MCM Packet-Players to be named later
Questions by: Matt Langer, Amy Kaczmarowski, Joe Graz, Kristin Smith

## Tossups

1) This musical tells the story of Jimmy Smith, a hard working Bible publisher, and all the trouble he gets into and out of on a summer weekend in New York and Atlantic City. With music by Vincent Youmans and lyrics by Irving Caesar and Otto Harbach, it opened on Broadway in 1925 and ran for 321 shows. It is often remembered, however, for the way in which its producer, Harry Frazee, financed its initial production in 1920. FTP, name this musical, whose finance caused Frazee, then owner of the Boston Red Sox, to sell the contract of Babe Ruth.

Answer: No No, Nanette
2) First formulated by its namesake in 1738 , it is a simplification of the mechanical energy balance. It divides the energy of a fluid element into 3 parts, the static pressure, dynamic pressure, and potential energy, which are constant as long as no energy is added to the system. For ten points, name this physical law, which is most often used to explain how a wing provides lift.


ANSWER: _Bernoulli's_Law
3) One of several writers to catalog these was Antipater of Sidon. Two were destroyed by fire, two were destroyed by earthquake, one was disassembled after an earthquake, one may have been a fable, and one still stands today. These are the ends met by, for ten points, the members of what list, which due to Greek numerology had its membership limited to seven.

## ANSWER: Wonders of the Ancient World

4) In this novel, Ty Ty's favorite phrase seems to be "pluperfect hell," and his statement about true femininity is that it makes one "want to get down on your hands and knees and lick something." With a subplot about masculinity and the struggle of urban factory strikes, the novel's main plot focuses on Ty Ty's neglect of the family farm in the quest to search for gold, a quest which includes the kidnapping of an albino to "conjure" the gold and culminates when Ty Ty's son Buck murders his brother Jim Leslie in a fight over Buck's wife, Griselda. FTP, name this novel by Erskine Caldwell in which Ty Ty Walden always dedicates one plot of his land to god.

## ANSWER: God's Little Acre

5) Ryan was chosen by Nashville in this year's NHL draft, but is attending Wisconsin this fall. His father, Bob, also spent 4 years at Wisconsin, helping the Badgers to the 1977 NCAA title. His uncle, also from Madison, was on the 2002 US Olympic team and the 1989 Stanley Cup Champion Calgary Flames. For 10 points, name the last name shared by these three defensemen, Ryan, Bob, and Gary.
6) Political and non-profit companies are exempt from this, as are businesses for 18 months after a sale. Started on June 27, 2003, it grew by 1,000 per second, as people flocked to join it. This immediately followed a ceremony in which President Bush claimed it was a step forward for privacy in America. Taking effect on October 1, telemarketers will be charged $\$ 11,000$ /call to people who have registered with the FTC. For ten points, name the collection of phone numbers which, starting this fall, telemarketers will not be allowed to disturb.

## ANSWER: The "Do Not Call" List (accept knowledgeable equivalents)

7) This reaction is the mechanism by which cyclopentadiene polymerizes, and its strong energetic favorability explains the chemicals instability. It its simplest form, it is the reaction between a conjugated diene and a substituted alkene to form a substituted cyclohexene. For ten points, name this reaction, which won its two German discovers the 1950 Nobel Prize in Chemistry.

ANSWER: Diels-Alder Reaction
8) The play begins with the main character's narration of the dimensions of his own cell and a self-mocking declaration that he is the man who makes people laugh. The play calls into question the importance of gender, since the main character has engaged in a 20-year affair with a man... whom he has believed was a woman. In the end, Gallimard (GAL-eeMAR) assumes the role he first saw portrayed by his lover, Song, and enacts the suicide of his fantasy. FTP, name this play by David Henry Hwang based loosely upon a Puccini opera of a similar name.

## ANSWER: M. Butterfly

9) This dynasty passed leadership from brother to brother, and then to the oldest maternal nephew when no brothers remained. The king's death was also cause for great human sacrifice, and often over 100 servants would be tossed in his grave. Their writing system is one of the oldest complete systems, left largely on the shoulder blades of pigs. For ten points, name this earliest Chinese dynasty.

## ANSWER: Shang

10) He was fictionalized as Bela Zangler in "Crazy for You" and as Dimitri Weismann in a 1971 Stephen Sondheim musical. He produced Kern and Hammerstein's "Show Boat" on Broadway in 1927. He was married to one of his stars, Billie Burke. For ten points, name this impresario, best known for his annual "Follies."

## ANSWER: Florenz Ziegfeld

(The 1971 Sondheim musical, of course, was "Follies".)
11) On June 28, 1919, this man left the Versailles Conference in protest of the punitive treaty that would be signed that day. In his The Economic Consequences of the Peace, he attacked leading political figures for allowing the treaty to be passed, and lost favor with the government that he never completely regained. Published in the Journal of the Royal Statistical Society, he strongly attacked work done by Karl Pearson. For ten points, name this man, who in addition to writing Indian Currency and Finance also wrote The General Theory of Employment, Interest, and Money.

ANSWER: John Maynard Keynes
12) Dermagraph-TC, a new technology for treating burn victims, uses this tissue as a basis for its artificial skin. A single sample can produce 6-8 football fields worth of skin matrix. Useful because it can be harvested while the donor is still an infant, for ten points, name this tissue, that was until recently discarded after being removed from a male child.

## ANSWER: Foreskin

13) This actor was an understudy on a production of The Threepenny Opera in 1955 until he worked his way into a leading role. He won a Tony in 1969 for his performance in the Musical Promises, Promises. He was also a frequent guest on the television series Murder, She Wrote, which lead to a spinoff, The Law and Harry McGraw. For ten points, name this actor, who played on NBC's primetime lineup as Lenny Briscoe in Law \& Order.

## ANSWER: Jerry Orbach

14) Deeply connected to the biography of its South African-born author, this novel chronicles the struggle of a woman struggling against writer's block. The novel itself contains several "notebooks" in many colors: black, red, yellow, and blue. All of these are wrapped into an overarching "frame novel" entitled "Free Women." Each notebook catalogues different aspects of the author, "Anna," and culminate in the final titular notebook in, FTP, what 1962 novel by Doris Lessing?

## ANSWER: The Golden Notebook

15) This was originally established in 1937 under the chairmanship of Martin Dies. While investigating the KKK, one of its members, John Wood, said that, "The threats and intimidations of the Klan are an old American custom, like illegal whiskey-making." After that investigation, it researched possible involvement of the Communist Party in New Deal projects. In September of 1947, however, it started the task for which it became most famous. For ten points, name the group that interviewed the Hollywood 10, the strong arm of McCarthyism.

ANSWER: House Un-American Activities Committee or HUAC
16) After being purchased for $\$ 18,000$, they were moved from Baltimore by Frank Farrell and Bill Devery in 1903. Called the Highlanders because of the location of their stadium, 10 years later they took on the name they are known by today. After admission to the American league, it was 18 years until they won their first pennant, in 1921. For 10 points, name this franchise, which has gone on to capture 37 American League pennants and is currently seeking an elusive $27^{\text {th }}$ championship.

## ANSWER: New York Yankees

17) The pressure drop across a pump divided by the fluid density is this, as is the maximum height the fluid being pumped can reach in a straight tube. It can also mean a body of water retained at height and the dam doing the retaining. It is also a term for the backpressure required to fill a pump. For 10 points, name this term, which in another context is, along with the abdomen and thorax, a section of an insect.

ANSWER: Head
18) Interstates $65,69,70$, and 74 all converge in this city of roughly 820,000 people. The largest city in the US not on a navigable body of water, it is surrounded by suburbs such as Brownsburg, Plainfield, Mooresville, and Greenwood. Rated in the top six cities for meeting planners, FTP, name this city, where the national attention turns every Memorial Day Sunday for a certain 500 mile long car race.

## ANSWER: Indianapolis

19) This number is the weight, in pounds, of a curling stone. There are this many chapters in "Catch-22". There are this number of eyes in a deck of playing cards. This is the atomic number of Molybdenum. For ten points, name this number, also dear to fans of Douglas Adams as the Ultimte Answer to the Ultimate Question of Life, the Universe, and Everything.

ANSWER:_42_
20) This fractal is an infinite set that has been proven to have a one-to-one correspondence with the unit interval, yet it has a total length of zero. It is named after a Russian mathematician who played a major role in the development of set theory. For ten points, what is this set, formed by an infinite iteration consisting of the removal of a middle section from the unit interval and all subintervals?
A. The Cantor Set (prompt on Middle-Thirds Set)
21) Produced by the German firm of Krupp these were 42 cm howitzers, model L/14 designed in the aftermath of the Russo-Japanese War of 1904 on behalf of the German Army. They were initially used as a means of successfully demolishing the fortress towns of Liege and Namur in August 1914, the war's first month. With a range of 15 km their 420 mm shells proved devastating and all four were used during the German assault upon Verdun from February 1916. For ten points, name these large siege weapons, that got their name from the wife of the owner of the Krupp factory.

ANSWER: Big Bertha
22) Born in 1914 in Swansea, West Glamorgan, this poet received little in the way of formal education, yet gained fame in literary circles by the time he reached his late twenties. Unlike many of his contemporaries, he did not drive an ambulance, but instead worked for the BBC, reading snatches of his own work during the bombing of London. During the 1940s he wrote a tribute to James Joyce entitled Portrait of the Artist as a Young Dog. FTP, name this author of "Especially When the October Wind," "The Force that Through the Green Fuse Drives the Flower," and "Do Not Go Gentle Into That Good Night."

ANSWER: Dylan Thomas
$2003 M_{d d}$ City Masters Langer, Kaczmarowsk:, Graz, Smith
Bonuses

1) Answer the following about music, FTPE.
A. This band released the song "Djed", which samples a seminal piece of 1970s tape music.

ANSWER: _Tortoise_
B. This man composed the piece sampled in "Djed", and also composed "The Desert Music" and "It's Gonna Rain".

ANSWER: Steve _Reich_
C. This is the name of the piece sampled in "Djed".

ANSWER:_Come Out_
2) This question is all about $U, U, U$ !
A. What amino acid is signaled by the mRNA sequence "UUU"?

ANSWER: _phenylalanine_
B. This disorder is an autosomal recessive disorder, caused by mutations in both alleles of the gene for phenylalanine hydroxylase, found on chromosome 12.

ANSWER: _phenylketonuria_or_PKU_
C. Generations of geeky children have been fascinated by the warning "Phenylketonurics: Contains phenylalanine" on beverages containing what ingredient?

ANSWER: _aspartame_or _NutraSweet_
3) Given a zip code, name the state in which that zip code is located.
A. 10019

ANSWER: _New York_
B. 75201

ANSWER: _Texas_
C. 94103

ANSWER: _California_
4) For ten points each, name the three requisite conditions for chaos in discrete dynamical systems:

The first condition states that a given set of close points will be scattered over time.

## A. Topological Transitivity / Topologically Transitive

The second condition states that periodic points show this trait.

## A. Dense

The third condition follows from the first two, and from the original state of the system.
A. Sensitive dependence on initial conditions
5) TPE, name the famous author from slightly less well-known works.
A. DanieNDeronda

ANSWER: George Eliot or Mary Ann Evans
B. Villette

ANSWER: Charlotte Bronte
C. The Heart of Midlothian

ANSWER: Sir Walter Scott
6) FFPE, give thenion and Confederate Commanders at each of the American Civil War battles listed:
A) Fredericksburg

ANSWERS: General Robert E. Lee and Major General Ambrose E. Burnside
B) Namozine Church

ANSWER: Major General George A. Custer and Major General Fitzhugh Lee
C) Secessionville

ANSWER: Brig. Gen. Henry Benham and Brig, Gen. Nathan Evans
7) TPE, nam\& the work from main character, FPE for the author.
10. Cincinatus C.
5. Vladimir Nabokov

ANSWER: Invitation to a Beheadding
10. D-503
5. Yvgeny Zamyatin

ANSWER: We
10. Gleb
5. Fyodor/asilievich Gladkov

ANSWとR: Cement
8) Robert Schumann often signed his works with names representing aspects of himself.

For five points each, name the most famous of these members of the "Band of David":
The dreamy, introspective character?
ANSWER: Florestan
The logical, impetuous character?
ANSWER: Eusebius
The balanced side?
ANSWER: Raro (Master Raro)
9) 15 PE , name the European epic from the primary battling cultures.
A. Moors and Spaniards.

ANSWER: El Cid
B. French and Sarace

ANSWER: Song of Roland of La Chancon de Roland
10) The NBA Draft was held on Thursday. FTSNOP, name
A) For five, the number 1 overall pick, a high school senior from Akron, Ohio ANSWER: LeBron James
B) FFPE, name the number 2 and three picks, both under 20, one European, one American
ANSWER: Darko Mlicic (Mill-i-chich) and Carmelo Anthony
C) For 10 points, name the country from which Darko hails

ANSWER: Serbia
(continued on next page)
D) For five, name any country from which a first round pick hailed other than the US and Serbia.

ANSWERS: France, Croatia, Argentina, and Brazil
11) 30-2e-10-8, name the American author from works.
30. The Spy
20. The Deerslayer
10. The Pioneers
5. The Last of the Mohicans

ANSWER: James Fennimore Cooper
12) FTPE, name these people related to the Iran Contra Affair
A) These were the two people in charge of selling weapons to Iran despite a trade embargo.

ANSWERS: Oliver North and Robert McFarlane
B) This was the only man sentenced to a prison term as a result of the Iran Contra Affair

## ANSWER: Thomas Clines

13) FFPE, name the five elements that are most present in the Earth's crust by weight, with a bonus five if they are named from Greatest to Least

ANSWER: Oxygen, Silicon, Aluminum, Iron, and Calcium
14) FFPE, given how the marriage ended, name the wife/wives who had their marriage to Henry VIII ended in that fashion.
A) Divorce

ANSWERS: Catherine of Aragon And Anne of Cleves
B) Died of Natural Causes

ANSWER: Jane Seymour
C) Beheaded

ANSWER: Anne Boleyn, Kathryn Howard
D) Survived

ANSWER: Katherine Parr
15)For ten points each, name these powerful women of myth and religion:

She lived in a hut that stood on chicken legs and would eat you if you didn't fulfill an agreement, but she gave a flaming torch to Vasalisa, who held up her end of the bargain:

## ANSWER: Baba Yaga

This Hindu goddess was born of the energy of all the other gods, and slew the shapeshifting demon Mahisa, restoring order to the heavens:

## ANSWER: Durga

This Shinto goddess of joy danced so comically and obscenely that Amaterasu, in hiding, brought the sun back to the world:

ANSWER: Uzume
16) When you turn your car, you're doing physics! For the stated number of points:

For 10, What type of acceleration does your car experience when it rounds a turn at constant speed?

## ANSWER: Centripetal Acceleration

For 5, If you are sitting in the car, your frame of reference causes you to experience what ficticious force in the direction opposite the centripetal acceleration?

ANSWER: Centrifugal Force
For 5, if the turn is taken too fast for the surface, this can occur, where the back of the car whips past the intended turn

ANSWER: Fishtailing (accept equivalents)
For 10, because of the high speeds on the freeway, what design is used to minimize fishtailing and other turning problems?

ANSWER: Banked turns
17) Given the location, name the year, plus or minus 20, when European sailors first landed FTPE
A) Japan

ANSWER: 1542 (1522 to 1562)
B) India

ANSWER: 1498 (1478 to 1518 )
C) Cape of Good Hope:

ANSWER: 1488 (1468 to 1508)
18) FTPE, answer these questions about the late Strom Thurmond

Within 2, name the year that Thurmond was initially elected to the Senate?
ANSWER: 1954
Strom Thurmond became the first person to win election to a national office as this sort of canidate in 1954?

ANSWER: Write-in
Strom Thurmond also recorded the longest filibuster in Senate history. Within 30 minutes, how long did he speak on the Civil Rights Act of 1957 ?

ANSWER: 24 Hours, 18 minutes
19) For 15 PE, name the described Korean dynasty
A) The dynasty left its name on the Buddhist canons in woodblock printing. One of its Kings wrote the Ten Injunctions, and the dynasty gave its name to the peninsula.

ANSWER: Koryo Dynasty
B) This was the last of the Korean dynasties, lasting from 1392 until Japan's annexation in 1910. As opposed to the Buddhism of the Koryo, this dynasty favored NeoConfucianism, Chu Hsi Style.

ANSWER: Choson or Yi Dynasty
20) Answer these questions about masters of the symphony for five points each:

Beethoven may have contemplated suicide upon going deaf, as evidenced in this letter to his brothers:

ANSWER: Heiligenstadt Testament
Between which two of his symphonies was it written?
ANSWER: The second and third
Haydn was desperate for a vacation for himself and his orchestra, so he wrote the Farewell Symphony as a hint to this man, his patron, that he wanted a break:

ANSWER: (The Prince of) Esterhazy
In what style was the Farewell Symphony?
ANSWER: Sturm und Drang / Storm and Stress
Mozart was a child prodigy and wrote 41 symphonies. Give either the year of his first symphony or the age at which he wrote it:

ANSWER: 1764 / age 8 (also accept age 9)
What is the nickname of his 41st symphony?
ANSWER: Jupiter
21) For 10 points each, name any 3 of the 4 stages of cognitive development according to Piaget.

ANSWERS: Sensory-Motor, Preoperational, Concrete Operational, Formal Operational
22) Answer the following questions about Thermodynamics FTPE:

Boltzmann's Law relates the log of the number of possible states to what thermodynamic property?

ANSWER: Entropy
In statistical mechanics, entropy is modeled as a counting of states, while this quantity is modeled as the interaction between particles.

## ANSWER: Enthalpy

This quantity is equal to the Enthalpy minus the Entropy times the temperature.

