Tom Bole, Joel Grus, Andrew Lim, and Paul Trevillion, with some from your genial quizmaster

1. A religious pamphlet still circulated by Jack Chick Publications depicts this as Satan's all-time favorite TV show, because it paved the way for "all our occult and vampire shows watched by millions today." A film remake is in preproduction, or more accurately a film about a fictitious film remake. With Nora Ephron directing and co-writing, Will Ferrell is slated to play a difficult Hollywood star trying to make this show a comeback vehicle. Steven Carell will play the actor playing Uncle Arthur, Shirley Maclaine will play the actress playing Endora, and Nicole Kidman will play Ferrell's leading lady -- who actually is a witch. FTP name this classic sitcom which featured respected character actors like Agnes Moorehead and Maurice Evans and starred Elizabeth Montgomery.

Answer: Bewitched
EDITOR'S NOTE: It horrifies your genial quizmaster to admit that as Hollywood remakes go, this one sounds creative.
2. The aforementioned Bewitched is not the only highly implausible Will Ferrell vehicle in pre-production, though this other one has stalled. If it's ever made, Mos Def would play Jones, the janitor at the Night of Joy saloon, while Drew Barrymore would play the barmaid and wannabe stripper Darlene. Olympia Dukakis would play Santa Battaglia, the matchmaking friend of Lily Tomlin as the protagonist's mother. And Will Ferrell - you heard me, Will Ferrell - is slated to play Ignatius J. Reilly. FTP name this novel, which in 1981 won a posthumous Pulitzer Prize for its author, John Kennedy Toole.

Answer: A Confederacy of Dunces
3. Possessing calcareous skeletons derived from lophophores, this phylum of animals is divided into older palmatozoans and newer eleutherozoans. Seawater enters seive plates via madreporites, leading to a ring canal with five or more radial canals branching off. Bulblike ampullae and podia make up tube feet functioning in feeding and gas exchange in, FTP this phylum of sea urchins and sea stars.

Answer: Echinodermata; or echinoderm
4. Prior to this event, which took place on Kotlin Island in the Neva Bay, a meeting of sailors had produced in a resolution which raised 15 demands against the government, including freedom of the press and free elections by secret ballot to the Soviets. For ten points, name the subsequent 1921 revolt, swiftly crushed by Marshal Tukhachevsky and painted by the Bolshevik government as a bourgeois conspiracy, which took place at the naval fortress guarding the seaward approach to St. Petersburg.

Answer: Kronstadt rebellion
5. Turned down by its young composer's friends, it was reworked from a tamer version about to be introduced into The Fair at Sorochinsk. Based on a planned opera drawn up by its composer and Balakirev and inspired by a story by Gogol, this work relates an incident at Mt. Triglav, Kiev, where the Witches' Sabbath is held on St. John's night. FTP name this tone poem by Modest Musorgsky.

Answer: $\quad$ A Night on Bald Mountain
6. It can be simulated by a 2PDA, a pushdown automaton with two stacks, and if a language L has an enumerator that outputs its strings in lexicographic order, then $L$ is recursive, i.e. $L$ is decided by this. Post systems, recursive functions, random access machines, and quantum computers can all be reduced to this, but running one on itself can take forever. FTP name this abstract model of the computer.

## Answer: Turing machine

7. "Binsey Poplars." "Hurrahing in Harvest." "The Lantern Out of Doors." "The Windhover." These are all poems by a $19^{\text {th }}$ century Englishman, whose work was only published posthumously. FTP name this poet whose work reflected his conversion to Catholicism, the author of "God's Grandeur" and "Pied Beauty."

Answer: Gerard Manley Hopkins
8. Asymmetric carbons automatically confer this property, which when possessed by molecules in a pure mixture, renders the solution optically active. This type of molecules cannot have a plane of symmetry, and usually has an atom connected to four different substituent groups, known as a stereocenter, and designated R or S. FTP name this property of molecules that have nonsuperimposable mirror images, Greek for handedness.

Answer: chirality
9. His namesake foundation aims to help manage and resolve conflicts in multiethnic and multicultural societies throughout Africa. It also defends his historical reputation against those who argue that his motives were purely pragmatic. While officially retired from party politics since 1997, he still seeks a relevant role in the reshaping of his home country. FTP name this former President of South Africa, who shared the 1993 Nobel Peace Prize with Nelson Mandela for his role in ending apartheid.

Answer: F.W. de Klerk
10. "Vows are spoken / To be broken / Feelings are intense / Words are trivial / Pleasures remain / So does the pain / Words are meaningless / And forgettable." So goes the second verse of this song, written by Martin L. Gore. The first verse begins, "Words like violence / Break the silence / Come crashing in / Into my little world." FTP name this song from the album Violator by Depeche Mode.

Answer: Enjoy the Silence
11. Discovered in experiments run at George Peabody College, this phenomenon is also found with words like grass, apple, and ocean, because they are associated with consistent coloration. Introduced in the 1935 paper "Studies of Interference in Serial Verbal Reactions," it occurs when people are asked to identify the color of words like green, red, and blue that are written in contradictory colors. FTP identify this effect named for an American psychologist.

Answer: Stroop effect
12. The location of the battlefield was no surprise to either side, as it was the same well-known gathering place used by Patriot militia just before the battle of Kings Mountain. Recognizing the limitations of his militia, the American commander had them take the front lines, fire two shots, and then fall to the rear as reserves behind the Continental regulars. Fast-moving British regulars under Banastre Tarleton were tricked into thinking this was a breakthrough and pursued the militia right into the trap set by Daniel Morgan. FTP name this critical battle of Jan. 17, 1781, which ended British control of South Carolina.

Answer: (the) Cowpens
13. Published serially between 1843 and 1844 , this novel tells the story of a man who as a boy was raised not by his mother but rather by an orphan taken in by the boy's grandfather. The man has a cheerful servant named Tapley, and travels to America in order to seek his fortune but is employed by a fraudulent company and falls ill. For ten points, name this novel by Charles Dickens that was criticized for portraying American society as uncivilized.

Answer: $\quad$ The Life and Adventures of Martin Chuzzlewit
14. This mission lasted less than five hours. A participant noted, "That was about the shortest day I've ever run into." It covered a distance of 75,679 statute miles, and mechanical difficulties created a life-threatening situation for one future U.S. Senator from Ohio. For ten points, name this Mercury mission which carried the first American to orbit the Earth.

Answer: $\quad$ Friendship 7
15. This character was punished for detaining a wife with idle chatter while her husband had an affair. Later, the character fell in love with a handsome youth and followed him around, however she could only ever have the last word. For ten points, name this nymph who fell in love with Narcissus.

Answer: Echo
16. Branching off collaterals and innervating spines, they originate from the cone-shaped hillock area of the cell, and usually terminate on small clefts where chemical processes take over. Afferent varieties carry information into the region while efferent varieties carry information away. FTP name these long extensions covered by myelin sheaths that carries electrical signals for a neuron.

Answer: axons; prompt on nerves
17. Its highest peak, Mt. Kamakou, is almost 5,000 feet above sea level. Its population, roughly 7,000, has been kept low by a series of economic misfortunes. Treacherous currents in this island's namesake strait limit shipping, a huge ranch established by Kamehameha V led to overgrazing and destroyed native vegetation and fishponds, American sugar growers' intense irrigation left the well water too salinated to sustain the plantation, an epidemic in the mid-1930's wiped out the hives of its lucrative honey industry, and in the 1970's cheaper foreign competition ended the otherwiseproductive pineapple industry. FTP name this driest of Hawaii's major islands, whose remote Kalaupapa peninsula was used for over 100 years as a leper colony.

Answer: Molokai
18. Writing to R. W. Wood, its formulator called it "an act of desperation." Rewriting the law of equipartition of energy so that average energy goes to 0 as frequency goes to infinity, we find that energy density is proportional to the 5th power of wavelength. Replacing the Rayleigh-Jeans theory of blackbody radiation, FTP name this law named after a German physicist that quantizes energy.

Answer: Planck's Law
19. Upon the invasion of Dutch territory by Louis XIV, this man was appointed Stadholder and Captain General of the Dutch forces opposing the French invasion. Like many royals, he would later marry his cousin, the daughter of the Duke of York who later became King James II of England. For ten points, name this Protestant, who, though architect of the League of Augsburg, won just one battle in the war of the same name -- the Battle of the Boyne in Ireland in 1690 -and who two years earlier had taken the throne of England from James II in the Glorious Revolution.

Answer: $\quad$ William III of England (or William of Orange)
20. A Capricorn, he has a human bottle opener as a friend, and was in the 241 st Engineering Corps with his buddy Harold Mitchell, whom he warns about a latest acquaintance from Mississippi. He recites Huey Long's motto that "every man's a king," and explains the Napoleonic Code to his wife, with whom he had "the color lights" going until her sister arrived from Belle Reve. FTP name this husband of Stella in A Streetcar Named Desire.

Answer: Stanley and/or Kowalski
21. "If all the girls who attended the Yale prom were laid end to end, I wouldn't be a bit surprised." "This is not a novel to be tossed aside lightly. It should be thrown with great force." "Men seldom make passes / At girls who wear glasses." "Guns aren't lawful; Nooses give; Gas smells awful; You might as well live." FTP name the author to whom these witticisms are attributed, a member of the Algonquin Round Table and regular contributor to the New Yorker.

Answer: Dorothy Parker
22. Henry Adams believes in attaining the universal kind of this, though he could never understand mathematics. Virginia Woolf suggests that modern spirit can dispense with $i t$, to be replaced by perfect and beautiful signs. Ludwig Wittgenstein defined it in 4.001 of his most famous work as the totality of propositions, but left most of it unused. FTP name this tool defined as a set of strings used to communicate.

Answer: language
23. They have deshielded hydrogens and $\mathrm{sp}^{\wedge} \wedge$ carbons, and their rotation by thermal isomerization can be used to calculate dissociation energies for their strong sigma and weak pi bonds. They are useful for producing plastics and fibers, and undergo addition reactions to give products such as oils. More acidic than alkanes, FTP name these compounds with a carbon-carbon double bond.

Answer: alkenes; prompt on olefins

1. Name these posterior pituitary hormones. FTPE.
(10) Also called vasopressin, it induces kidneys to resorb more water by increasing aquaporin levels.

Answer: antidiuretic hormone
(10) It stimulates labor contractions and release of milk.

Answer: $\quad \underline{\text { oxytocin (not prolactin, which is released in the anterior pituitary) }}$
(10) Also called growth hormone release-inhibiting hormone, it interferes with thyrotropin and growth hormone release. Answer: somatostatin
2. Answer the following about a political figure FTPE:

He was co-recipient of the 1994 Nobel Peace Prize along with Shimon Peres and Yitzhak Rabin.
Answer: Yasser Arafat
The 1993 accords that won the prize for Arafat and his Israeli counterparts were signed in this namesake city.

## Answer: Oslo, Norway

In 1958, while living in Kuwait, he co-founded this underground political organization, which eventually became the largest of the organizations within the Palestine Liberation Organization.

## Answer: AI-Fatah or AI-Fateh

3. Ordinary things that appear in opening lines of Emily Dickinson poems. FTPE.
(10) He did not know that Dickinson saw him bite an Angleworm in halves and ate the fellow, raw, and then hopped sidewise to the Wall to let a Beetle pass. Name this animal that came down the Walk.

Answer: "A Bird came down the Walk"
(10) Written by faded Men at the suggestion of Holy Specters, it calls Sin a distinguished Precipice and Satan the Brigadier. Name this antique Volume.

Answer: $\quad$ "The Bible is an antique Volume"
(10) Dickinson's lips were eventually covered up by Moss, and after she was scarce adjusted in the Tomb, the One who died for Truth was lain in an adjoining Room and talked like a Kinsman to her. Name this quality Dickinson died for.

Answer: $\quad$ II died for Beauty--but was scarce"
4. The libretto by Giuseppe Giacosa and Luigi Illica added the rough and loud Musetta who leaves an elderly admirer to return to the painter Marcello to live on the Barriere' d'Enfer teaching singing. FTPE.
(10) Name the opera by Puccini featuring songs like "O soave fanciulla," "Donde lieta usci," "Torna al nido la rondine," and "Che gelida manina."

Answer: $\quad$ La Boheme; or Bohemian Life
(10) For 5 each, name the poet and her lover who dies of pulmonary tuberculosis.

Answer: $\quad$ Rodolfo and Mimi
(10) Puccini's opera is based on the novel Scenes de la vie de boheme by this French writer.

## Answer: Henry Murger

5. TRAVELS WITH CHARLIE: In one afternoon in Iowa, your genial quizmaster and his brother drove by three different sites with musical significance. FTSNOP:
a) 10 pts.: The Brothers Steinhice stopped by this building three miles from Nashua, NH, of which composer William Pitts wrote, "No spot is so dear to my childhood" in a song first performed at its dedication in 1864. (Yes, that means it didn't exist during his childhood; deal with it.)

Answer: the Little Brown Church in the Vale; accept Church in the Wildwood
b) 5 pts.: Also on the itinerary was Mason City, hometown of Meredith Willson and the model for River City in this musical, Willson's magnum opus.

Answer: The Music Man
c) 5 pts. each: Just a stone's throw from Mason City was Clear Lake, where a Feb. 1959 plane crash claimed the lives of these three musicians along with pilot Roger Peterson. By the way, the plane was named N3794N, not "American Pie."

Answers: Buddy Holly, Ritchie Valens (accept Valenzuela), the Big Bopper (accept J.P. Richardson)
6. Answer the following about a physics experiment. FTPE.
(10) Identify this electron diffraction experiment that applied Bragg's law and verified de Broglie's doctoral thesis, named for two Bell Labs physicists.

Answer: Davisson-Germer experiment
(10) The accidental explosion of a bottle of liquid air oxidized a crystal of this element number 28 that Davisson was using as a target for electron beams.

Answer: nickel
(10) This British physicist independently confirmed de Broglie's theory by transmitting electrons through a film of randomly oriented crystals, sharing the 1937 Nobel Prize with Davisson.

Answer: George Paget Thomson
7. In 1947, the Academy of Motion Picture Arts and Sciences voted its first special citation for Foreign Language Film, one of eight such awards in the next nine years before they made it a regular category. FTPE:
a) This Italian directed that first honorary winner, Shoe-Shine, as well as the $3^{\text {rd }}$ winner, The Bicycle Thief.

Answer: Vittoria de Sica
b) In 1951 this director's Rashomon became the first of three Japanese films to win honorary awards. Surprisingly, the films winning honorary citations in 1953 and 1954 weren't his.

Answer: Akira Kurosawa
c) Films by this director, La Strada and Nights of Cabiria, won for 1956 \& 1957, the first 2 years of the regular category.

Answer: Federico Fellini
8. Speaking of Best Foreign Language Film Oscars, over the years nominations have gone to versions of War and Peace, Cyrano de Bergerac, The Brothers Karamazov, and even a German version of Shaw's Arms and the Man. They all lost. Given a novel adapted into a film that actually won the Best Foreign Language Film Oscar, name the author FTPE:
a) The Tin Drum

Answer: Gunter Grass
b) Pelle the Conqueror

Answer: Martin Nexo
c) Babette's Feast - which makes this author unique, as her memoir Out of Africa was adapted into a Best Picture winner. Answer: $\quad$ Isak Dinesen [accept Karen Blixen]
9. Your genial quizmaster noticed an odd pattern among certain major party Presidential candidates. Get a running mate named John, lose, run again with a different running mate, lose again. Given running mates, name the candidate FTPE:
a) John Sparkman and Estes Kefauver [whom, it should be noted, practiced law for many years in Chattanooga]

Answer: Adlai Stevenson III
b) John Sergeant and Theodore Frelinghuysen

Answer: Henry Clay
c) John Bricker and Earl Warren

Answer: $\quad$ Thomas E. Dewey
10. Name these manners of articulation in phonetics given the description FTPE, or five if you need English examples.
(10) Complete and momentary closure of airflow through the vocal tract found most notably at bilabial, alveolar, and velar points of articulation in English.
(5) Examples: the voiceless $p$ in span, the voiced $g$ in gap.

Answer:
stops
(10) A class of continuants in which continuous airflow through the mouth is accompanied by audible noise produced by air passing through a very narrow opening.
(5) Examples: the voiceless $h$ in hat, the voiced $v$ in van.

Answer: fricatives
(10) A very rapidly articulated nonsyllabic segment.
(5) Examples: the palatal $y$ in yes, the labio-velar w in now.

Answer: glides
11. For ten points each, identify the characters from Joseph Heller's novel Catch 22.

10: He enters and exits his office through the window to avoid members of his command. His full name, given to him as a joke by his father, is made all the more amusing following a rank-increasing computer error. For ten points give both his name and his rank.

Answer: Major Major Major Major [note must have all 4 Majors]
10: He spends much of the novel trying to photograph naked women, claiming to be a photographer for Life magazine. These photographs never come out because, reportedly, he always leaves the lens cap on.

## Answer: Hungry Joe

10: He is a mess hall officer who starts an incredibly successful enterprise in which everyone in the camp has a "share." Answer: Milo Minderbinder
12. Stuff about the geography of a certain nation FTPE:
a) Besides its mainland, it has several major islands, including Fyn, Falster, Lollan, and Bornholm. In fact, its capital city is split between the islands of Sjaelland and Amager.

Answer: Denmark
b) Like it needed more islands, Denmark also controls this North Atlantic island group with capital at Torshavn.

Answer: the Faeroe Islands
c) You know the strait separating Denmark from Norway is the Skagerrak, but name the strait between it and Sweden. Answer: Kattegat
13. Also known as alkoxyalkanes, these unreactive compounds are derivatives of alcohols in which the hydroxy proton has been replaced by an alkyl group. FTPE.
(10) Name this functional group with an oxygen bounded to two carbons.

Answer: ether
(10) This cyclic polyether with ether groups based on 1,2-ethanediol units is an ionophore. Its cavity can bind to cations, solubilizing them in organic solvents.

Answer: crown ether
(10) This polycyclic polyether has a 3D rather than 2D arrangement around cations, allowing more selective binding, earning Cram, Leh, and Pedersen a 1987 Nobel Prize.

Answer: $\quad$ cryptand; frown on but accept cryptide
14. Name the two countries between whom the following peace treaties were signed for five points for each half:

10: Treaty of Riga (1921)
Answer: Russia and Poland.
10: Peace of Vervins (1598)
Answer: $\quad$ France and Spain.
10: Treaty of Shimonoseki (1895)
Answer: $\quad$ China and Japan.
15. Concepts introduced by Carl Jung. FTPE.
(10) These are universal, primordial, intuitive image patterns and structural elements that recur in myths, dreams, art, and literature.

Answer: archetypes
(10) Resulting from the inherited structure of the brain, this is the part of the mind containing memories common to humankind, which includes archetypes.

Answer: collective unconscious
(10) This is the aspect of an individual that she projects to others, allowing for a compromise between the authentic self and the role in society.

Answer: persona
16. Sculptors who sculpted David FTPE.
(10) The most famous sculpture of David before his battle with Goliath is the one with over-sized hands by this master who painted the ceiling of the Sistine Chapel.

Answer: Michelangelo Buonarotti
(10) A dynamic David with twisted body and a blade ready for action was finished by this sculptor of The Ecstasy of St. Theresa.

Answer: Giovanni Lorenzo Bernini
(10) This teacher of da Vinci famous for the equestrian statue of Colleoni modeled David as a thin boy in a skirt with a short dagger.

Answer: Andrea del Verrocchio
17. Identify the royal ruling parent of each of these monarchs for 10 points each:

10: Elizabeth I (England)
Answer: Henry VIII
10: Leopold I (Holy Roman Empire)
Answer: $\quad$ Ferdinand III
10: Oscar I (Sweden and Norway)
Answer: $\quad$ Charles XIV Marshal Bernadotte (also accept Carl XIV)
18. Answer the following about a data structure. 5-10-15.
(5) Consisting of vertices connected by edges, this data structure is used to represent network flows and travel paths.

Answer: graph
(10) This algorithm solves the single-source shortest paths problem on a weighted directed graph by maintaining a priority queue of remaining vertices sorted by shortest-path estimates.

Answer: Dykstra's algorithm
(15) This graphical model represents conditional independencies in a domain of interest by missing edges between nodes parameterized by conditional probability distributions. Name these structures named for an inverse probability theorem.

Answer: Bayesian network; or belief network
19. FTPE name these categories of people blessed Biblically in the Beatitudes.

10: They shall inherit the earth.
Answer: the meek
10: Theirs is the kingdom of heaven
Answer: the poor in spirit
10: Those who do this shall be comforted.
Answer: mourn
20. Name the following people who created works called The Kiss. FTSNOP.
(5) Which Russian naturalist playwright famous for The Seagull wrote a story titled The Kiss?

Answer: Anton Chekhov
(5) Which Swedish actress famous for her hermetic retirement starred in her last silent film titled The Kiss?

Answer: $\quad$ Greta Garbo
(10) Which American writer of The Awakening wrote a short story titled The Kiss depicting a woman named Nathalie who marries a rich man while flirting with a family friend?

Answer: Kate Chopin
(10) Which American inventor made the first film depicting sexuality on screen, a clip showing the climax of The Widow Jones, properly titled The Kiss?

Answer: Thomas Edison
21. Answer the following about pressure-temperature phase diagrams. FTPE.
(10) This is the point beyond which no liquid-vapor transition can take place, i.e. the substance exists as one indistinguishable phase.

Answer: critical point
(10) This is the point where all three phases can coexist.

Answer: triple point
(10) If we apply Clausius-Clapeyron to find $\mathrm{dP} / \mathrm{dT}$ for the solid-liquid transition for water, we find that it is in this range of values, contrary to most substances.

Answer: negative; accept equivalents like less than 0
22. Name the authors of these famous diaries, FTP:

10: This explorer duo used creative spelling in their journals, including the word "mosquito" at least fifteen different ways.

Answer: Lewis and Clark
10: In 1983, the German new magazine Stern paid 10 million marks for what was purported to be this man's diary.
Answer: Adolf Hitler
10: In his diary, all names appear in longhand, while the rest of the $17^{\text {th }}$ century work is written in his system of shorthand known as tachygraphy.

Answer: Samuel Pepys

