores six of her own. Her first published works were poetry collections, such as *Speeches of Dr. Frankenstein* and *The Circle Game*. Her novel *Alias Grace* is a fictionalized account of the murder of Thomas Kinnear and Nancy Montgomery by two servants; her other novels include *The Edible Woman*, *Cat's Eye*, and *The Blind Assassin*. FTP, name this Canadian author whose best known work is the 1985 dystopian novel *The Handmaid's Tale*.

Answer: Margaret Atwood

20. One of his chief advisors early in his reign was the Praetorian prefect Sextus Afranius Burrus, whose power greatly diminished after he was accused of conspiring with Cornelius Sulla. After sending Cnaeus Domitius Corbulo to protect Roman interests in Armenia, he established a peace agreement with the Parthian Empire which brought him even greater popularity at home. He had another early advisor, Seneca the Younger killed following the plot of Caius Calpurnius Piso. FTP, who is this Roman emperor, the nephew and successor of Claudius?

Answer: Nero Claudius Caesar Augustus Germanicus or Nero Claudius Drusus Germanicus

21. Among his writings are a scientific treatise for his son 'little Lewis' and a poem chiding his scribe Adam Pinkhurst. He was lauded by contemporaries such as John Gower, yet his depictions of himself in his works, such as *The House of Fame*, often show him as a fat bumbler. He frequently employed dreamvisions, such as in *The Book of the Duchess*, and is often considered the father of English literature. FTP, name this author best known for *The Canterbury Tales*.

Answer: Geoffrey Chaucer

22. It was founded by seven men, including William Saunders, who served as the organization's first Master, and Oliver Hudson Kelley, its first Secretary. Legislation that its members passed included the regulation of grain elevators at the expense of the railroads, a right which was upheld in the *Munn v. Illinois* Supreme Court decision. It was originally founded as a fraternal order on the model of the Freemasons, before its growth as a political entity. FTP, name this national political and social organization of farmers.

Answer: The National Grange or Order of the Patrons of Husbandry

1. F10PE, identify each of the following features of the Great Basin from clues.

A. This extremely flat area has hosted several attempts to break land-speed records and is also home to the Burning Man festival. It was once the bed of Lake Lahontan during the last ice age.

Answer: **Black Rock Desert**

B. This region in California and located at the edge of the Great Basin is home to Badwater Basin, the lowest point in North America.

Answer: **Death Valley**

C. Located in western Utah, this large playa is a remnant of a namesake pluvial lake which covered much of the Great Basin during the last ice age. The salt in this playa reaches depths of 6 feet in many areas.

Answer: **Bonneville Salt Flats**

2. F10PE, identify each of the following characters from Nathaniel Hawthorne's *The Scarlet Letter*.

A. This is the pastor with whom Hester has an affair. He is eloquent and well-respected, but also torn by his own guilt over not confessing his sin.

Answer: **Arthur Dimmesdale** (*accept either*)

B. This is Hester's husband, who had sent her to New England ahead of himself. When he learns of the adultery, he seeks vengeance, revealing his cold and cruel nature.

Answer: **Roger Chillingworth** (*accept either*)

C. This is the child born of Hester and Arthur's affair. She is more intelligent than her age and is rumored by some in the town to be the child of the Devil.

Answer: **Pearl**

3. F10PE, identify each of the following related to the Second Bank of the United States.

A. This longest-serving Secretary of the Treasury helped to charter the Bank in 1816 in large part because the financial troubles he had weathered the US through during the War of 1812, which came shortly after the closing of the first.

Answer: **Albert Gallatin**

B. This Supreme Court case, which saw a state attempt to tax a branch of the Bank, ruled that Congress had the authority through its implied powers to create the Bank, because it resulted in the execution of its stated powers.

Answer: **McCulloch v. Maryland**

C. This man, who served as the Bank's second president, was caught in Andrew Jackson's war against the bank, which resulted in its national charter not being readopted in 1832. He left his post in 1839, two years before the Bank failed.

Answer: **Nicholas Biddle**

4. Identify the following parts of the atmosphere FTPE.

A. This portion of the atmosphere is just above where most of Earth's weather occurs and is characterized by its increasing temperature with height.

Answer: **Stratosphere**

B. This level of the atmosphere is made up of a relatively small number of particles that are extremely fast-moving, causing it to feel cold despite its name.

Answer: **Thermosphere**

C. This part of the atmosphere is known for its ability to bend radio waves, allowing them to travel long distances at night.

Answer: **Ionosphere**

5. Identify the album from tracks 30-20-10.

A. 30) "Pulling Teeth"; "Coming Clean"; "Sassafras Root"

B. 20) "She"; "Longview"; "F.O.D."

C. 10) "Welcome to Paradise"; "When I Come Around"; "Basket Case"

Answer: **Dookie**

6. Identify each of the following examples of ancient sculpture, all of which are currently housed in the Louvre, F10PE.
- A. Though it is missing its arms and head, this statue is considered a masterpiece of Hellenistic art and was discovered by a French amateur archaeologist in 1863.
 Answer: Winged Nike of Samothrace or Winged Victory of Samothrace or Winged Victory or Winged Nike
- B. This statue, which was initially discovered without the central figure's right arm, was a great inspiration for the Italian Renaissance and served as a model for several works by Michelangelo.
 Answer: Laocoön and His Sons or Laocoön Group
- C. Though it is now seen without arms, fragments of a hand holding an apple were found with the rest of the statue on its namesake island in 1820.
 Answer: Venus de Milo or Aphrodite of Milos
7. FTPE name these works by Henry James:
- A. This work centers on Isabel Archer, an initially independent American woman who ends up in a loveless marriage that she remains in to uphold social convention.
 Answer: The Portrait of a Lady
- B. This work concerns an unnamed governess, who may or may not be sane, who sees ghosts and believes her charges Flora and Miles can see them too.
 Answer: The Turn of the Screw
- C. The titular protagonist of this novel is a wealthy, flirtatious New Yorker over whom Winterbourne obsesses and whose actions with Mr. Giovanelli may or may not be sexually innocent.
 Answer: Daisy Miller
8. Identify each of these bacterial morphologies from a brief description F10PE.
- A. These bacteria are spherical or mostly spherical in shape and often come in large congregations.
 Answer: Coccus or Cocci
- B. These bacteria are shaped like rods or pills.
 Answer: Bacillus or Bacilli
- C. These bacteria are shaped like curved rods and are often comma-shaped.
 Answer: Vibrio
9. F10PE, identify each of the following objects from Norse mythology.
- A. This is the magical hammer wielded by Thor, who, along with his sons, is the only person capable of lifting it.
 Answer: Mjollnir
- B. This is the fetter used to bind the Fenrir; it consists of a number of mystical objects, including the breath of a fish and the footfalls of a cat.
 Answer: Gleipnir
- C. This is the trumpet possessed by Heimdall, who will only blow it once in order to alert the other gods of the coming of Ragnarok.
 Answer: Gjallarhorn
10. F10PE, identify these people from the history of the Plymouth colony.
- A. This wealthy London merchant secured the Pilgrims a chance to settle in the New World and also served as the first governor of the Plymouth Colony. He died in 1621, though the cause is uncertain.
 Answer: John Carver
- B. He considered a principle developer of the Mayflower Compact, record of which comes primarily from his journals, and served 15 terms as the governor of the Plymouth, following the death of John Carver.
 Answer: William Bradford
- C. This soldier served as the military advisor for Plymouth, but is best remembered for his fictional portrayal in a namesake Henry Wadsworth Longfellow poem.
 Answer: Myles Standish

11. F10PE, answer the following about a film:

A. Directed by Ron Howard, it tells of an aspiring magician who finds the infant Elora Danan and seeks to protect her from Queen Bavmorda, an evil tyrant whose downfall was prophesied with the birth of the girl.

Answer: Willow

B. The title character of *Willow* is played by this dwarf, whose other roles include Prof. Flitwick from the *Harry Potter* films and Wicket W. Warrick from *Return of the Jedi*. Watch for his fine performance early in *Ray*.

Answer: Warwick Davis

C. Played by Val Kilmer, this roguish swordsman helps Willow to protect Elora Danan and also provides the love interest for Queen Bavmorda's daughter, Sorsha, who helps in the defeat of her mother.

Answer: Madmartigan

12. F10PE, identify the following laboratory techniques.

A. This process is used to check the accuracy of an instrument, usually by measuring a known quantity with it and adjusting the reading to match that quantity.

Answer: Calibration

B. This procedure determines the concentration of a solution. It usually involves adding one drop at a time of the substance to a solution with a known concentration and continuously monitoring the pH of the resulting solution.

Answer: Titration

C. This procedure uses visible light to determine the concentration of a solution. Light of a known wavelength is shone through a small vial of the solution, and the concentration can then be calculated from Beer's law.

Answer: Spectroscopy or Spectrophotometry

13. Identify each of the following William Faulkner novels from characters F10PE.

A. Caddy, who becomes pregnant out of wedlock, Benjy, Caddy's mentally retarded brother, Quentin, Caddy's brother who commits suicide after she becomes pregnant, and Dilsey, the cook who cares for all the Compson children

Answer: *The Sound and the Fury*

B. Bayard Sartoris, Ringo, a slave who accompanies Bayard, Granny Millard, who swindles the Yankees out of mules, and Drusilla, Bayard's cousin who wishes to be a Confederate soldier

Answer: *The Unvanquished*

C. Joe Christmas, a bi-racial orphan charged for a murder he did not commit, Lena Grove, a pregnant teenager seeking her child's father, and Byron Bunch, the man who eventually attempts to help Lena and accompanies her

Answer: *A Light in August*

14. F10PE, identify each of the following operas from Giuseppe Verdi.

A. One of the most famous opera choruses is the *Anvil Chorus*, in which the Gypsies sing of their livelihoods, in this opera, which sees Leonora die in a vain attempt to save Manrico, who is killed by Count Luna.

Answer: *Il Trovatore*

B. One of the most famous arias in this opera is *La donna e mobile*, in which the Duke of Mantua decries women after he fears he has lost his love, Gilda. In the end, she sacrifices herself so that Sparafucile does not kill him.

Answer: *Rigoletto*

C. One of the most famous duets from this opera is *Un di, felice, eterea*, in which Alfredo sings of his love for the title character, Violetta, and she rebuffs his advances. In the end, she sacrifices everything for him and dies of consumption.

Answer: *La Traviata*

15. Identify each of the following people associated with the career of Hernando De Soto F10PE.

A. De Soto first arrived in the New World as part of the expedition led by this conquistador against the natives of Panama. This man's son-in-law was Balboa and he ruled first from Darien and then from Panama City.

Answer: Pedro Arias de Avila

B. De Soto then accompanied this conquistador on his expedition through Nicaragua and Honduras. He founded two Nicaraguan cities, Leon and Granada and the currency of that nation is named for him.

Answer: Francisco Hernandez de Cordoba

C. Finally, De Soto served as part of the expedition of this conquistador who conquered the Inca Empire. He and de Soto had a falling out following the execution of Atahualpa.

Answer: Francisco Pizarro

16. Answer the following about radiation F10PE.

A. This is the term given to a body which absorbs all incoming radiation in all wavelengths and in turn can theoretically emit at any wavelength. No known examples exist.

Answer: Blackbody

B. This law shows that the irradiance of a blackbody over all wavelengths is equal to the body's temperature to the fourth power times a constant.

Answer: Stefan-Boltzmann law

C. This law states that the wavelength at which a blackbody radiates the most energy is equal to the number 2897 divided by the body's temperature.

Answer: Wien's displacement law

179. Identify the following about the history of the English language F10PE.

A. This term is sometimes used as a synonym with Old English and was advanced with this meaning by Camden, a historian under Elizabeth I.

Answer: Anglo-Saxon

B. Largely responsible for the shift from Old to Middle English, this language was spoken by the French-speaking invaders who followed and succeeded William the Conqueror.

Answer: Anglo-Norman

C. The transition from Middle to Modern English is usually seen as a product of this event, which was named and first studied by Otto Jespersen and which accounts for the major difference between continental and English pronunciation

Answer: Great Vowel Shift

18. Identify each of the following about a Nobel Prize-winning author F10PE.

A. This Egyptian author won the Nobel Prize in Literature in 1988, becoming the first Arabic-language writer to win the award.

Answer: Naguib Mahfouz

B. Mahfouz is best known in the West for this collection of novels, which includes *Palace Walk*, *Palace of Desire*, and *Sugar Street*.

Answer: *The Cairo Trilogy*

C. Another noted work by Mahfouz, this allegorical novel depicts the stories of the Abrahamic religions and prompted an assassination attempt against the author in 1994.

Answer: *The Children of Gebelawi* or *The Children of the Alley* or *The Children of Our Ally* or *Alwad Haritina*

19. Provide each of the following Latin phrases which are often used in epistemology F10PE.

A. This phrase, meaning "from before", defines knowledge which the mind possesses earlier than its own creation or birth.

Answer: A Priori

B. This phrase, which translates as "blank slate", refers to the idea that the mind possesses no information prior to its creation.

Answer: Tabula Rasa

C. This phrase, translated as "to be is to be perceived", was used many times by George Berkeley and encapsulates his idea that only direct knowledge of sensations or ideas is possible.

Answer: Esse est Percipi

20. Identify these failed presidential assassins from clues F10PE.

A. One month before his inauguration, this man attempted to shoot Franklin Roosevelt in Florida. He injured 4 people and killed Chicago mayor Anton Cermak.

Answer: Giuseppe Zangara

B. This man planned to crash a jet liner into the White House in order to kill Richard Nixon, but he committed suicide after a police officer stormed the plane and shot him through the cockpit door.

Answer: Samuel Byck

C. Two women attempted to assassinate Gerald Ford within 17 days of each other. Name either, one a member of the Manson Family, the other an FBI informant.

Answer: Lynette "Squeaky" Fromme or Sara Jane Moore

21. F10PE, identify each of the following from the early annals of computer science.

A. This was the first large-scale, digital computer capable of being reprogrammed. It was developed 4 years after the Z3, now considered the first computer and used to compute artillery firing tables for the Army's Ballistic Research Lab.

Answer: **ENIAC** or **Electronic and Numeric Integrator and Calculator**

B. Because of the flaws inherent in the ENIAC's fixed-program structure, this structure, often named for an Austrian-American mathematician, who wrote an article detailing it in formal logical language, was developed.

Answer: **Stored-Program** Architecture or **Von Neumann** Architecture

C. Though von Neumann was originally writing about the EDVAC, this British computer was the first to make use of stored-program architecture. This computer's operation was centered on the Williams tube.

Answer: **Manchester SSEM** or **Manchester Small-Scale Experimental Machine** or **Manchester Baby**

22. According to Hesiod's creation myth, numerous deities and forces came into existence spontaneously or through parthenogenesis. F10PE, identify each of the following.

A. This was the first force created in the universe. It is characterized as a yawning nothingness and later spawned children of its own.

Answer: **Khaos**

B. One of two children specifically ascribed to Khaos, this being is characterized as darkness and is a part of the underworld. With his sister, Nyx, he fathered Hemera, the day, and Aither, the heavens.

Answer: **Erebos**

C. The birth of this god of love, either as a child of Khaos or through his own spontaneous generation, allowed for the coupling of other deities and the births of many other gods.

Answer: **Eros**