Baby Hen 2003 Packet 4, Four, Cuatro Packet composed by Mark Pellegrini, Roger Craig and various others. Produced by Harvey Weinstein.

4-1. British publisher Tony Faber offered a million dollar prize for a proof of it in 2000, a prize that went unclaimed. It was originally stated in a 1742 letter from its creator to Descartes, although it was modified afterward. The weak form concerns three addends, while the strong form has two addends. Neither has been proven, but Vinogradov and Borodzin made progress in proving both, giving a number for the "sufficiently large" condition put forth by Hardy and Littlewood. FTP, name this postulate which states that every number greater than 4 can be written as the sum of two primes.

ANSWER: Goldbach's Conjecture

4-2. The first act beings as a large crowd, including the exiled king Timur and the slave girl Liu, watch as the Prince of Persia is executed. That Prince had failed to successfully answer three riddles, of which the first two answers are "Hope" and "Blood." FTP, name this Puccini opera in which Prince Calaf successfully answers the three riddles and marries the titular character.

ANSWER: Turandot

4-3. While writing it, the author pictured Ingrid Bergman as Maria, a role she would later play in the movie adaptation. Its title comes from John Donne's "Devotions upon Emergent Occasions." Bookended by scenes in pine forests, it includes an account of El Sordo's last stand. Set in Segovia in 1937, it tells of three days in the life of an American Spanish professor and dynamite expert volunteering in the Spanish Civil War. Inspired by the author's experience as a foreign correspondent in Paris and Spain during the war, this is FTP, what Hemmingway novel which tells the story of Pilar, Maria, and Robert Jordan?

ANSWER: For Whom the Bell Tolls

4-4. It was first proposed on July 21, 1955 at a summit conference held in Geneva. Its purpose was to lower cold war tensions and to allow reliable intelligence to be gathered by both sides. Fearing a trick, the Soviets rejected it immediately. Revived by George W Bush in 1989, it was re-proposed a multinational agreement and signed into law in 1992. This is, FTP, what international agreement allowing signatories to send freely send reconnaissance flights over each other's countries?

ANSWER: Open Skies

4-5. The name's the same. The first digital one was created by Ken Thompson, a topic he discussed in his paper "Reflections on Trusting Trust." He did it by modifying the C compiler so that it would improperly compile the login program. The mythological one was built by Epeius. Sinon, a spy, convinced the recipients to take it, bringing on their doom. Virgil's Aeneid references it when Laocoon warns that one should fear Greeks bearing gifts. FTP, identify this mythological hollow wooden figure.

ANSWER: Trojan Horse

4-6. His first film was 1972's "Fear is the Key", and he portrayed Meyer Lansky in "Bugsy" and Vice President Gary Nance in "Dave". Other roles include Cosmo in "Sneakers" and the psychotic Don Logan in "Sexy Beast". After a lengthy stage career, he won the Best Actor Oscar for his second film role ever. FTP, name this actor born Krishna Bhanji whose most famous role was that of Mahatma Gandhi.

ANSWER: Ben Kingsley

4-7 Belleforsest's Historic Tragedies of France, published in 1570, was one source for it. It first appeared in print in 1603's Bad Quarto, and later in the first folio. Act 3 Scene 4 takes place in the Queen's closet and the core plot can be found in Saxo Grammaticus's *Gesta Danorum*. The last lines of the play are "Take up the bodies: such a sight as this/ Becomes the field, but here shows much amiss./Go, bid the soldiers shoot." FTP, identify this Shakespearean play about a Prince of Denmark.

ANSWER: Hamlet

4-8. His novel 1601 was banned on the basis that it was obscene. Because of their controversial content, "The War Prayer" and Letters from the Earth were not published until long after his death. He once noted that "None but the dead have free speech." He tells of the story of Tom Canty and Edward Tudor switching places in The Prince and the Pauper. His most famous work, set in his hometown of Hannibal, Missouri, is The Adventures of Tom Sawyer. FTP, identify this American author born Samuel Langhorne Clemens.

ANSWER: Mark **Twain** (Accept early buzz of Samuel **Clemens**)

4-9. The gamma variety, created by Th1 cells, are involved in the regulation of the immune and inflammatory responses. The omega variety is released by leukocytes at the site of viral infections or tumors. The alpha and beta varieties are both produced by both T-cells and B-cells, and are an important component of the anti-viral response. A major part of the immune system, they bind to cell surface receptors, which then cause gene activation of antiviral systems. This is, FTP, what type of cytokine, which gets its name from its ability to inhibit viral replication?

ANSWER: Interferon

- 4-10. It modified much of the Wagner Act, and nullified parts of Norris-LaGuardia Act. Its repeal was a central tenet in Ralph Nader's 2000 presidential bid. It empowered the government to obtain an 80-day injunction against any strike that it deemed a peril to national health or safety, and prohibited secondary boycotts. Passed over Harry Truman's veto in 1947, several attempts to repeal it have failed. Modified by the Landrum-Griffin Act, this is FTP, what decidedly anti-union law bearing the name of a President's son? ANSWER: The <u>Taft-Hartley</u> act (accept the <u>Labor-Management Relations Act</u>)
- 4-11. It was replaced by the Non-intercourse Act, and later Macon's bill number two. When congress attempted to enforce it, it nearly led to a rebellion in New England. This law was Thomas Jefferson's response to the British orders of council and the French continental system, both of which were hurting the American merchant marine. Designed

to force the British and French to open themselves to American trade, it forbid all trade abroad. FTP, identify this 1807 law, ridiculed as the O-grab-me act.

ANSWER: Embargo Act

4-12. This novel's climax occurs when the protagonist becomes lost in the snow and has a vision of a temple, within which two hags tear apart a child. He reaches this state after conversations with the Jesuit Leo Naphta, head physician Dr. Behrens, the humanist Settembrini, and the coffee planter Peeperkorn. He makes a visit to the International Sanitarium Berghof in the Swiss Alps to rest and visit his cousin, Joachim Ziemssen. FTP, name this novel about Hans Castorp's stay in a tuberculosis sanitorium, written by Thomas Mann.

ANSWER: The Magic Mountain

4-13. Its captain, Charles McVay, has the ignominy of being the only man in US history to be court-martialed for losing his ship during wartime. Just after midnight on July 30, 1945, it was torpedoed by the Japanese submarine I-58. That ship had just recently completed its mission delivering the Hiroshima atomic bomb to Tinian, and was on its way to Leyte. Over 900 men went into the water, and over the next few days, sharks attacked and killed most of the survivor. This is, FTP, what cruiser, named for the capitol city of a midwestern state.

ANSWER: USS Indianapolis

- 4-14. Based on the work of Hideki Yukawa, Enrico Fermi first postulated on its existence in 1940. It was unified by Glashow, Salam, and Weinberg in 1979 with the electromagnetic force. With an effective range of about ten to the minus 14 meters, it is the force responsible for holding protons and neutrons together. It is thought to be carried by the Z and W bosons, and affects charged leptons, quarks, and neutrinos. FTP, name this fundamental force, not as strong as the strong nuclear force. ANSWER: **Weak nuclear** force (Accept **Electroweak** force before the asterisk)
- 4-15. A rare printmaking process uses this material to build up an insoluble layer on top of a Masonite board, into which a design is carved to produce a printing plate. In works of art, the material is most often used as an emulsifier and binder in a paint system with dry pigment suspended in oil or water, and the resulting paint surface is a hard, matte film. FTP, name this organic protein extracted from curdled milk. Answer: **Casein**

4-16. Although it emerged out of civil law, it has applied to federal criminal law since US v Oppenheimer in 1916. In 1960 in Ashe V Swenson, the Supreme Court applied it to double jeopardy to limit prosecution for crimes committed at the same time. It states that when an issue of fact has been determined by a valid final judgement, the issue cannot be re-litigated by the same parties. FTP, this is what two word legal phrase, very closely related to Res Judicata?

ANSWER: Collateral Estoppel

4-17. Longitudinal waves are sometimes called this to describe their motion. In mechanical engineering, it is usually assumed that it doesn't happen to fluids or solids. In computer science, there are two types, full fidelity, sometimes called loss-less, and lossy. MPEG and MP3 are good examples of the results. FTP, give the shared term, which means to forcibly to make something smaller.

ANSWER: Compression

4-18. The name's the same. Teresa, played by Senta Berger, in 1963's Major Dundee, Rosa in 1990's Ghost, and Rico in 1996's Fled. Willy was the murdered private in A Few Good Men. Corazon was the leader of the Spartans in Sid Meirer's Alpha Centauri. Also the name of the main character in Hemmingway's The Old Man and the Sea, FTP, give the shared name, which also names the capital city of Chile.

ANSWER: Santiago

4-19. Among this composer's 45 operas is *Tarare*, with a libretto by Beaumarchais, and *Falstaff*, based on *The Merry Wives of Windsor*. In his lifetime, he was best known for his vocal and choral music, but today he is known as a teacher to Czerny, Schubert, and Beethoven. At the height of his fame, he was court composer and conductor of the Italian opera in Vienna, but he was soon overshadowed. FTP, Pushkin, Rimsky-Korsakov, and Peter Shaffer cast what composer as a villain in Mozart's death?

Answer: Antonio Salieri

4-20. In 1895, Robert Wiedersheim published a list of 86 of them. Today, although that list is much smaller and very hotly debated, it still includes the thymus, parathyroid, and pineal glands. Many people maintain that as one of these, the coccyx is the remnants of a tail, although the appendix is probably the best known one. FTP, name this group of organs which are thought to be evolutionary leftovers, organs that no longer serve a known function.

ANSWER: Vestigial Organs

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#### **BONUSES**

4-1. Name the volcano from clues, FTPE.

10) This volcano lost over 400 meters of elevation on May 18, 1980.

ANSWER: Mount St. Helens

10) This active volcano located in Martinique, erupted in 1902 destroying the port of Saint-Pierre, killing 30,000 people.

Answer: Mount Pelee

10) This Colombian peak erupted twice in 1985 almost totally burying the town of Armero, killing 25,000 people. It also had a major eruption in 1595, which extended all the way to Panama.

Answer: Mount Ruiz

4-2. William Faulkner novels from description, FTPE

10) This 1936 novel takes place before, during, and after the Civil War. Thomas Sutpen, a poor farmer from West Virginia, arrives in Jefferson and buys his hundred square miles of land from the Indians.

ANSWER: Absalom, Absalom!

10) Told in stream of consciousness style by 15 different narrators, the story centers on Addie Bundren and the journey to bury the decaying corpse.

ANSWER: As I Lay Dying

10) The title of the novel is taken from Shakespeare's "Macbeth". We hear from four different narrators, including Jason, Quentin, and Benjy Compson.

ANSWER: The Sound and the Fury

- 4-3. Identify the Chinese dynasties on a 15-5 basis.
- [15] Wang Mang temporarily usurped the throne during this dynasty in AD 9.
- [5] The setting of "Crouching Tiger, Hidden Dragon", this longest lasting dynasty saw the invention of paper.

ANSWER: Han

- [15] Founded in 1368 by Chu Yüan-chang, who took the name Hung-wu, it established the governmental structure which would last until 1912.
- [5] During this dynasty, blue and white underglazed porcelain was perfected, yielding many beautiful vases.

ANSWER: Ming

- 4-4. Jurists just slightly right of Attila the Hun, FTPE
- 10) This Reagan appointee to the Supreme Court made headlines with his opinion in Herrera v. Collins that actual innocence is no grounds for an appeal.

ANSWER: Antonin Scalia

10) Congress rejected this 1987 Reagan nominee to the Supreme Court. His name has become a verb meaning "to be handled roughly be Congress"

ANSWER: Robert Bork

10) Currently the Solicitor general of the United States, he argued Bush's case in Bush V Gore. His wife Barbara was killed in the September 11 attacks.

ANSWER: Theodore "Ted" Olson

4-5. Identify the following about these national epics, FTPE.

[10] Consisting of almost 60,000 verses, the poet Ferdowsi [Fer-doo-see] wrote this Persion epic for Sultan Mahmud of Ghazna.

ANSWER: Shah-nameh (or "Book of Kings")

[10] Compiled by Elias Lönnrot, this national epic means "land of heroes" in Finnish.

ANSWER: Kalevala

[10] José Hernández's epic poem, "Martin Fierro" is an evocative depiction of this South American country's frontier in the 19<sup>th</sup> century.

ANSWER: Argentina

4-6. Name these famous American Indians, FTPE.

10) This Seminole helped lead an attack on Wiley Thompson in 1835 to protest the removal of the tribe. A promised offer of peace by General Jessup was a trick and he died in prison.

Answer: Osceola

10) He was a professional lacrosse player before gaining the role as Tonto in the Lone Ranger series.

Answer: Jay Silverheels

10) The only Native American currently in Congress, he is also a Northern Cheyenne chief.

Answer: Ben "Nighthorse" Campbell

4-7. An important theory in Evolution, FTPE

10) This theory states that evolution takes place in very short bursts followed by long periods in between.

ANSWER: Punctuated equilibrium

10) Punctuated equilibrium was proposed by Niles Eldredge and this recently deceased evolutionary biologist

ANSWER: Stephen Jay Gould

10) Punctuated equilibrium relies heavily on peripatric speciation, a concept formulated by this very old german-born Harvard biologist.

ANSWER: Ernst Mayr

4-8 World Series of Poker, FTSNOP.

A. FTP, this is the casino where the World Series is held every year.

A: Binion's Horshshoe Casino (prompt on Binion's)

B. For five points each, name the game and stakes for "The Big One," the final tournament of the Series that determines the World Champion.

A: No Limit (5 points) Texas Hold 'Em (5 points)

C. For five points each, name any two of the four men that have won "The Big One" at least twice.

A: Johnny <u>Moss</u>
Doyle <u>Brunson</u>
Stu <u>Ungar</u>
Johnny <u>Chan</u>

4-9. Given a chemical formula, tell whether each of the following may act as Bronsted acids, Bronsted bases, both or neither, FFPE, with a bonus five for all five correct.

A.  $H_3S^+$  Answer: <u>acid</u>
B.  $HS^-$  Answer: <u>both</u>
C.  $Al(H_2O)_6^{3+}$  Answer: <u>acid</u>
D.  $CH_3^-$  Answer: <u>base</u>
E.  $NH_3$  Answer: <u>both</u>

4-10. Before Riley and Reich, the French were composing stuff that just kept repeating itself over and over and over and over. Name these proto-Minimalist works by eary 20th century French composers FTPE:

[10] The first true Minamalist piece, this Eric Satie work for piano consists of a short phrase repeated 840 times. It has never been completely performed by one person, though tag teams have done the job.

#### **ANSWER: Vexations**

[10] Also by Satie, this grandaddy of Muzak was first performed during the intermission of one of his shows in the hopes that it would remain background music. Much to Satie's dismay, people actually listened; the title refers to the item Satie wanted the music to represent.

## ANSWER: Furniture Music (Musique d'ameublement)

[10] One of the composer's least favorite pieces, because it "lacked music", this study in orchestration by Maurice Ravel consists of two melodies that get passed around the orchestra as the volume slowly increases to a grand coda. It's his most famous work.

ANSWER: Bolero

- 4-11 Basic circuital components, FTPE
- 10) This component, typically created using two transistors, is designed so that current can only pass one way through it. The Zener and junction types are common varieties. ANSWER: **Diode**s
- 10) A coil of wire which creates a magnetic field when current passes through it. It may have an iron core inside the coil. It can be used as a transducer converting electrical energy to mechanical energy by pulling on something.

ANSWER: Inductors

Typically creating using large numbers of flip-flops or capacitors, these are devices that can store, shift, and output sequences of bits.

ANSWER: <u>Registers</u> (Do not accept <u>Random Access Memory)</u>

4-12. FTPE, identify the following men of letters who were trained as physicians. [10] This New Jersey born doctor wrote poems about a red wheelbarrow and the figure five in gold.

ANSWER: William Carlos Williams

[10] He studied medicine at the University of Moscow before writing "Ivanov", "The Three Sisters," and "The Seagull."

ANSWER: Anton Chekov

[10] This author of "The Adventures of Peregrine Pickle" and "The Expedition of Humphrey Clinker" had a surgical practice in London.

ANSWER: Tobias Smollett

4-13. 30-20-10-5, name the organ.

- [30] Hassall's corpuscles can be found here. It has a pinkish color and a grainy consistency and is ventrally located.
- [20] The site of clonal selection and deletion, after puberty it undergoes involution. It located anterior of the solar plexus.
- [10] It differs structurally from other lymphoid organs in that it does not have lymphatic vessels draining into it. Its shape resembles a leaf of thyme.

Answer: thymus gland

- 4-14. FTSNOP, Given the War, name the United States President when the US entered the war.
- [5] Mexican American War
   ANSWER: James Knox Polk
   [5] Spanish American War
   ANSWER: William McKinley

[10] Blackhawk War

ANSWER: Andrew Jackson

[10] Aroostook War

ANSWER: Martin Van Buren

- 4-15. Name these Islamic terms, FTPE.
- [10] The body of religious law, it covers not only faith and religious rituals, but every aspect of quotidian life.

ANSWER: Sharia(h)

[10] Issued by a religions specialist, it is a legal pronouncement on a specific issue.

ANSWER: Fatwa

[10] This term refers to a teacher or leader in Islam. One Shiite dogma has it that it refers to only the first twelve.

ANSWER: Imam

- 4-16. Epyptian gods from description, FTPE
- 10) The God of the underworld, his mother is Hesat. He has the head of a jackal.

ANSWER: Anubis

10) The goddess of fertility, she was the daughter of Nuit and Seb. Osiris was her husband, and she helped him come back to life.

ANSWER: Isis

10) Another fertility goddess, she is often associated with the cow. She was the mother of Horus. Once, she changed into a cat and left Egypt, but Thoth convinced her to return.

ANSWER: Hathor

- 4-17. Answer the following questions about a world leader, FTSNOP.
- 5) Name the current King of Spain who has served since 1975.

Answer: Juan Carlos I or Juan Carlos Alfonso Victor Maria de Borbon y Borbon

10) Juan Carlos followed this man as leader of Spain, who led the Nationalist forces who overthrew the Spanish democratic republic during the Spanish Civil War.

Answer: Francisco Franco

15) Juan Carlos was the grandson of this last King of Spain, who left in 1931 and died in

exile 10 years later. Answer: **Alfonso XIII** 

- 4-18. Identify the following from Egyptian art, FTPE.
- A. The name of these usually monolithic symbols of the sun in ancient Egypt meant "defense" or "protection," while the name by which we know them comes from the Greek for "a prong for roasting." Pope Sixtus V used several of them to mark Rome's most important sites, including the Lateran and St. Peter's Basilica.

### A: Obelisks (accept Tejen)

B. This style marked a shift to more natural, less stylized art in ancient Egpyt. The name of this style refers to the capital of Egypt during the reign of Akhenaten and Nefertiti, from 1375-1358 BC.

#### A: Amarna style

C. Showing a Roman influence leaning towards individualized portraiture, these realistic portraits executed primarily in encaustic were placed into the funerary wrappings above the head during the first through third centuries AD. Many were uncovered in a region about 60 miles south of Cairo.

#### A: Fayum (FIE-OOM) portraits

- 4-19. Name these works of Soren Kierkegaard FTPE:
- [10] Written under the name of Johannes De Silento, it discusses various problems raies by the Genesis story of Abraham's sarcrifice of Issac, eventually coming to the conclusion that man should regard God with the titular emotion and action.

# ANSWER: Fear and Trembling

[10] This 300-page "little book", written without a pseudonym, states that charity cannot be this without its namesake emotion, itself undescribable. Mainly concerned with ethics, its subtitle references "deliberations" as opposed to "upbuilding discourse."

#### ANSWER: Works of Love

[10] Written under the pseudonym Anti-Climactus, this companion to the *Concept of Anxiety* describes the titular concept as a deep despair distinct from mortality that only the Christian can have a full appreciation of.

ANSWER: The Sickness Unto Death

- 4-20. Name the picaresque novel from characters on a 30-20-10 basis:
- [30] Roger Thwackum, Thomas Square, Molly Seagrim
- [20] Sophia Western, Captain Blifil, Jenny, Bridget
- [10] Squire Allworthy, the titular foundling

ANSWER: The History of **Ton Jones**, A Foundling

4-21. Name these Senators who have caused controversy, FTPE.

10) This Pennsylvania senator was in the news in 2003 when he equated gay sex with incest and polygamy.

Answer: Rick Santorum

10) This former New Jersey senator abandoned his reelection campaign in 2002 amid a fund raising scandal.

Answer: Robert Torricelli

10) This man give up his bid to stay as Senate Majority leader in 2002 after making prosegregationist remarks at the 100<sup>th</sup> birthday part of Strom Thurmond.

Answer: Trent Lott