## NATSSO II - House Round 5 Written by Stephen Webb

1. In 2002 Yi-Jehng Kuan and Lewis Snyder announced that they discovered this compound in interstellar space, accurately repeating a false positive eight years earlier by Snyder. It can be the only internal amino acid of a collagen helix, and is very stable, as any mutations that would make it an amino acid with a larger side chain would break up the protein's structure. For ten points, name this amino acid, which is not optically active, the simplest of the amino acids.

## Answer: glycine

2. Only the Gathas, or hymns, of this holy book are credited to the founder of the religion, and are the oldest portions. Later pieces are elaborations of thinking in this religion, and the current text is only a fraction of what existed in antiquity, as legend states that Alexander the Great had the full text destroyed when he invaded Persia. For ten points, name this holy scripture, penned in a language similar to Sanskrit, the primary holy book of Zoroastrianism.

Answer: Avesta (the language is Avestan)
3. Towards the end of World War II, he was detained near Pisa by the US Army, kept in an open cage for twenty-five days before being given a tent. It was during this time that he suffered a nervous breakdown, and drafted what would win the first Bollingen Prize in 1948. Apologizing in a 1967 interview with Allen Ginsberg for "that stupid, suburban prejudice of anti-Semitism," he died later that year. For ten points, name this US poet who influenced a generation of authors with his incomplete epic poem, The Cantos.

## Answer: Ezra Pound

4. They signed with LaFace records and released their first full length album, Southernplayalisticadillakmusik in 1994. Aquemini contained the song "Rosa Parks," which prompted Parks to sue them over misusing her name, a lawsuit which was denied, denied again under appeal with Johnny Cochran, and finally in 2003 was given the go-ahead by the Supreme Court to proceed. For ten points, name this native Gerogia duo who won the 2004 Album of the Year for their Speakerboxxx/The Love Below.

Answer: OutKast
5. He was killed, likely by a richocheting bullet, on the way home to County Cork at Beal na mBlath on August 22, 1922, not even thirty two years old. Imprisoned until the end of 1916 for his part in the Easter Rebellion, he helped set up the Dáil Éirenn in 1919, which led to the formation of the Irish Republican Army. For ten points, name this Irish revolutionary leader who negotiated the the Anglo-Irish Treaty with Arthur Griffith and who was the subject of an semi-fictional 1996 film starring Liam Neeson.

Answer: Michael Collins
6. While working for the Este family, he penned the drama Aminta, first performed in 1573. A few years later he was put in an asylum for what is now believed to be schizophrenia by the duke of Ferrara, and during that time penned his masterpiece. Dying before he could be crowned poet laureate by Clement VIII, for ten points, name this Italian poet whose incarceration saw the writing of Jerusalem Delivered. Answer: Torquato Tasso
7. To the right side of the painting, a man plays a drum while a cat scurries between the crowd of people, while to the left a man in red carrying a musket conceals an oddly lit girl in white who stands before a pointing man dressed in gold. In the middle, a man in white, Willem van Ruytenburch, confers with his captain, dressed in black with a red sash, Captain Cocq. For ten points, name this 1642 painting depicting a militia, executed by Rembrandt.

Answer: The Night Watch or The Militia Company of Captain Frans Banning Cocq and of Lieutenant Willem van Ruytenburch
8. One came into use in 1993, while another began functional three years later. They each have an effective equivalent to a 10 meter mirror, achieved by coordinating 36 hexagonal mirrors. They can also work together through interferometry, making what is effectively an 85 meter mirror. Administered by Cal Tech, the University of California and NASA, for ten points, name this pair of telescopes, the largest of the Mauna Kea Observatory.

Answer: W.M. Keck Telescopes
9. Her story is told in Ad Urbe Condita by Livy, in which she is the daughter of Numitor, the king of Albalonga. Numitor's son Amulius seized power and executed Numitor's son, forcing her to become a Vestal Virgin to secure his power. Mars took a liking to her, and she was ordered buried alive as punishment for not being celibate, but the children conceived survived thanks to the mercy of the servant who was ordered to kill them. For ten points, name this woman, the mother of Romulus and Remus.

## Answer: Rhea Silvia

10. In 1998 President Clinton awarded the plaintiff of this Supreme Court case the Presidential Medal of Freedom, who had, in 1983, appealed with a writ of coram nobis that the US government knowingly presented false information. In it, the plaintiff argued that the President had overstepped his bounds with Executive Order 9066, and that his remaining in San Leandro, California, was not illegal. For ten points, name this 1944 case which ruled that the Japanese Internment of World War II was not unconstituional.

## Answer: Korematsu v. United States

11. According to Gorin, the use of the term "mole" to describe a quantity of a substance originates with this man, around 1900. The law
of dilution carries his name, however his fame rests with a commercial process which follows the Haber process and exposes the results to platinum and heat then runs those results through water. For ten points, name this Russian chemist whose namesake process is an industrial source for nitric acid.

## Answer: Wilhelm Ostwald

12. The river originates on Baitous Mountain, and its most significant tributaries are the Changjian, Herchun and Tokro rivers. Emptying out into the Korean bay between Dandong and Shinŭiju, the Sup'ung-nodongjagu dam provides hydroelectric power for the region. For ten points, name this river, which forms much of the border between North Korea and China, which, upon approach by UN troops in the Korean War, prompted the Chinese army to cross the river in response.

## Answer: Yalu River or Yalü jiang or Amnok-gang

13. Following the death of Antiochus IV Epiphanes, this empire took advantage of the weakening of the Seleucid weakness, and in 141 BC their king, Mithirdates I, captured Demetrius Nicator, the Seleucid king. By 129 BC, they had established a capital at Ctesiphon, and began intervening with the affairs of the Romans, including a 53 BC defeat of Crassus. For ten points, name this Middle Eastern empire, that ended with the rise of the Sassanid, or second Persian empire, in 224 AD.

## Answer: Parthian Empire

14. In 2002 he composed the musical Bombay Dreams with AR Rahman, while other musical works include Aspects of Love, The Beautiful Game, and Sunset Boulevard. Three of his musicals have been turned into film, with many of his works from the 1970s and 1980s being done with lyricist Tim Rice. For ten points, name this English composer of musicals whose works after parting with Tim Rice include The Phantom of the Opera and Cats.

Answer: Andrew Lloyd Webber
15. Stephen Sondheim converted this play into a musical, in which he replaces the two Greek playwrights with George Bernhard Shaw and William Shakespeare, with Shakespeare winning the competition. In the original play, Dionysus despairs at the lack of quality of living playwrights, and goes to bring Euripedes back from Hades. Aeschylus challenges him to a competition, wins, and is brought back instead. For ten points, name this Aristophanes comedy whose name comes from the animals that greet Dionysus when he is ferried across Styx.

## Answer: The Frogs

16. The third ship to carry this name is a Wasp-class amphibious assault vehicle, while the second was an Essex-class aircraft carrier that saw action from the end of World War II until Vietnam. The first was named for a work by Benjamin Franklin and built by the French East India Company that left Bordeaux to cruise against the British in the Bay of Biscay. For ten points, name this frigate whose engagement with the HMS Serapis on September 25, 1779 resulted in her being abandoned by John Paul Jones.

## Answer: USS Bonhomme Richard

17. In 1906 he published a collection of tales by Rabbi Nachman, and two years later published the stories of the Baal Shem Tov, the founder of Hasidism. During World War I, he helped start the Jewish National Commission, becoming a lecturer at the University of Frankfurt am Main, but was banned from lecturing by the Nazis and moved to Jerusalem in 1938. For ten points, name this Jewish philosopher and pedagogue who, in 1923, published his masterpiece I and Thou.

Answer: Martin or Mordechai Buber
18. Sir Anthony Absolute wishes for his son, a Captain, to marry Lydia Languish, unaware that he is already working in that direction in the guise of the broke Ensign Beverly to appeal to her romantic ideals. Lydia's aunt disapproves of the Ensign, and wishes her to marry Captain Absolute, while things get more complicated when Absolute's friend Bob Acres challenges to Ensign to a duel, as he too loves Lydia. For ten points, name this comedy which introduces Mrs. Malaprop to literature, written by Richard Sheridan.

Answer: The Rivals
19. It is descended from an earlier, as yet undeciphered script and was deciphered between 1951 and 1953 by Michael Ventris. First discovered on March 31 and April 6, 1900 in a cache of clay tablets by Arthur Evans, it is descended from the script for the Minoan language. For ten points, name this script, first located in Knossos, the syllabary used for the Mycenaen language.

Answer: Linear B
20. While at Harvard from 1945 until 1974, he realized that neutrinos come in multiple varieties, associated with the leptons. Leaving for UCLA in 1974, three of his students went on to win Nobel Prizes. For ten points, name this Nobel laureate, whose theory of renormalization and his work on quantum electrodynamics earned him the 1965 Nobel Prize in Physics with Richard Feynman and SinItiro Tomonaga.

Answer: Julian Schwinger
21. He was influenced by the "syndicalism" of Georges Sorel, and, after a 1902 vagrancy arrest in Switzerland, he went to Trento, where he wrote the novel The Cardinal's Mistress. Becoming the editor of Avanti, and an official of the Italian Socialist Party, he split to join the Milan fascio and create the newspaper The Italian People. For ten points, name this creator of fascism who became dictator of Italy in 1922 until his 1943 mob lynching.

Answer: Benito Amilcare Andrea Mussolini

## Bonuses

1. Identify the following explorers from their discoveries for ten points each.
(a) Stowing away in a cask to avoid his creditors, he established the city of Darién, the oldest surviving European settlement in the Western Hemisphere, and was the first European to see the Pacific Ocean.

Answer: Vasco Núñez de Balboa
(b) On his way to subduing the natives to establish Darién, Balboa was joined by this leader of the colony of San Sebastian who later went on to conquor Peru.

Answer: Francisco Pizarro
(c) This companion and rival of Pizarro joined him in the hopes of conquoring Peru, but a dispute over the division of territory resulted in his defeat at the Battle of Las Salinas. He is credited with discovering Chile.

## Answer: Diego de Almagro

2. Time for an illicit substance bonus. Identify the following about Dr. Alexander Shulgin for ten points each.
(a) Shulgin as a pharmacologist developed this drug, the original ecstacy, which is not equivalent to many street-produced drugs similar to ecstacy but with differing side effects.

## Answer: MDMA or 3,4-methylenedioxy-N-methylamphetamine

(b) Alexander Shulgin's creation of MDMA was during his employment with this German phamarceutical company, whose other developments include the isolation of morphine.

Answer: Merck KGaA or Merck \& Co.
(c) Sigmund Freud also collaborated with Merck in their research of this drug, a potent stimulant which Freud was himself an avid user of.

Answer: cocaine (the scientific name is two lines long)
3. Identify the following contributors to the development of genetics for the stated number of points each.
$(5,5,5)$ For five points each, name the three men who won the 1962 Nobel Prize in Medicine and Physiology for illucidating the structure of DNA, one a physicist who worked with X-ray diffraction, the other two a zoologist and a molecular biologist who met at Cavendish Labs.

Answer: Francis Harry Compton Crick, James Dewey Watson and Maurice Hugh Frederick Wilkins
(5) Watson and Crick used the lab work of this woman, an assisstant to Wilkins, in their discovery. Wilkins showed the other two her work without her knowledge. She died in 1958 of ovarian cancer.

Answer: Rosalind Franklin
(10) In 1905 this British biologist coined the term "genetics" in a letter to Adam Sedgwick. He was responsible for popularizing the works for Gregor Mendel.

Answer: William Bateson
4. Identify the artists of the American West for ten points each.
(a) He executed the bronze statue Bronco Buster

Answer: Frederic Cackrider Remington
(b) This photographer was co-founder of Group $\mathrm{f} / 64$ and was director of the Sierra Club, as well as executing a large number of photographs of national parks.

Answer: Ansel Adams
(c) In 1941 she sacrificed the Guggenheim Award to depict the forced relocation camps of the Japanese in the American West, while her photographs for the Farm Security Administration include Migrant Mother.

## Answer: Dorothea Lange

5. Identify the following works of William Faulkner for ten points each.
(a) This allegory for the passion of Jesus sees a young man leave Yoknapatawpha County for the French Army in World War I, where he incites a mutiny and is executed, won Faulkner the Pulitzer in 1955.

Answer: A Fable
(b) William Faulkner was also awared the Pulitzer posthumously for this work about the joyriding fun of Lucius Priest, Boon Hogganbeck and Ned McCaslin.

Answer: The Reivers
(c) Horace Benbow is an ineffectual intellectual who becomes involved in the events of Temple Drake, who is raped by Popeye, whom she later defends and accuses Benbow's client, Lee Goodwin. The story is continued in Requiem for a Nun.

Answer: Sanctuary
6. Identify the following things about applying magnetic fields to things for ten points each.
(a) This property of magnetism occurs when an external magnetic field is applied to matter, and the magnetization is in the opposite direction to the applied field, weakening the magnetic field inside matter.

Answer: diamagnetism (as opposed to paramagnetism)
(b) Superconductors exhibit this effect, which is perfect diamagnetism, is the total exclusion of magnetic flux from the body of a superconductor, and was discovered in 1933.

Answer: Meissner-Oschenfeld effect
(c) Diamagnetism was first observed by this man, whose namesake cage that confines electromagnetic fields, which he built in 1836.

Answer: Michael Faraday
7. Simple enough, I give you a lake, you tell me what nation it's located in. Five points each.
(a) Lake Tiberias, otherwise known as the Sea of Galilee

Answer: Israel
(b) Lake Ladoga

Answer: Russia
(c) Great Slave Lake

Answer: Canada
(d) Lough Erne

Answer: Ireland
(e) Lake Powai

Answer: India
(f) Lake Leopold II

Answer: Democratic Republic of the Congo or Zaire
8. Believe it or not, Australia has produced some literature! Identify the authors from the land down under from clues for ten points each.
(a) This author wrote the scripts for The Great Escape and To Sir, with Love, but he is perhaps better known for his series of works such as Shogun and King Rat.

Answer: James Clavell
(b) He penned the memoir Flaws in the Glass and the novels The Living and the Dead and Riders in the Chariot, and is the only Australian to win the Nobel Prize in literature, doing so in 1973.

## Answer: Patrick White

(c) Currently based in New York, this playwright has twice won the Booker Prize for his novels, the first time for 1988's Oscar and Lucinda and the second in 2001 for True History of the Kelly Gang.

## Answer Peter Carey

9. Name the Pre-Socratic philosophers from clues for ten points each.
(a) Numbered as one of the Sophists, and is famed for the quote "Man is the measure of all things, of those that are that they are, and of those that are not that they are not."

Answer: Protagoras
(b) The founder of the Eleatic school, his The Way of Truth argues that "nothing comes from nothing" while his On Nature exists only in fragments.

Answer: Parmenides of Elea
(c) Known as 'the Obscure' he is famous for saying "No man can cross the same river twice, because neither the man nor the river are the same," and argued that the universe is in flux, in opposition to Parmenides.

Answer: Heraclitus of Ephesus
10. Israel and its Arab neighbors have never gotten along. Identify the following spats that broke out between them for ten points each.
(a) This brief 1967 conflict began with Egypt, Syria and Jordan attacking Israel, and ended with Israeli forces under the command of Moshe Dayan occupying the Golan Heights, Gaza Strip, West Bank and Sinair Peninsula.

## Answer: Six-Day War

(b) Lasting from October 6 until late October of 1973, Egypt and Syria attacked Israel, and took much of the land lost in the Six-Day War before the IDF took it back. The lack of preparedness for the attack was pinned on Moshe Dayan, who resigned in 1974.

Answer: Yom Kippur War
(c) In 1982 Israel invaded this nation, forcing the PLO out of the country and occupying its southern half up to the capital of Beirut.

Answer: Lebanon
11. Identify the following of Chaucer's Canterbury Tales for ten points each.
(a) Arcite and Palamon are held by Theseus, duke of Athens, and fall in love with Emily. Getting out, they fight in a tournament for her hand, and Arcite wins, but dies before he can claim his prize.

Answer: The Knight's Tale
(b) The Queen sends a knight who rapes a woman on a quest to find what women want, giving him a year and a day to find out or his life is forfeit. He finds out from an old woman in return for marrying her, and she becomes fair and faithful after he complains that he is unhappy with the marriage.

Answer: The Wife of Baths' Tale
(c) In this tale, three revellers set out to kill Death. They find gold coins and forget about the quest, and while one runs off the fetch food and wine the others plot to kill him. He poisons the meal, they kill him, and the two die of the poisoned food.

Answer: The Pardoner's Tale
12. Name the opera composers from works for ten points each.
(a) Cavalleria Rusticana

Answer: Pietro Mascagni
(b) Bluebeard's Castle

Answer: Béla Bartók
(c) Der Freishütz, Oberon, King of the Fairies

Answer: Carl Maria von Weber
13. Identify the following things related to the US sending money abroad during the 20th century from clues for ten points each.
(a) This plan involved finding solutions to collecting reparations from Germany, and concluded a structured payment plan for Germany and required that the Reichsbank be reorganized under Allied supervision. The US then loaned Germany money to help finance this.

Answer: Dawes plan
(b) Proclaimed to Congress on March 12, 1947, this plan was first implemented by sending money to Greece and Turkey to combat communism, and an act of Congress granted both nations $\$ 400$ million.

## Answer: Truman Doctrine

(c) An economic strategy under Taft, it involved using US economic power to further foreign policy in Latin America and East Asia.

Answer: Dollar Diplomacy
14. Identify the following language families from clues for ten points each.
(a) This somewhat disputed language family includes some sixty languages, including the Turkic, Mongolian and Tungusic languages, as well as Korean, Japonic, and sometimes Ainu.

Answer: Altaic languages
(b) Including about 150 languages and 3 billion speakers, it was discovered in comparing Sanskrit to older dialects of Lithuanian, and includes almost every European language, as well as Hindi, Punjabi and Urdu, among others.

Answer: Indo-European languages
(c) Including the languages of the namesake Confederacy and Cherokee, this Native American language family of languages always includes at least one nasal vowel phoneme, and includes the Huron and Mohawk-Oneida Languages.

Answer: Iroquian languages
15. Given a definition, name the terms from topology for ten points each.
(a) It is the embedding of a circle in 3-D space, and the theory studying it is somewhat related to braid theory.

Answer: knot
(b) In graph theory, a subdivision of topology, this is the action of going along all the edges of a graph so that the beginning and ending points are the same. Examples include the Eulerian and Hamilton.

Answer: cycle
(c) A topological space is said to have this property if it cannot be divided into two disjoint nonempty open sets whose union is the entire space.

## Answer: connected

16. Answer the following about the humble beginnings of the Holy Roman Empire, for ten points each.
(a) The beginning of the Holy Roman Empire is usually marked by this son of Henry I the Fowler, who was crowned by Pope John XII in 962.

Answer: Otto I the Great
(b) Otto I first cemented his rule with the defeat of the Magyars in 955 at this battle near Augsburg.

## Answer: Battle of Lechfeld

(c) Henry V twice invaded Italy and set up an antipope over the issue of his control of ecclesiastical appointsments in Germany, eventually reaching an agreement with Pope Calixtus II in this 1122 agreement.

Answer: Concordat of Worms or Pactum Calixtinum
17. Given a plot summary name the operas composed by Austrians for ten points each.
(a) Alban Berg's first opera, it is about the title soldier and the infidelity of his mistress Marie that results in his stabbing her. Answer: Wozzeck
(b) Beethoven's only opera, it tells of how Leonore rescues her husband Florestan from prison.

## Answer: Fidelio

(c) This operetta by Johann Strauss, Jr. involves the Baron von Eisenstein spending eight days in prison for insulting an official, but his friend Notary Falke convinces him to attend a ball in the residence of Count Orlofsky, where the year before he had gone dressed as the title animal.

## Answer: Die Fledermaus or The Bat

18. Identify the following women Hera terrorized for their affairs with Zeus for ten points each.
(a) She was forbidden from giving birth on solid ground, so she discovered the island of Delos, where she gave birth to Artemis and Apollo.

Answer: Leto
(b) This poor woman had to give birth to Dionysus twice, the second time after Hera had Titans devour the child, leaving only his heart to be reimplanted into her womb.

Answer: Semele
(c) Hera sent a gadfly to sting this poor woman, who was turned into a heifer by Zeus to conceal his affair from his wife.

Answer: Io
19. Name the organic functional group from clues for ten points each.
(a) Containing an - OH group at the end of an organic compound, examples include methanol and phenol.

## Answer: alcohol

(b) This functional group contains a benzene ring with one hydrogen replaced by an organic compound.

> Answer: phenyl
(c) Two organic compounds are connected by an oxygen with single bonds.

Answer: ether
20. Answer the following about the Sturm und Drang literary movement for ten points each.
(a) The movement took its name from a play by this German author.

Answer: Friedrich Maximilian von Klinger
(b) Plays by this Sturm und Drang author include The New Menoza and The Soldiers.

Answer: Jakob Michael Reinhold Lenz
(c) This other German Romantic author penned the music for the opera Undine, the novels The Devil's Elixirs and Tom-Cat Murr, and was the subject of an Offenbach opera.

## Answer: Ernst Theodor Amadeus Hoffmann

21. The so-called "Bloodless Revolution" did in fact result in some blood being spilled. Identify the following battles that occurred in the aftermath of the ascension of William III for ten points each.
(a) The Jacobite forces of James II were defeated in this skirmish outside the town of Drogheda on July 1, 1690, and resulted in England ending James II's grip on the Irish throne.

Answer: Battle of the Boyne
(b) In 1746 the Young Pretender was turned back near Iverness at this battle, where the Duke of Cumberland that lasted around an hour and resulted in 1250 Jacobite deaths to only 300 Hanoverian.

Answer: Battle of Culloden
(c) The Third Jacobite uprising was squashed in this 1715 battle, the last battle fought on English soil, in which the Jacobites moved into Lancashire but were defeated by General Wills at the title town.

Answer: Battle of Preston

