1. All in all, there are nine men in this painting, eight of whom are alive. The dead man has a white cloth covering his private area, leaving the rest of his skin completely bare - except for the skin on left forearm, which has been completely removed. FTP, identify this painting showing a practice of the surgeon's guild of Amsterdam, a 1632 painting by Rembrandt van Rijn (RHINE).
Answer: The Anatomy Lesson of Dr. Tulp [or of Dr./Professor Nicolaes Tulp]
2. Used for the study of electron paramagnetic resistance, it is delineated by the Paschen-Beck effect. It was discovered by splitting a single D -line from a sodium flame placed between two magnetic poles. Used to study the magnetic fields of large objects such as the sun, this is, FTP, what effect named after the 1902 winner of the Nobel Prize in Physics?
ANSWER: Zeeman Effect
3. This 'Theatre of the Absurd' play burlesques the nonsensical stuffiness of an English home by stringing together clichés of a foreign language phrase book. Characters without identities repeat empty gestures in a tragicomic parody of existence. FTP, name this play where a clock chimes out an increasingly unpredictable number of times, the first successful play of Eugene Ionesco.
Answer: The Bald Soprano or La Cantatrice chauve
4. His projects included conquering the Crimea, which worked, and reestablishing the Byzantine empire under one of Catherine II's grandsons, which didn't work quite so well. As Catherine's lover for two years and later as field marshal, he was the most powerful man in the empire for 17 years until his death in 1791. Among his slickest moves was the construction of fake villages in the Crimea to convince Catherine that his settlement plans there were working. FTP name this Russian, namesake of a battleship famed for a Black Sea mutiny. Answer: Grigory Potemkin
5. She was created out of the ice in Ginnungagap. After three days time, she revealed the location of the first man, Buri, by licking him out of the ice. FTP, the frost giant Ymir was sustained by the milk of what cow from Norse mythology?
Answer: Audhumla
6. After a night out at Babylon with Emmett, Michael, and Ted, Brian picks up Justin for a night of fun. Michael also takes someone home, only to be interrupted for a trip to the hospital after Brian learns that Melanie and Lindsay have had a baby boy, Gus. This is a brief summary of, FTP, what Showtime series that celebrates the lives of eight gay characters in Pittsburgh?
Answer: Queer As Folk
7. The P-element of Drosophila is one important example. Composite types consist of nonfunctional or functional genes flanked by insertion sequences, while simpler types consist of 800-1400 base pairs whose ends contain short repetitive sequences. Postulated as a means for explaining why maize do not obey Mendelian genetics, FTP, name these movable genetic elements discovered by Barbara McClintock, better known as "jumping genes".
ANSWER: transposons (prompt on jumping genes)
8. This author's first novel was the 1970 work The Third Life of Grange Copeland. Noted for her strong advocacy of social justice, her book Meridian is considered one of the best novels of the Civil Rights struggle, and You Can't Keep a Good Woman Down, written in 1981, combines that theme with feminist ideals. FTP, name this southern writer, whose most famous character is Celie from The Color Purple.
Answer: Alice Walker
9. Founded by Edmund of Langley, it might not have been a serious rival for the throne if not for the weak current government. Only three kings came from this dynasty, and its last was slain at Bosworth Field, after which it merged with its rival to create the house of Tudor. FTP name this English royal house that fought the Wars of the Roses with Lancaster.
Answer: York
10. This country consists of 33 islands, 29 of which are inhabited. Its official languages are English and Gilbertese. This country's Banaba Island is one of three islands in the Pacific formed solely from bird dropping accumulation. FTP, identify this country, the only country in all four hemispheres, with capital at Bairiki.
Answer: Kiribati (KEE-ree-bahss)
11. The person referenced in the title of this poem is a middle-aged man of anonymous respectability who differs from others in his greater degree of self-awareness and suffering. He puts off making some significant gesture to the world, but lacks the necessary will and passion, and thus the poem ends on a note of hopelessness. FTP, name this poem that has its opening verses from lines 61-66 of Canto XXVII of Dante's Inferno, written by T.S. Eliot.
Answer: The Love Song of J. Alfred Prufrock
12. Partly fueled by anger over high unemployment and poverty, the event that set them off was the August 11 arrest of an African American for a minor traffic violation. Local youths surrounded the car, believing the arrest to be racially motivated, and the situation escalated. 5 days later, 34 people were dead and damage was estimated at $\$ 40$ million. FTP name these 1965 riots named for the L.A. suburb in which they occurred. Answer: Watts Riots
13. Invented in 1745 by Ewald von Kleist, Peter van Musschenbrock independently developed it a few months later. An early model consisted of a vial of water that is stopped with a cork and pierced by a nail. When the end of the nail is rubbed, an electric charge is stored in the nail. FTP, name this prototype storage device for static electricity.
ANSWER: Leyden Jar
14. Despite a rocky start to his career, over the past two years he's averaged more than 22 points and 5 assists per game, shooting more than $76 \%$ from the field. He jumped straight from Farragut Academy in Illinois into the pro leagues, where he made history in 1997 with a stunning 6-year, $\$ 120$ million contract. FTP name this 7-foot forward for the Timberwolves.
Answer: Kevin Garnett
15. It was put together by Lady Caroline Guest in the mid-nineteenth century, and was drawn largely from the Red Book of Hergest and the White Book of Rhydderch. The central theme of strife that runs through the tales in the work is the conflict between the Children of Don and the Children of Llyr. FTP, name this body of literature, literally meaning "instruction for young poets", a collection of Welsh tales that record some of the earliest Celtic legends.
Answer: The Mabinogion (maah-bi-KNOW-jee-un)
16. One practitioner of it was William of Ockham, who argued that all knowledge of the physical world is attained through the senses. It argues that knowledge derived from a priori experience is not valid. FTP name this philosophical school of thought whose adherents included Mill and Hume, and which states all knowledge is based on experience.
Answer: empiricism
17. Its fourth movement is marked "saltorello," a lively dance from the country alluded to in the piece's title. This 1833 piece is based on experiences from the composer's Grand Tour, where he was impressed with the
paintings of Titian and Giorgione but found the papal singers to be "unmusical." FTP name this popular symphony by Felix Mendelssohn.
Answer: Italian Symphony (or Symphony No. 4)
18. The title character of this novel is a lonely, embittered handloom weaver who long ago accused of a theft of which his best friend was guilty. Gradually, he is brought back into a normal, wholesome life through his love for the young girl Eppie. FTP, name this novel where a miser's lost golden horde is replaced by a golden-haired foundling, written in 1861 by George Eliot.

## Answer: Silas Marner

19. The reaction quotient Q is also described by this law, but only when the reaction has not yet gone to completion. It is described by the product of raising the concentration of the products by their respective coefficients and dividing this by the value and the product of raising the concentration of the reactants by their respective coefficients. FTP, name this law which describes the equilibrium constant of any reaction regardless of step.
ANSWER: law of mass action
20. As a result of it, Texas gave up its disputed land in exchange for $\$ 10$ million. It also abolished the slave trade in D.C., and territories acquired from Mexico would decide whether to allow slavery within their borders. FTP name the series of measures that also included the Fugitive Slave Act, sponsored by Henry Clay. Answer: Compromise of 1850
21. Mythical stories portray this author as associating with such famed contemporaries as King Croesus of Lydia, Solon, and the Seven Wise Men. He died circa 565 BC, at the hands of the citizens of Delphi, who were angered when this author insulted their oracle. They secretly planted a sacred relic in his belongings, judged him a thief, and threw him from a cliff. FTP, name this slave from Phrygia, whose characters include the fox, ant, tortoise, and hare.
Answer: Aesop
22. His name roughly translates as "prosperity of religion." A Kurd by heritage, he inherited power from his uncle Nur and founded the Ayyubid dynasty. FTP name this Islamic leader most famous for opposing the Franks during the Third Crusade.
Answer: Saladin (Salah al-Din)
23. Secretion of this hormone is stimulated by GHRH. ( ${ }^{*}$ ) In adults, an overproduction of this causes acromegaly, while in children, an overproduction causes gigantism while an underproduction causes dwarfism. It normally promotes bone lengthening and muscle tone and while inhibiting uptake of glucose. FTP, name this hormone produced in the anterior pituitary gland that promotes growth.
ANSWER: Somatotropin (accept on Growth Hormone before (*))
24. It was not widely practiced until the Safavids made it the official religion of their empire. Its largest sect is the Twelvers, who believe the last true caliph was Muhammed al-Mahdi. Common in Iran and Iraq, members believe that the only true caliphs are descendents of Ali and Fatima. FTP name this branch of Islam.
Answer: Shi'ism or Shi'a or Shiites
25. War and peace: Name these $20^{\text {th }}$-century secretaries of state FTPE.
(10) Appointed by Truman in 1949, he was the principal creator of Cold War policy and helped outline the Marshall Plan, but was criticized for statements that may have helped engender the Korean conflict.

## Answer: Dean Acheson

(10) This man helped prepare the U.N. charter in 1948 and kept Communist strategies in line during the fifties. Eisenhower called him "one of the truly great men of our time." But he has been criticized for maneuvering in Southeast Asia that many believe helped engender the Vietnam War.
Answer: John Foster Dulles
(10) This Nobel Peace Prize laureate ironically served the same president as both Secretary of State and Secretary of War.
Answer: Elihu Root
2. Answer the following about the works of the ever-reclusive J.D. Salinger FTPE:

Salinger created the intelligent but troubled Glass family. Seymour Glass is a main character in this short story, in which he utters the title phrase on a Florida beach to a child named Sybil Carpenter.

## Answer: "A Perfect Day for Bananafish"

Two other members of the Glass family appear in this, their very own novel, named for them.
Answer: Franny and Zooey.
In The Catcher In The Rye this younger sister of Holden Caulfield is correct when she tells Holden that the relevant line in the poem is actually "If a body meet a body," not "If a body catch a body."

Answer: Phoebe
3. Given a painting that refers to a woman in its title, identify the painter FTPE.
a. The Venus of Urbino

Answer: Titian
b. Liberty Leading the People

Answer: Eugène Delacroix
c. Judith with the Head of Holofernes. Well, OK, Charlie found over 10 painters with works by that name, so we'll be more specific: the 1901 symbolist one.
Answer: Gustav Klimt
4. There are probably actors out there who are more annoying than William Shatner, but I haven't seen any yet. Given a description of a Shatner movie, name it, 5 points for 1 correct, 10 for 2,20 for 3, or 30 for all 4.

1. This original Star Trek movie features Captain Kirk's line about Spock, "Of all the souls I have encountered in my travels, his was the most human."
Answer: Star Trek II: The Wrath of Khan (either part acceptable)
2. Shatner provides the voice of Jason of the Argonauts in this 1998 animated flick.

Answer: Hercules
3. In this movie, Shatner plays Buck Murdock, whose lines include, "There are hundreds of thousands of lights, all blinking, and beeping, and flashing-I can't stand it anymore! They're blinking and beeping and flashing! Why doesn't somebody pull the plug!"
Answer: Airplane II: The Sequel
4. One of Shatner's forays into allegedly serious film was this godawful 1965 oddity, acclaimed at the time despite its incomprehensibility (thanks in large part to being filmed entirely in Esperanto.)
Answer: Incubus

## 5. VISUAL BONUS: Moderator, please pass out visual bonus to team.

Name these organic chemistry reactions given a visual example and clue FTPE. When giving your answer, you must specify which answer goes with each part. You have 20 seconds to identify all three.
ANSWER: (A) Grignard Reagent, (B) Williamson Ester Synthesis, (C) Diels-Alder Reaction.
6. Answer the following questions about Edgar Allan Poe's "The Raven" FTPE.
a) The main character seeks solace from sorrow "for the rare and radiant maiden whom the angels name" what?

Answer: Lenore
b) The main character orders the raven back to the shore of night. The name of what Roman god is used to describe the shore?

Answer: Pluto (the line is "Get thee back into the tempest and the Night's Plutonian shore!")
c) The raven sits "perched above my chamber door- Perched upon a bust of [blank] just above my chamber door
-- Perched, and sat, and nothing more." The bust of in question is of what Greek Goddess?
Answer: Pallas, or Athena
7. Name these battles of the Greco-Persian wars FTPE.
a) Fought on land and sea, the highlight was the Spartan king Leonidas' fight to the death at the pass for which this 480 BCE battle is named.
Answer: Thermopylae
b) Shortly after Thermopylae, Themistocles lured the Persian navy into a narrow channel where they were routed by the smaller Greek ships. Name this battle.
Answer: Salamis
c) The Persian invasion was ended in 479 BCE by this battle which saw the Greek general Pausanius defeat Mardonius.
Answer: Plataea
8. Name these physics terms which contain a common word FTPE.

10: This is the constant of proportionality that describes how resistant a material is to being stretched. ANSWER: Young's Modulus
10: This is the constant of proportionality that describes how resistant a material is to bending. ANSWER: shear modulus
10: This is the constant of proportionality that describes how resistant a material is to being compressed. ANSWER: bulk modulus
9. Given a choral work, name its composer FTPE.
(10) A German Requiem (1868)

Answer: Johannes Brahms
(10) Missa Papae Marcelli (c. 1590)

Answer: Giovanni Palestrina
(10) Missa in C, Coronation Mass (1779)

Answer: Wolfgang A. Mozart
10. Name the book of the Bible from a quote FTPE.
(10) "I do not know. Am I my brother's keeper?"

Answer: Genesis
(10) "Pray then in this way: Our Father, who art in heaven, hallowed be thy name..."

Answer: Matthew
(10) "Do not seal up the words of prophecy of this book, for the time is near. Let the evildoer still do evil, and the filthy still be filthy, and the righteous still do right, and the holy still be holy."
Answer: Revelations
11. The scene is the 1932 World Series. The Yankee at bat points into center field and belts the next pitch for a home run. Answer the following about that incident FTSNOP.
(5) For 5 points, name the Yankee.

Answer: Babe Ruth
(5) Aside from the memorable called shot, Ruth was overshadowed in that Series by his teammate, who batted .529 with three homers and 8 RBIs. For 5 points, name this first baseman.
Answer: Lou Gehrig
(10) FTP, name the National League park in which Ruth hit the ball out.

Answer: Wrigley Field
(10) For a final 10 points, name the Cubs pitcher who gave up the called shot.

Answer: Charlie Root
12. 1989 was a bad year for heavy-handed Eastern European dictators. FTPE name these leaders who lost power in 1989.
(10) This well-hated Romanian came to power in 1965 and proceeded to drive the country to near starvation through impractical policies. He and his equally hated wife, who officially claimed authorship of almost every scientific paper published in Romania, was shot by a firing squad on Dec. 25, 1989. Ho, ho, ho.
Answer: Nicolae Ceausescu or Ceaucescu
(10) This longtime ruler of East Germany was forced to resign because he refused to enact the reforms encouraged by Gorbachev, leaving it to his successor Egon Krenz to open the Berlin Wall.
Answer: Erich Honecker
(10) This man didn't actually leave the presidency until 1990, but his agreement to open negotiations with Lech Walesa caused Solidarity to sweep elections in the Polish parliament in August 1989.

## Answer: Wojciech Jaruzelski

13. Answer these questions related to optics FTPE.

10: This equation relates the angle of incidence and angle of refraction at a boundary between two materials. ANSWER: Snell's Law
10: Snell's Law can also describe angles at which there is no refraction, and thus only reflection. Name this phenomena whose most common application is fiber optics.

## ANSWER: total internal reflection

10: Different frequencies of light have different indexes of refraction leading to a decrease in sharpness of an image produced by a lens. Name this phenomenon associated with prisms.
ANSWER: chromatic aberration
14. Identify the following French authors, given works, FTSNOP.
a. (10 pts.) The Blacks, The Maids, The Balcony

Answer: Jean Genet
b. (5 pts.) Wind, Sand, and Stars; The Little Prince

Answer: Antoine de Saint-Exupéry
c. (5 pts.) Les Misérables

Answer: Victor Hugo
d. (10 pts.) Tiger at the Gates, The Madwoman of Chaillot

Answer: Jean Giraudoux
15. Given a philosophical work, name its author FTPE.
(10) Treatise Concerning the Principles of Human Knowledge (1710)

## Answer: George Berkeley

(10) A Vindication of the Reasonableness of Christianity (1695)

Answer: John Locke
(10) Social Contract (1762)

Answer: Jean-Jacques Rousseau
16. Here's a chance to choose your bonus. The category is non-European mythology. Are you Old World or New World? Choose now.
[PAUSE FOR CHOICE]
IF NEW WORLD:
Answer the following questions about deities of Aztec mythology FTPE.
a) Arguably the most compassionate of the gods, this feathered serpent god only demands one sacrifice a year.

Answer: Quetzalcoatl
b) When Coatlicue became pregnant with this god, his other siblings tried to kill Coatlicue. Vowing while still
in the womb to defend her, he put on battle armor as soon as he was born and killed all 401 of his siblings.
Answer: Huitzilopochtli
c) This god was the lord of all sources of water, clouds, rain, lightning, mountain springs, and weather.

Answer: Tlaloc
IF OLD WORLD:
Given a description, name the deity from Vedic mythology FTPE.
a. This consort of Siva is a bloodthirsty fertility goddess who decorates herself with emblems of death. In Indiana Jones and the Temple of Doom, the Thuggi cult worships this goddess.
Answer: Kali
b. This is the god who gives inspiration, liberates men, and represents the principle of life. The same name is also given to a narcotic plant.
Answer: Soma
c. This principal god of the Vedas is the storm god who rides his solar chariot across the sky and wields his thunderbolt.
Answer: Indra
17. Identify the following Shakespeare comedies FTPE.
10) Set in Illyria, it tells the story of the shipwrecked Viola. Characters include Duke Orsino, Olivia, Sir Toby Belch, Sir Andrew Aguecheek, and Malvolio.

## Twelfth Night

10) The main comedic device in this play is mistaken identity, caused by the two sets of identical twins who have the same names.

## A Comedy of Errors

10) Berowne, Longaville, Dumaine, and the King of Navarre make a solemn pact to lead an ascetic life, and particularly to avoid the company of women. Then the Princess of France arrives, and each one falls in love with and tries to secretly court one of the women in her party.

## Love's Labours Lost

18. FTPE answer these questions about primitive hominids.
(10) This Pleistocene species is thought to be the direct ancestor of Homo sapiens. The first remains were found in the 1890s in Java, but it seems to have lived all over the world.
Answer: Homo erectus
(10) This species would have been a feasible alternative to Homo erectus if it weren't for the fact that it doesn't exist; the remains found in Sussex were proven to be fraudulent.
Answer: Piltdown man
(10) This genus of hominids lived in the early Pliocene and walked upright. Species include africanus and afarensis.

## Answer: Australopithecus

19. In August 1967, the Eastern Region of Nigeria was declared independent. Answer these questions about it FTPE.
(10) First, name this breakaway African republic.

Answer: Biafra
(10) What people formed the majority of Biafra's population?
(10) Name the officer who declared Biafra a sovereign state.

Answer: Odumegwu Ojukwu
20. Given the lyrics from a Madonna song, identify the song for ten points. If you need the album on which it appears, you will receive only five points.
a. FTP: "Give it up, do as I say / Give it up and let me have it my way / I'll give you love, I'll hit you like a truck / I'll give you love, I'll teach you how to..."
FFP: Erotica
Answer: "Erotica"
b. FTP: "Things haven't been the same since you came into my life / You found a way to touch my soul and I'm never ever ever gonna let it go"
FFP: Bedtime Stories
Answer: "Secret"
c. FTP: "You only see what your eyes want to see / How can life be what you want it to be"

FFP: Ray of Light
Answer: "Frozen"
21. Answer these questions related to bone structure FTPE.

10: This type of connective tissue connects bones to muscles.
ANSWER: tendons
10: This type of cell lays down collagen and hydroxyapatite to form new bone.
ANSWER: osteoblasts
10: These are the hollow tubes that contain blood, lymph vessels and nerves and supply cells inside compact bone.

## ANSWER: Haversian Canals

22. Given a character or characters from Dante's Inferno, give the ordinal number of the circle to which they are condemned FTP. If you need the sin of the circle in which they are located, you will only receive five points.
a. FTP: Paolo and Francesca

FFP: Lust
Answer: The Second Circle
b. FTP: Lucan, Horace, Ovid, Vergil

FFP: Those who lived before Christianity and/or were not baptized before death
Answer: The First Circle
c. FTP: Farinata, Pope Anastasius IV, Epicurus and his followers

FFP: Heresy
Answer: The Sixth Circle
23. Answer these questions related to electrochemical cells FTSNOP.

10: This is the type of electrochemical cell which creates electricity. The battery is another name for it. ANSWER: Galvanic or Voltaic Cell
10: In a galvanic cells, what is the name of the dry phase equalizes charge between two half-cells and consists of a mixture of positive and negative ions?

## ANSWER: Salt Bridge

10: This is the law that describes the free energy change of an electrochemical reaction at standard conditions, given by the equation $\Delta \mathrm{G}=-\mathrm{nFE}$.
ANSWER: Faraday's Law
24. Answer the following questions about the novella Death in Venice FTSNOP.
a. F5P, who wrote it?

Answer: Thomas Mann
b. FTP: The novel begins in what German-speaking capital city?

Answer: Vienna or Wien
c. F15P: The protagonist is a writer who becomes infatuated with a Polish boy. Name him (the protagonist).
Answer: Gustav von Aschenbach
Answer these questions about a certain Nobel winner FTPE.
a. This Chinese-born author won the 2000 Nobel Prize in Literature.

Answer: Gao Xingjian
b. In this novel, Gao Xingjian enacts an individual's search for roots, inner peace, and liberty, by means of an odyssey in time and space through the Chinese countryside.
Answer: Soul Mountain
c. Gao Xingjian is today, and has been since 1987, a citizen of what country? Answer: France

## WASHINGTON U. A - BONUS \#5 -- VISUAL BONUS:

(A) 10: This is the synthesis for a common reagent for alkyl halides. Name the reagent.

(B) 10: This is a synthesis reaction for ethers.

(C) 10: This is a synthesis of a cyclohexene.


