Toss-Ups

1. This number is equal to the fourth root of 28561 , the number of cards dealt to a single person in bridge, the number of people at the Last Supper, and it is the number you would fear if you suffered from triskaidecaphobia. FTF, name it. (13)
2. Borodin, Gui, Balakirev, Rimsky-Korsakov and one other composer were the members of the "koochka" or "Invincible Band" during the middle of the nineteenth century. This last composer is famous for his operas such as Boris Godunov, his piano works such as Pictures from an Exhibition, and his symphonic suite, Night on Bald Mountain. Name him. (Modest Mussorgsky)
3. It's time for "Name that Shakesperean play." Given the following characters, please identify the play. Sebastian, Alonso, Trinculo, Ferdinand, Miranda, Frospero, Caliban, Ariel. (The Tempest)
4. The universal symbol for males is a circle with an arrow pointed to the upper right; the symbol for females is a circle with a cross directly below it. For ten points, these symbols are-also associated with, respectively, what two planets or Roman gods? (Mars and Venus)
5. Scientists have not yet engineered a pink lemon. Until that day occurs, people who make pink lemonade need to color it with juice from this other fruit. FTF, name it. (Grape)
6. For a quick ten points, buzz in and give me the names of the four Teenage Mutant Ninja Turtles. Berornandorn Michel angelo, Donatello and Rafael - Leonardo
7. Dante's Divine Comedy is divided into three sections, the Inferno, the Furgatorio and the Faradiso. Each one of these sections ends in the same word. FTF, name it. (Stars)
8. Although he may be quite busy running his organization, the National Association for the Advancement of White People, this member of the Louisiana state legislature, once condemned by Lee Atwater as a "charlatan" has also found time to unsuccessfully seek a U.S. senate seat. He is perhaps most terrifying to the general public because of his previpus ties to the K.K.K. FTF, name him. fonnomputy David Duke
9. This Spaniard was born Manuel Laureano Rodriguez y Sanchez in 1917, and, by 1939 was acclaimed as the greatest bullfighter of his time. However, his reputation suffered after he announced his retirement, and in order to prove himself, he reentered the ring but was killed by a bull in 1947. FTF, give the nickname of this man, for whom a liqueur was named. Nomberer
A. Manolete
10. Kahlua, Creme de Menthe, and Amaretto share a few things in common. They are all oddly spelled, and they are all liqueurs, another oddly spelled word. FTF spell liqueur. ( $L$ I Q UEUF)
11. Although you would definitely want to avoid getting three strikes in a row in baseball, in bowling, this accomplishment is given a special avian nickname. FTF, name it. marker
Turfy
12. Often derided as "scientists without -a subject," the

## DUPE

 researfherfof sexictily tope to one day reach their out-of'-this-worl'd goal implied by SETI's full name. FTF, give the full hame. (Search for ExtraTerrestrial) Intelliciance12. 12 15 Benedicts, 6 Falls, 16 Gregory, 8 Alexanders, 5 Sixtuses and 2 John Falls have held this highest position in the Roman Catholic Church. FTF, name it. Pope
13.19. In 1789, it was Muhlenberg, in 1811 it was Clay, in 1814 it was Cheever, in 1815 it was Cl lay, in 1822 it was Barbour, in 1823 it was Clay, in 1837 it was Folk, in 1860 it was Pennington, in 1900 it was Henderson, in 1942 it was Rayburn, in 1943 it was Martin, in 1952 it was Rayburn, in 1954 it was Martin, in 1958 it was Rayburn, in 1984 it was O'Neill, in 1997 it was Wright, and in 1990 it is Foley. FTF, what governmental position did these men hold in the given year? Speaker of the House of Representatives
13. 12. For ten points, give the year in which the following works were written or composed: Mozart's Haffner Serenade, Edward Gibbon's Decline and Fall of the Roman Empire, Fragonard's Washerwoman, Thomas Fine's Common Sense, Adam Smith's The Wealth of Nations and America's Declaration of Independence. 1730 1776
1. H6. The issue of censorship and pornography has been brought to the forefront of American culture once again by the trial in Cincinatti over the pictures of Robert Mapplethorpe. It is not Mapplethorphe who was on trial, though, but rather the director of the Contemporary Arts Center. FTF, name this director. (Dennis Barrie)
2. Yt. Of all of Shakespeare's many comedies, only one $i s$ set in jolly old England. Name this play, which was reputedly written because Queen Elizabeth wanted to see Sir John Falstaff of Henry IVth fame in a romantic situation. Merry Wives of Windsor
17.10. Autoimmune diseases are terrible disorders in which one's immune system begins to create antibodies against some part of our own self. They are not limited to humans alone; even the First Dog, Millie, has recently been diagnosed as having one. FTP, name this wolfish disease. Lupus
having one. For ten pgixits, name this "wolfish" disease where antibodies are manufactured against our own DNA. Lupus
3. 19. A chimeric virus is a virus which is actually a combination of two or more different viruses. Similarly, the chimera of ancient mythology was a bizarre combination of animals, having three heads. FTF, name the three heads of a chimera. Goat, Dragon, Lion

19 26. The Ace hit "How Long has this been going on", the Mike and the Mechanics hit "Silent Fining" and the Squeeze hit "Tempted" were all sung by this artist, who went single in 1987 releasing "Don't Shed, $a$ Tear" and "One Good Fieason." For ten points, name him. (Paul Carrack.)
20 71. Winner of the Nobel Frize for literature in 1969, this Irish-born citizen of Fris was known for his novels such as Malone Dies and his plays like Endgame and Waiting for Godot
 FTp, name him. A: Samue Beckett
21 22. Known colloquially as a licorice stick, this instrument is featured as the "cat" in Prokofiev's Peter and the Wolf, $i s p l a y e d$ by actor Woody Allen and was featured in Benny Goodman's jazz band. FTF, name it. clarinet

22 乙. It is defined as "a straight line associated with a curve such that as a point moves along an infinite branch of the curve the distance from the point to the line approaches zero and the $\equiv l o p e$ of the curve at that point approaches the slope of the line." FTF, what is this term?A: asymptote

23 24. The "dog days" of summer are supposedly the hottest days of August. They were so named because they were under the supposed influence of the dog star which is, FTF, better known as what?A: Sirius
24. 7ु. Fiecently, there have been increased outbreaks in the number of cases of salmonellosis, a bacterial infection often associated with poultry and eggs. For ten points, spell salmonellosis.
25. 26. If you take the atomic weight of deuterium, multiply it by the atomic weight of tritium and subtract from that the atomic weight of the remaining isotope of hydrogen, you get this number, which is the atomic number of Boron. FTF, name it: $A:$ five
26. 24. Barcelona, Spain, will be the host city for the 1992 summer olympic games. FTF, which city will host the winter games in the same year? Albertville. France
27. FTP, which is the only letter of the English alphabet which is not the first letter of a United States college or university?

A: $\underline{\underline{z}}$
28. Of Joan of Arc, Cleopatra, Julius Caesaf and Don Juan, who appeared in a play by George Bernard Shaw but not in billiam Shakespeare?

A: Don Juan (do not accept "the third one" -- does not demonstrate knowledge)
29. When Lincoln was killed, Walt Whitman was so moved that he wrote two famous memorial poems. FTP, name either.

A: O Captain, My Captain! or When Lilacs Last in the Dooryard Bloom'd

RUTGERS

1. 30 POINT How well do we know our geography? Well enough to know fictional locations from those stuck in reality, we hope. FTP each, identify the following as fictional or real:
2. Laputa
3. Shoemakersville
4. Amaurot
fictional (Gulliver's Travels)
real (here in Pennsylvania)
fictional (Cap. of More's Utopia)
5. 30 POINT The genetic code is virtually universal, translating three base codons from mRNA eventually into amino acids. For five pts each, can you answer the following questions about the genetic code?
1) How many possible different codons are there?

A: $\underline{64}$
2) Of the 64 different codons, one codes for "start," while three code for "stop." First, give the mRNA three letter codon for "start."
A: $\underline{\text { AUG }}$
3) For five pts each, and an additional 5 for all three, give the three codons signalling chain termination.
A: UGA, UAA, UAG
'. 30 POINT Walt Disney stunned the film industry with the release of Fantasia. Fantasia was unusual not only because it was animated, but for the daring ways it juxtaposed its imagery with Classical music. Given the following descriptions of the animated sequence, for 5 pts each, name the musical accompaniment and its composer.

1) The first sketch of the movie, it demonstrated the workings of the orchestra, featuring the violin.
A: J.S. Bach \& Toccata \& Fuque in D Minor
2) Flowers and mushrooms dance around to the music of this Christmas classic.
A: Tchaikovsky \& Nutcracker
3) In animating this symphony, Disney chose to hearken back the myths of ancient Greece; satyrs and centaurs are featured along with various mythological gods in this sequence.
A: Beethoven \& Sixth or Pastoral Symphony
d. Fofhaps then most comic of the sketches, Hippos, Alligators and Ostriches dance, to this ballet. Ponchielli's Dance of the Hours
¢. Disney gave us a view of evolutionary history, focusing on dinosaurs, when he animated the sketch to this work. Stravinsky's The Rite of Spring
f. The final sketch featured tho works combined into one. The first was Mussorgsky's, Wight on Bald Mountain, featuring a Walperpisnacht (Valper-jis-nachlt); the sptond featured a group of monk-like figures carking candles and singing this famous tune. 'Each's Ave Maria

## Schubert

4. ( 30 pts) Although they share the same last name, the first names differ. For ten points each, give the first name for the following famous Websters.
a. Born in 1782, he became one of the most respected U.S. senators in an age when the senate contained such other luminaries as $\mathrm{Cl} a y$ and Calhoun. (Daniel Webster)
b. Born in 1758, he is best known as the American writer of the book you would go to to find out what lexicographer means. (Noah Webster)
c. Speculatively born in 1580, he was the famous Jacobean tragedian whose works included The White Devil and The Dutchess of Mali. (John Webster)
5. (25 pts) The layers of a tree trunk, in alphabetical order, are: bark, cambium, heartwood, phloem (flow - um) and xylem (zie - lump). For five points each, list the order you would find these layers, from the inside out. Heartwood. xylem, cambium, phloem, bark)
6. (30 pts.) Currents are like rivers in the sea. For 5 pts each, give the direction (clockwise or counterclockwise) and the temperature (warm or cold) of each of the following currents:
7. The Gulf Stream (clockwise, warm)
8. The East Australian current (counterclockwise, warm)
9. The Canaries current (clockwise, cold)
10. ( $\mathbf{3 0}$ pts.) Copper is termed one of the seven metals of antiquity because it was one of the relatively few metals known and used in primitive times. For 5 pts each, name the remaining six "seven metals of antiquity". (Tin, gold. silver, mercury, iron, lead.)
11. (25 pts) While fish travel in schools and wolves gather in packs, other animals have less commonly used names for groups. For 5 pts each, give the correct group name for:
12. eagles: convocation
13. geese: (Any of the following are acceptible:)
gaggle, flock or skein
s. ferrets: business
14. crows: murder or hover
15. snakes: den
16. (SO pts) 30 pts are yours for identifying this author on the first clue, 20 on the second, 10 on the third.
17. His Fasselas is debatedly one of the first English novels, detailing the adventures of a prince as he searches for an existence of happiness.
18. He is perhaps most famous for his dictionary in which he defines oats as "A grain, which in England is generally given to horses, but in Scotland supports the people."
19. He is the subject of James Boswell's 1791 biography.

Samuel Johnson
10. (20 pts) Richard Wagner's musical tetralogy, The Ring of the Nibelungs is a set of four massive operas written between 1853 and 1874. For 5 pts. each, give either the English or German name of each of these four operas. Sieqfried, The Valkries. The Rhine Gold. The Twilight of the Gods or, alternatively, Siegfried, Die Valkrie, Das Fheingold, Gotterdammerung.
11. (25 pts.) For 5 pts each, given the capital of the following Soviet Union Fepublic, name the republic:

1. Minsk Eyelorussia
2. Kishinev Moldavia

ङ. Vilnius Lithuania
4. Eaku Azerbaidzhan
5. Tbilisi Georqia
12. (30 pts.) Cattle, Dairy Cows, Sheep, Swine, Chickens and Turkeys: In 1988, a farm "census" noted that these animals were the 6 most popular on farms. For 5 pts. apiece, list them in order from least to most populous. Dairy Cows, Sheep, Swine, Cattle, Turkeys, Chickens (10307, 10774, 53795, 98994, 240349 and 5003000 respectively)
13. (25 pts.) There are 12" in a foot, and 1000 ml in a
liter, but for 5 pts each, can you tell me how many:
A. square feet in an acre? 43560
B. quires in a ream (of paper)? 20
C. yards in a bolt (of cloth)? 40
D. tablespoons in a cup 16
E. chains in a furlong 10
14. (30 pts.) It is 7 am, Sunday, in Washington D.C. For 5 pts a piece, what time is it in:
A. Eogota, Columbia 7am
B. Capetown, South Africa 2pm
C. Moscow, USSR 3pm
D. Beijing, China Bpm
E. Tehran, Iran 3:30 pm
F. Honolulu, Hawaii 2 am
15. (30 pts) The area of a circle is equal to the radius of the circle squared times pi, an irrational number often estimated to be 3.14. I'll give you five points for each of the next 6 digits after the "4" you can name correctly. 3.14159265
16. (30 pts Thirty points are yours for naming this group on the first Glue, 20, 10 :.
A. It was founded in 1776 by Adam Weishaupt, a Bavarian professor of canon law at Ingolstadt.
B. Under conditions of secrecy, it sought to penetrate and control the masonic lodges for subversive purposes, in an attempt to combat superstition through this association for rational enlightenment and the regeneration of the world. C. Among its members were Goethe and SAiviler, but the movement was dissolved in 1785 by the Bavarian government. the Illuminati
16. 17. ( 30 pts) David H. Souter recently became the 105 th justice of the US Supreme Court after the Senate voted him in 90 to 9 , with Pete Wilson abstaining. The nine who voted against Souter were, not surprisingly, all liberal democrats. For 20 pts, name 4 of them, for 25 pts, 7, and for 30 pts, all nine. Answer: Edward Kennedy, Alan Cranston, Brock Adams, Daniel Akaka, Bill Bradley, Quentin Burdick, John Kerry, Frank Lautenburg, Barbara Mikulski.
17. 10. (30 pts) The social readjustment rating scale, developed by psychologists, gives a rating to how much stress certain life events can cause. Rate the following si\% events in order from least stressful to most stressful (five points each): In-Law Troubles, Christmas, Marriage, Troubles with the boss, Divorce and Changing to a different line of work.
Answer: Christmas. Troubles with the boss. In-Law Troubles. Changing to A different line of Work, Marriage, Divorce

18 17. (20 pts) Molecular biologists are able to take advantage of the fact that molecules of DNA contain a certain atom that is not present in proteins, as well as a certain atom present in proteins but not in nucleic acids. For ten points each, name the element y in DNA but not in protein? (Phosphorus) And for an additional 10, name the Protein element not found in DNA. (Sulfur) Shetland Islands are in the waters surrounding Great
Britain. For ten points each, name the body of water each is found in:
a. Isle of Man - Irish Sea
b. Isle of Wight - English Channel
c. Shetland Islands - Norwegian Sea


## RutGers

## BONI

20.21. SO pts.: "Eillboard magazine ranks em and we count 'em down." Such is the claim of American Top 40. At the
 $70^{\prime}$ s and 80 's. Can you name them? (10 pts each) a. The \#1 song of the sixties, originally written by McCartney for his partner's son, Julian. Hey Jude b. The \#1 song of the seventies, sung as a duet and published using pseudonyms for the otherwise famous songwriting team's real names. Don't Go Ereaking My Heart c. The \#1 song of the eighties, a ballad, sung by a group whose name could be "the law enforcers" Every Ereath You Take
21. 22. (25 pts) Several years ago, the artificial heart was being hailed as the paragon of human ingenuity. Fecently, however, the FDA rescinded its earlier approval of the device. FTP, give the name of the device. (Jarvik-7.) And for an additional 15 points, name the company which produced the Jarvik-7. Symbion, inc.
22.2z. (25 pts) Recently, MTV held a reunion weekend where all five of the original "VJ"'s came back. For 5 pts each, name these "vintage VJ's": A: Nina Blackwoood, Mark Goodman, Al an Hunter, J.J. Jackson and Martha Quinn

23 24. (20 pts) Fialph Nader has taken on thepost office because he claims that four "commemorative" stamps issued earlier in 1990 are simply "a huge advertising campaign" for these four 1939 classic movies. For 5 pts each, name them: Gone With The Wind, Staqecoach, The Wizard of Oz , Eeall Geste

24 ( 20 pts) While we still don't know who really sang "Girl You Know It's True" and other Milli Vanilli hits, we do know the real names of the "Now we have it - now we don't" grammy winning duo who only lip-synched the song. For 10 points each, give the real names of the two "synchers":
Rob Filatus and Fab Morvan.
25. (20 pts) It is 1066, and you are poor king Harold of England. You have two enemies coming - one from the north and one from the south. For five points each, name: a. The defeated leader of the enemy from the north: Harald Hardrada
b. The country of this enemy: Norway
c. The successful leader of the southern enemy: William the Conqueror or William the bastard or William I
d. The country of this enemy: Normandy or France
26. (20 pts) We all know that Homer, Marge, Eiart, Lisa and Maggie make up the core of the Simpson family, but, for 10 pts each, what are the names of Marge's two sister's? Fatty and Selma

## Rutgers

Bond
2726. (30 pts) Given the symphony orchestra, name the musical director of (10 pts each):
a. The National Symphony Orchestra: Mstislav Rostropovich
b. Philadelphia Orchestra: Ricardo Multi (Still...)
c. New York Philharmonic: Zubin Mehta
28.39. (25 pts Bonus) $n, m_{2}$, (read " $m$ sub l") $m_{3}$ and 1 are the four quantum numbers which describe and electron in an atom. Of these, which (Efts each) a. is also called the azumuethal or orbital angular momentum quantum \#? 1
b. is the principal quantum \# $n$
c. is a result of the Pauli exclusion principle? ms
d. describes the shape of the electronic orbital $\underline{1}$
e. is only allowed values of $+1 / 2$ and $-1 / 2$ ? ms
29. 76. (20 pts) As we all know, Henry VIII of England had six wives. But which of these wives: (A) Was the one which caused Henry to break with the Catholic Church? (Catherine) of Aragon (B) Gave Birth to Henry's only male heir? Jane Seymour) (C) Became a royal sister after the divorce? (Anne of Cleaves (D) Was executed after she was proved to be unfaithful to her husband? (Catherine Howard)

