

Tossups

1. Based on the novel of the same name by Robert Bloch, its screen writer Joseph Stefano made it the first film to include the term transvestite, used to describe the character played by Anthony Perkins. While three sequels enlighten us to the origin of Perkins' character's oedipal complex on his then dead mother, FTP identify this film in which diminished octaves accompany shots from 70 different angles as Norman Bates stabs a woman to death in the shower, directed by Alfred Hitchcock.

Answer: Psycho

2. This method is usually analyzed by finding the inflection point of the namesake curve created when it is conducted on an analyte, though the sharp curve created according to the Henderson-Hasselbalch equation makes that easy to find. Also known as volumetric analysis, it typically makes use of a visual indicator to find the equivalence point. Consisting of the adding of a reagent in small amounts from a burette, FTP identify this chemical procedure conducted to determine the concentration of a known reactant.

Answer: titration

3. A thin red bar borders the entire right side of this painting. On the upper left is what appears to be a yellow island, and a similar portion of land is on the lower left. They are connected by a bridge on which, in the distance, walks a person dressed in blue and another in red, side by side. The central figure wears black and holds his head while above him are two long, wavy orange clouds. Recently returned after being stole from a Norwegian Museum, FTP identify this painting of Edward Munch in which the central character makes the title sound.

Answer: The Scream [accept The Cry]

4. During World War I his name became a verb dealing with conserving meat and wheat products while he was US Food Administrator. Throughout his career he served in many unelected positions, such as Secretary of Commerce under Harding and Coolidge, and first won elected office after his presidential campaign against New Yorker Al Smith. However, his tenure as president was soon overshadowed by the damaging protectionist effects of the Hawley Smoot tariff. FTP, name this US president often blamed for his mishandling of the Great Depression.

Answer: Herbert Hoover

5. Mr. Brocklehurst's poor management causes the titular woman's best friend Helen Burns to die in a typhus epidemic. She is also jealous of Blanche Ingram and eventually studies Indian languages. Frustrated by the marriages of Miss Temple and of Bertha, Mrs. Reed concealed her relationship to one of her suitors, the missionary St. John Rivers, whom she meets after leaving her job as a governess for Adele at Thornfield. FTP identify this novel which concludes with the title character's marriage to Mr. Rochester, written by Charlotte Bronte.

Answer: Jane Eyre

6. Herbert Huncke was the first person to coin this term, and John Clellon Holmes wrote one of their first major works, *Go*. A broad definition of them frequently includes the Black Mountain Poets and the San Francisco Renaissance, and when more narrowly defined it included Neal Cassady, Gregory Corso, and Peter Orlovsky. Also including Lawrence Ferlinghetti, it had a public scandal when Lucien Carr murdered David Kammerer, a friend of the author of *The Naked Lunch*, William S. Burroughs. FTP identify this literary school which included Jack Kerouac and Allen Ginsberg.

Answer: Beat generation (or beats or beatniks)

7. They appear to be related to cyanobacteria and contain a small plasmid and ribosomes, although most of their proteins are synthesized elsewhere. They lack the cristae found in Mitochondria, and their double membrane suggests they are the result of endosymbiosis. Most chemical reactions occur in membranes

surrounding lumens, called thylakoids, which are grouped in grana. Filled with a fluid called stroma, FTP identify this cellular organelle in which photosynthesis occurs.

Answers: **Chloroplast**

8. This king was the father of Evil-Merodach and led a 13 year siege of Tyre, as well as an unsuccessful punitive attack against Necho II of Egypt after completing his father's destruction of the Assyrian Empire. Conflation with the last king of his dynasty may explain his madness described in the Bible, and he had Zedekiah blinded and describes a vision of a statue with feet of clay. The son of Nabopolassar, FTP identify this king of Babylon found in the book of Daniel who sacked Jerusalem in 587 B.C.

Answer: **Nebuchadnezzar II**

9. This composer gives his name to a forceful pizzicato where the string rebounds off the fingerboard, and he incorporated the acoustic scale and tympani glissando into several of his works. His second violin concerto earned a great deal of fame, and he composed the educational piano work *Microcosmos*, while along with Zoltan Kodaly he collected folk songs. FTP identify this Hungarian composer of *Music for stings, percussion, and celeste*, a famous *Concerto for Orchestra*, and the opera *Duke Bluebeard's Castle*.

Answer: Bela **Bartok**

10. Its longest and second section is called "The Cow," and in other sections passing reference is made to the battle of Mt. Uhud and a mistaken identification of Mary as the third person of the Christian Trinity. All of its sections are written in rhymed prose and begin with the same line: "In the Name of God the Compassionate, the Merciful." Although scholars have established a chronological order for its sections to apply the principle of abrogation, its 114 surahs collected by Uthman were ordered by length. FTP identify this Holy book of Islam.

Answer: the **Koran**

11. Pencil and paper ready. The DVD of a certain Movie sells for \$20. If once every year a sequel is released direct to DVD at $\frac{3}{4}$ the price of the one in the previous year to compensate for a decrease in cinematic quality, then FTP what will it cost a die hard fan to purchase every DVD in the series assuming he lives an infinite amount of time and the geometric series is continued for ever?

Answer: **\$80**

12. It notes that the occurrence of the titular concept is lower in Catholic countries than Protestant ones, which its author attributes to the increasing integration in the former. Although it does not discuss Hitler, Anna Karenina, or Hemingway, it notes a decrease in the rate of the title concept among married people and those with children, and it divides the title concept into egoistic, altruistic, anomic, and fatalistic varieties. Taking care to separate accidental deaths from those it studied, FTP identify this 1897 book by Emile Durkheim about taking one's own life..

Answer: **Suicide**

13. The demonstrative *pa* became one in Late Egyptian, while Greek adopted the Homeric demonstrative pronoun *ho* to fill this function. Russian lacks one, and although Latin lacks one, its pronoun *ille* became one in French and Spanish. An identical form can be used as an object pronoun in French, and it is used in contrast with *eine* in German and *un* and *une* in French. FTP, *Der* in German, *le* in French, and *el* in Spanish all identify this type of word, used to specify a definite noun, whose English form is *the*.

Answer: **definite article** (accept masculine and/or singular definite article)

14. He proposed a theory of the universe involving vortices in his work *Le Monde*, which he left unfinished after learning of Galileo's problems with the inquisition. He developed a lengthy algebraic method without calculus for finding the tangent to a curve, and he developed a new epistemology when on November 10, 1619 he came to doubt everything, though he soon settled on a proof of his own existence. Famous for his *Meditations on First Philosophy* and *Discourse on Method*, FTP, identify this French mathematician who pioneered analytic geometry and based all knowledge on the assertion, "I think, therefore I am."

Answer: Rene Descartes

15. The outlying forts of Douaumont and Harcourt fell in the opening engagements of this battle to an army under Crown Prince Wilhelm. Its psychological value was the main reason Falkenhayn believed the French would defend it until they were "bled white," and the British began the battle of the Somme to relieve pressure from it. Fought from February to December, 1916, FTP identify this longest battle of the First World War in which Henri-Philippe Petain gained fame during an important French victory.

Answer: Verdun

16. Originally from Annu, he was the dedicatee of a distinctive type of temple in dynasty 5, and he rose to prominence at the end of the Old Kingdom. On account of his assimilation with Horus, he was often depicted as a falcon wearing a large disk on his head. The father of Shu and Tefnut, his cult was centered in Heliopolis, and his name is the theophic element of Ramses. Assimilated with Amun in the New Kingdom, FTP name this Egyptian Sun God with a monosyllabic name.

Answer: Re or any of the following: Ra; Pre; Pi-re; Re-Horakty; Amun-Re; Amun-Ra

17. Its leader once tried to use a human nose as an aphrodisiac and is unable to understand why Ross does not eat all of the other friends as he is the largest. That leader also led an invasion of Nintendo characters with tactics drawn from Space Invaders, and became sick after eating a hippy instead of the starship captain who had introduced this planet's young as a popular snack food. FTP identify this planet, led by Leur, the home of large green aliens in *Futurama* who periodically invade Earth.

Answer: Omicron Persii 8

18. The average value for this quantity on earth is about .39, but it is significantly lower in the oceans due to cloud contributions, and in urban areas, because the buildings absorb light before it reaches the ground. It is defined as the ratio of scattered to incident electromagnetic radiation, usually in the form of light. Appropriately, it is derived from a Latin word meaning white. FTP, name this measure of a surface's reflectivity.

Answer: Albedo

19. Written in the Ionian dialect, its second book is a lengthy description of the customs of Egypt. Its first book contains references to Semiramis and the story of the poet Arion, who was saved by a dolphin. It also details the history of the Mermnad dynasty of Lydia, whose last king, Croesus, was the first Asian ruler to subjugate Greeks. Including the exploits of Cambyses, Cyrus, Darius, and Xerxes and the battles of Platea, Salamis, and Marathon, FTP, identify this work of Herodotus about a war between the Greeks and the Persian Empire.

Answer: Herodotus' Histories or the History of the Persian Wars

20. Part of its remnants formed the Constitutional Union Party, and it ran Hugh Lawson White and two other men in its first national election. Opposed to the Mexican war, its members included Horace Greeley, and it advocated internal improvements in a platform called the American System. Including such men as Daniel Webster and Henry Clay, FTP identify this political party of Zachary Taylor and William Henry Harrison, which takes its name from a British political party and not distinctive headgear.

Answer: Whigs

21. It has been proved that one of these can be constructed with any number of ellipses, although their creator never used more than five. They have a total of exactly 2^n regions for n classes, ensuring that all elements which are members of the same classes are in the same region. Designed to model Boolean algebra, they are formed with circles for two or three categories. FTP identify this type of diagram made of overlapping circles used to compare differences and similarities.

Answer: Venn diagram

Bonuses

1. Identify the following works of British poetry by Tennyson FTPE
This poem describes an event of the battle of Balacava in the Crimean War, and notes that "Into the Valley of Death / Rode the 600."

Answer: The **Charge of the Light Brigade**.

In this poem Tennyson describes "Sunset and evening star,/ And one clear call for me!" and hopes "to see my Pilot face to face."

Answer: **Crossing the Bar**

Tennyson took 17 years to write this requiem for his friend Arthur Henry Hallam.

Answer: **In Memoriam** A.H.H.

2. Identify the following about everyone's favorite Medieval ruler FTSNOP.

[5] On Christmas day of 800 A.D, this man was crowned Holy Roman Emperor.

Answer: **Charlemagne**.

[5] This man of diminutive stature was Charlemagne's father.

Answer: **Pepin the Short** or **Pepin III**

[10] This man was Charlemagne's son and successor who divided up the empire among his own children.

Answer: **Louis the Pious**, or **Louis the Fair**, or **Louis the Debonair**, or **Louis I**

[10] This Englishman was the chief scholar in Charlemagne's court.

Answer: **Alcuin** of York

3. Identify the following economic market types from examples randomly including ancient Egyptians FTPE.

Pharaoh is the only person who buys canopic jars made of alabaster.

Answer: **Monopsony**

Imhotep, Seti, and Amenemhat each own chariot building firms and between them produce all of the chariots in Egypt. They can collude to form a cartel, and they might notice a kinked demand curve.

Answer: **Oligopoly**

Numerous groups of craftsmen sell mummified animals to many consumers, but each sells a different type of animal, giving the product some differentiation.

Answer: **monopolistic competition** (prompt on competition)

4. Answer the following about the anatomy of the eye FTPE.

This colored section of the eye dilates and constricts the pupil to regulate light flow

Answer: **iris**

This white hard layer covers the outside of the eye, and is contiguous with the cornea.

Answer: **sclera**

This thin transparent tissue covers the cornea and the inside of the eyelids. It gives its name to the formal designation of pink eye.

Answer: **conjunctiva**

5. Identify the following about lovers of Zeus FTPE.

This boy love of Zeus became cupbearer to the gods.

Answer: **Ganymede**

Zeus hid his affair with this woman by turning her into a cow, which Hera then asked for as a gift.

Answer: **Io**

This early lover of Zeus gave birth to Artemis and Apollo on the island of Delos.

Answer: **Leto**

6. Identify the following foreign generals who fought for the Americans in the Revolutionary war FTPE.

This Frenchman and close friend of George Washington sailed to the U.S. in 1777 as a private citizen, and distinguished himself most notably at Yorktown.

Answer: **Lafayette** (Joseph Paul Yves Roch Gilbert du Montier)

This Prussian Captain, who claimed to be a general, drilled troops at Valley Forge.

Answer: Friedrich **Von Steuben**

The large Polish population of Chicago ensured that this question writer at one time got the day off October 11th in commemoration of the 1779 death of this Polish general at the siege of Savannah.

Answer: Kasimir **Pulaski**

7. Identify the following about a work of literature FTPE

In this most famous work of Goethe [GER-tuh], the title figure sells his soul for infinite knowledge. In Part I, he falls in love with Gretchen, who bears him a child but then drowns it.

Answer: **Faust**

Faust falls in love with this mythical woman in Part II after conjuring her for the Holy Roman Emperor. He spends an entire act pursuing her.

Answer: **Helen** of Troy

This Demon accompanies Faust throughout his travels in an attempt to get his soul, although he is thwarted at the end.

Answer: **Mephistopheles**

8. Identify the following about star death FTPE

This product of stellar death is sustained by electron degeneracy pressure. If the mass of one exceeds the Chandrasekhar limit of 1.4 solar masses, it spontaneously explodes, and they are found on the bottom left of H-R diagrams.

Answer: **White Dwarf**

This very dense product of stellar death is sustained by degeneracy pressure of its namesake particles and is essentially a giant neutral atomic nucleus.

Answer: **Neutron star**

One of these even denser entities is created if a star has a mass too large to be sustained by neutron degeneracy pressure.

Answer: **Black hole**

9. Identify the following works of Auguste Rodin FTPE

This work depicts Paolo and Francesca, illicit lovers from The Divine Comedy, engaged in the title act.

Answer: The **Kiss**

This large work in high relief based on the Divine Comedy contains The Kiss, as well as The Thinker.

Answer: The **Gates of Hell**

This Rodin sculpture depicts Eustache de Saint Pierre and five others surrendering the keys of their city to Edward III of England during the 100 years war.

Answer: The **Burgers of Calais**

10. Identify the following about other universities that were founded by rich industrialists FTPE.
This man made a fortune in the tobacco industry, which he used to found a namesake Durham, North Carolina University.

Answer: James Buchanan **Duke**

This Scotsman and steel magnate founded a namesake Pittsburgh Institute of Technology, which has since been combined with another school.

Answer: Andrew **Carnegie**

This man, once the president of the Southern and Central Pacific Railroads and also a governor of California, founded his namesake university as a memorial to his dead son.

Answer: Leland **Stanford**

11. Identify the following Imagist poets from descriptions FTPE

This American ex-patriot author of the *Cantos* is considered the founder of Imagism.

Answer: Ezra **Pound**

The movement was later led by this author of *A dome of Many-Colored Glass* and *Patterns*, who was a member of a prominent family of New England poets, including her cousin James Russell.

Answer: Amy **Lowell**

This author of *Paterson* and "The Red Wheelbarrow" is sometimes considered to be an Imagist – he was at least strongly influenced by them.

Answer: William Carlos **Williams**

12. Because the author of this question was studying abroad in Germany, answer the following questions about the Weltmeisterschaft 2006 (VELT-my-ster-SHAH-ft), FTSNOP.

[10] The next men's World Cup for soccer will be hosted by this African nation in 2010.

Answer: **South Africa**

[5/5] Name the two teams that were involved in the final game, the game that saw Zidane's famous headbutt of Materazzi.

Answer: **France** and **Italy**

[5/5] These two countries in the first round of the playoffs played arguably the most intense game of the World Cup, with several fights, lots of acting, and lots of dirty plays. The ref awarded a record number of 4 red cards and 16 yellow cards.

Answer: **Portugal** and the **Netherlands** (or **Holland**)

13. Identify the following about music of dubious musicality FTPE.

This creator of Serialism is famous for his *Moon-struck Pierrot* and *Transfigured Night*, as well as the opera *Moses and Aaron*.

Answer: Arnold **Schoenberg**

This disciple of Schoenberg wrote the opera's *Lulu* and *Wozzek*.

Answer: Alban **Berg**

This geographic term is given to the school including Schoenberg, Berg, and Webern. The term indicates that they are the successors of a group loosely considered to contain people like Mozart, Haydn, and Beethoven.

Answer: The **Second Viennese** School (accept **Second Vienna** School, prompt on Vienna or Viennese)

14. Identify the following Mughal emperors from a description FTPE.

This descendent of Tamurlane founded the Mughal empire but only reigned for five years.

Answer: **Babur**

This grandson of Babur is considered the greatest Mughal emperor. The victor at the second battle of Panipat, he took an interest in religion, staging debates with non Muslims, and founded his own religion called the Din-i-Elahi.

Answer: Jalal-ud-Din **Akbar**

This grandson of Akbar deposed his father Jahangir, but is most famous for building the Taj Mahal.

Answer: **Shah Jahan**

15. Name these types of engines FTPE

This theoretical engine performs work while transferring energy between two reservoirs of constant temperature. It is the most efficient possible thermal engine.

Answer: **Carnot** engine

This four stroke internal combustion engine, operating by its namesake cycle, is used in most modern automobiles.

Answer: **Otto**

This type of internal combustion engine, found in large vehicles, lacks a spark plug and uses compression alone to ignite fuel. Newer versions that create fewer emissions are making this a more popular choice again.

Answer: **Diesel**

16. Identify the following Catholic Monastic Orders from famous members FTPE

This order, known as the Order of Preachers, included St. Thomas Aquinas and most of the members of the inquisition, and was formed to combat the spread of the Albigensian heresy.

Answer: **Dominican**

This contemplative order, which takes its name from a mountain in the Holy Land, included St. John of the Cross and Teresa of Avila.

Answer: **Carmelite**

This ultra- rigorous reform of the Cistercian Reform of the Benedictine order most famously included Thomas Merton.

Answer: **Trappists**

17. Give the English word given several foreign equivalents on a 10-5 basis

[10] Akkadian *Belum*, Hebrew *Adonai*, Greek *Kurios*

[5] Latin *Dominus*, French *Seigneur*

Answer: **Lord** (accept master and other equivalents)

[10] Akkadian *Ma*, Greek *Hyder*, Esperanto *Akvo*

[5] Latin *Aqua*, Hittite *Watar*, French *l'eau*

Answer: **Water**

[10] Akkadian *Sharrum*, Greek *Basileus*, German *Konig*

[5] French *Roi*, Latin *Rex*, Spanish *Rey*.

Answer: **King**

18. Name these related metals FTPE

A layer of unusually high concentration of this metal is used as evidence for a meteor impact at the end of the Cretaceous period.

Answer: **Iridium**

This metal is used with iridium as a catalyst in producing fertilizer, and is also used frequently in expensive jewelry

Answer: **Platinum**

This metal, whose name is based on the Greek word for odor, is the densest element.

Answer: **Osmium**

19. Identify the following about Japanese Islands FTPE.

This is the northernmost of the Japanese home islands. An episode of the Simpsons informs us that it is famous for its many soap factories.

Answer: **Hokkaido**

This island group runs between Hokkaido and the Russian Kamchatka Peninsula on the eastern side of the sea of Okhotsk.

Answer: **Kurill** Islands

The Ryukyu Islands, including Okinawa, lie off the southwest coast of Japan and form the eastern boundary of this sea.

Answer: **East China** Sea

20. Identify the following personalities from the fifth Crusade.

This pope made the crusade one of the principal matters of the Fourth Lateran Council.

Answer: **Innocent III**

The Crusade attacked Egypt to weaken the power of this Islamic dynasty, already weakened by the death of its founder, Saladin.

Answer: **Ayyubid**

This Italian, the founder of a mendicant monastic order and famous for his strict vow of poverty, attempted unsuccessfully to bring an end to the crusade by converting the Ayyubid sultan to Christianity.

Answer: St. **Francis** of **Assisi**