

UNITED STATES ACADEMIC BOWL - SAMPLE PACKET

Updated September 2017

FIRST HALF: 8 POWERMARKED TOSSUPS WITH 3-PART BOUNCEBACK BONUSES. 20 points for power, 10 points for after powermark; 10 points per each bonus part

1. This book's second-to-last chapter is a deathbed speech to Judah and his brothers, one of whom gives the oath "God will surely remember you" in its last chapter. This book details the destruction of Sodom and Gomorrah and the near-sacrificing of (*) Isaac by his father, Abraham, as well as the expulsion of Adam and Eve from the Garden of Eden. For 10 points, name this first book of the Old Testament in which God creates the heaven and the earth.

Answer: Book of Genesis (or Bereishit)

BONUS: This god's seemingly contradictory tasks include taming horses and causing earthquakes. For 10 points

[10] Name this Greek god of the sea.

Answer: **Poseidon**

[10] Poseidon competed to be the patron god of this city, offering a well of salt-water. When his offering was denied in favor of Athena's offering, he cursed this city to suffer water shortages.

Answer: Athens

[10] Athena won the competition by planting this type of tree, which provides food and oil from its fruit.

Answer: olive tree

2. In one of this man's novels, the sealing of McDougal's Cave dooms a murderer to death by starvation. In another work, Hank Morgan's prediction of a solar eclipse saves him from being executed by Merlin. This author of (*) A Connecticut Yankee in King Arthur's Court wrote about a 12-year-old watching his own funeral and tricking his friends into whitewashing a fence. For 10 points, name this American author who created the characters of Huckleberry Finn and Tom Sawyer.

Answer: Mark Twain

BONUS: Antonio's opening line "In sooth, I know not why I am so sad..." is in this form, as is Duke Orsino's opening line "If music be the food of love, play on!" For 10 points each,

[10] Name this type of metrical line, consisting of 10 alternating unstressed and stressed syllables.

Answer: iambic pentameter

[10] This "Bard of Avon" used iambic pentameter in most of his works, including a poem that begins "Two households, both alike in dignity/ in fair Verona, where we lay our scene..." that opens his *Romeo and Juliet*.

Answer: William Shakespeare

[10] The prologue to *Romeo and Juliet*, as well as 154 of Shakespeare's poems, are in this poetic form, whose 14 lines are divided into three quatrains and a final rhyming couplet.

Answer: (Shakespearean) sonnet

3. The glycocalyx surrounds this entity in some bacteria cells. This structure's behavior can be explained by Singer and Nicolson's fluid mosaic model, in which this structure's lipid bilayer creates a (*) semi-permeable barrier that controls what molecules can pass through it. Plants and fungi feature an additional wall surrounding this structure. For 10 points, name this protective outer layer that protects the cytoplasm and organelles of a cell.

Answer: cell membrane

BONUS: Once known as brimstone, this element is an important component of black gunpowder and fertilizer. For 10 points each,

[10] Name this element with atomic number 16 and chemical symbol S.

Answer: **sulfur**

[10] Thiols are organic compounds that contain sulfur, just as alcohols contain oxygen. One important thiol, ethanethiol [ethane-thi-ol] is used to odorize this otherwise odorless fuel, allowing leaks to be easily detected.

Answer: <u>natural</u> <u>gas</u> (prompt on gas; accept <u>propane</u>, <u>butane</u>, <u>liquefied</u> <u>petroleum</u> <u>gas</u>, or <u>LPG</u>; do not accept gasoline)

[10] Sulfur is present in cysteine and methionine, two of the alpha type of these organic compounds which are crucial for protein formation. Methionine is an "essential" one of these substances, as it cannot be synthesized naturally by the body and must be consumed in one's diet.

Answer: **amino acid**s

4. This man wrote *Beyond the Pleasure Principle* and described "Irma's Injection" as mental wish fulfilment in *The Interpretation of Dreams*. This man's hypothesized (*) Oedipus Complex suggests that men strive to marry women like their mothers, and he insisted that "sometimes a cigar is just a cigar." For the point, name this Austrian psychologist, an early proponent of psychoanalysis or "talk therapy."

Answer: Sigmund Freud (accept Sigismund Schlomo Freud)

BONUS: This country's Northern Territory contains an enormous rock called Uluru, and its city of Melbourne is in the state of Victoria. For 10 points each,

[10] Name this country, whose capital city, Canberra, is part of a territory that is completely surrounded by the state of New South Wales.

Answer: Commonwealth of **Australia**

[10] The state of New South Wales also contains this largest Australian city, home to a magnificent Harbor Bridge and a namesake curved-metal Opera House.

Answer: **Sydney**

[10] South of the states of New South Wales and Victoria is this Australian island-state, named for a Dutch explorer.

answer: **Tasmania**

5. This man's victory at the Battle of Friedland led directly to the Treaty of Tilsit, though his successes at Jena [YAY-nah] and Auerstedt were ultimately reversed after defeat at Leipzig. His escape from the island of (*) Elba led to the Hundred Days, in which the Seventh Coalition defeated him and exiled him to St. Helena. For 10 points, name this French Emperor who ruled much of Europe prior to his last defeat at Waterloo.

Answer: Napoleon Bonaparte (prompt on Bonaparte; accept Napoleon I)

BONUS: This government was founded by leyasu after the Battle of Sekigahara. For 10 points each,

[10] Name this Japanese shogunate that lasted from 1600 until the 1868 Meiji Restoration.

Answer: **Tokugawa** shogunate

[10] Shoguns were military leaders supported by the daimyo, who held positions similar to lords in Western feudalism, and by these noble warriors that followed the bushido code.

Answer: **samurai**

[10] The Meiji restoration returned Japanese rule to this position, currently held by Akihito.

Answer: **Emperor**

6. This instrument's register key allows it to overblow by a twelfth. It is the woodwind instrument most commonly played in klezmer music, and Ross Gorman played a glissando on this instrument to open (*) Gershwin's *Rhapsody in Blue*. Aaron Copland's concerto for this instrument was written for Benny Goodman. For 10 points, name this single-reed woodwind instrument which is more common in orchestras than saxophones.

Answer: clarinet

BONUS: The painter himself appears in the background of this work holding a palette, while a mirror in the background shows a reflection of the King and Queen. For 10 points each,

[10] Name this painting of the young Margarita Teresa and her maids of honor, painted in 1656 by Diego Velazquez.

Answer: Las Meninas

[10] This earlier painter depicted a dark, brilliant sky in his *View of Toledo* [toh-LAY-doh]. He was born on Crete, as somewhat reflected by his nickname.

Answer: El Greco (or Domenikos Theotokopolous)

[10] El Greco's View of Toledo depicts a city in this country. Velazquez was court painter to its King Philip IV, who protected his work from the Inquisition.

Answer: **Spain**

7. No general formula exists to find the solutions of this type of equation if its degree is greater than four, though the quadratic formula will find their roots if they have degree two. These expressions combine (*) real numbers and variables using only addition, multiplication, and positive integer exponents, so x squared is one of these, but the square root of x is not. For 10 points, name these simple mathematical expressions whose name is Greek for "many parts."

Answer: polynomial functions or expressions

BONUS: This substance can freeze at 28 degrees Fahrenheit, depending on the concentration of the dissolved ions. For 10 points each,

[10] Name this substance, which covers over 70% of the Earth's surface and is contrasted with the much rarer "fresh" variety.

Answer: salt water or sea water or ocean water

[10] This is the process by which salt is removed from seawater to create drinkable water. The city of Carlsbad, California is building a large plant to carry out this process.

Answer: **desalination** or **desalinization**

[10] The majority of dissolved salts in seawater are ions of these two elements, which form common table salt when combined.

Answer: **sodium** and **chlorine** (accept in either order; accept **sodium** and **chloride**, as those are the ion names; accept \underline{Na}^+ ["N a," with or without a "plus"] and \underline{Cl}^- ["C I," with or without a "minus"]

8. One of these creatures named Noboru Wataya goes missing in Haruki Murakami's *The Wind-Up Bird Chronicle*, and the "Practical" kind of these creatures are the subject of *Old Possum's Book*. In *Through the Looking Glass*, (*) Snowdrop, the daughter of Dinah, is a white one of these animals. In one nursery rhyme, one of these "went to London to look at the queen;" in another, one of these animals learns to wear boots. Lewis Carroll created a Cheshire variety of, for 10 points, what mouse-chasing house pets?

Answer: **cat**s (accept equivalents)

BONUS: This author asks "Do I wake or sleep?" at the end of his "Ode to a Nightingale." For 10 points each, [10] Name this English poet of "Ode on a Grecian Urn."

Answer: John Keats

[10] Keats ends "Ode on a Grecian Urn" by claiming that this five word phrase is "all/Ye know on Earth, and all ye need to know."

Answer: "Beauty is truth, truth beauty"

[10] Keats also wrote a sonnet describing his experience reading George Chapman's translation of this legendarily blind Greek poet of the *Iliad* and the *Odyssey*.

Answer: Homer

HALFTIME: 60-Second Rounds – 10 pts. Per correct answer; + 20 point bonus for a sweep

LITERATURE: YOUNG ADULT AUTHORS

HISTORY: ALASKA

SCIENCE: THE NUMBER SIX

LITERATURE: YOUNG ADULT AUTHORS

Which author wrote...

The Harry Potter series?
 Answer: J.K. (or Joanne) Rowling
 The Silmarillion and The Hobbit?

Answer: J. R. R. (John Ronald Reuel) <u>Tolkien</u>
3. Looking for Alaska and The Fault in Our Stars?

Answer: John Green

4. The *Anne of Green Gables* series? Answer: Lucy Maud **Montgomery**

5. a book narrated by Death about the storytelling girl Liesel, The Book Thief?

Answer: Markus Zusak

6. about the amnesia-stricken Cadence in 2014's We Were Liars?

Answer: E. Lockhart (or Emily Jenkins)

HISTORY: ALASKA

In Alaskan history, who or what is...

1. The state's capital city?

Answer: Juneau

2. The natural disaster that caused a tsunami when it occurred under Prince William Sound on Good Friday,

1964?

Answer: **earthquake**

3. Its highest point, also the highest point in North America?

Answer: Mount McKinley or Denali

4. The former Mayor of Wasilla who ran for Vice President with John McCain in 2008?

Answer: Sarah Palin

5. The Secretary of State who purchased it from Russia?

Answer: William Seward

6. The protected region in Alaska's northeast whose large oil reserve is the subject of drilling proposals?

Answer: Arctic National Wildlife Refuge or ANWR (often pronounced ann-wahr)

SCIENCE: THE NUMBER 6 In math and science, what is...

1. The name for a six-sided polygon?

Answer: **hexagon**

2. The structure of six-sided cells that stores food within beehives?

Answer: **honeycomb**

3. The ringed sixth planet from the Sun?

Answer: Saturn

4. The element with atomic number six?

Answer: carbon

5. The name for integers, of which six is the smallest, that are equal to the sum of their proper divisors?

Answer: **perfect** number

6. The cancer-causing compound that becomes TNT when three nitro groups and a methyl group are added to its

six-member ring? Answer: **benzene**

SECOND HALF: 8 POWERMARKED TOSSUPS WITH 3-PART BOUNCEBACK BONUSES 20 points for power, 10 points for after powermark; 10 points per each bonus part

9. Hymir stopped this god from killing his rival after this god went fishing with a bull's head as bait. This god tried to recover the necklace Brisingamen by disguising himself as Freyja with (*) Loki's help, and is destined to die of poison after killing Jörmungandr [YOHR-mun-gon-dur] at Ragnarök. Mjolnir [mee-YOLL-neer], a magical hammer, is owned by, for the point, what Norse god of thunder and son of Odin?

Answer: Thor (accept Donar)

BONUS: This god swallowed Halahala poison to save the world, and gained a blue-tinted throat in the process. For 10 points each,

[10] Name this Hindu god, whose powers of death and rebirth complement the maintainer Vishnu and the creator Brahma.

Answer: Shiva

[10] Together, Shiva, Vishnu, and Brahma make up this group of three Hindu gods.

Answer: Trimurti

[10] The Trimurti are themselves complemented by the Tridevi, a group of three goddesses made up of Saraswati, Parvati, and this consort of Vishnu, who is often depicted wearing red and gold to symbolize wealth.

Answer: Lakshmi

10. This state's voters rejected a plan to finance the 1976 Winter Olympics after the IOC had awarded them the bid. A late 1850's mining boom near the Front Range in this state led to the creation of a mint in its current capital city. The US (*) Air Force Academy is based in this state, known as the Centennial State for its 1876 statehood. Its largest city is officially one mile above sea level. For 10 points, name this Rocky Mountain state with capital Denver.

Answer: Colorado

BONUS: Peter Fechter was shot and bled to death near this structure in 1962. For 10 points each, [10] Name this structure that divided the east and west halves of a European city during the Cold War.

Answer: Berlin Wall

[10] Berlin saw this type of event in 1948 when the US, France, and the UK brought in supplies to get around a Soviet blockade.

Answer: Airlift

[10] Twenty American and Soviet tanks had a standoff in October 1961 at this crossing in the Berlin Wall, near where Fechter was shot.

Answer: Checkpoint Charlie (or Checkpoint C)

11. In 2009, Anthony Wesley discovered a black spot in this planet's atmosphere. Comet Shoemaker-Levy 9 briefly orbited this planet in the 20th century. Like Neptune, this planet's ring system was not (*) discovered until a visit from a *Voyager* probe, though the discoveries of Callisto, Europa, Io, and Ganymede, its four largest moons, were made in 1614 by Galileo. For 10 points, name this fifth planet from the Sun, the largest in the solar system.

Answer: Jupiter

BONUS: These insects are vectors for chikungunya, dengue fever, and West Nile virus. For 10 points each,

[10] Name these insects, whose genera include Anopheles. They are extremely effective transmitters of many blood-borne diseases, though it's only the females of these insects that suck blood.

Answer: mosquitos

[10] This blood-borne parasitic disease is only carried by Anopheles mosquitoes. The first Western drug known to fight this disease was quinine, used in tonic water.

Answer: malaria

[10] The malaria parasite infects these cells, which deliver oxygen throughout the body. A dangerous deformity of these cells called sickle cell anemia actually provides resistance against malaria.

Answer: red blood cells or erythrocytes

12. A border dispute on this river led to the creation of the microstate Liberland in 2015. Farther downstream, this river passes through the Iron Gates where Trajan built a bridge. This river passes through (*) four national capitals, including Bratislava. Johann Strauss wrote a waltz inspired by the blue color of, for 10 points, what second-longest river in Europe that flows from the Black Forest to the Black Sea?

Answer: **Danube** River (or Donau, Duna, Dunai, Dunaj, Dunărea, or Dunav)

BONUS: This speech ironically notes that "The world will little note, nor long remember what we say here." For 10 points each,

[10] Name this ten-sentence long speech that closes by resolving that "government of the people, by the people, for the people, shall not perish from the earth."

Answer: **Gettysburg Address**

[10] This U.S. President gave the Gettysburg Address at a dedication of a national cemetery at Gettysburg.

Answer: Abraham Lincoln

[10] The Gettysburg Address opens by referencing the founding fathers, who had, this number of years earlier, "brought forth on this continent a new nation conceived in liberty."

Answer: **four score and seven** years (or **87** years)

13. This man painted his wife in a blonde wig, wearing a red kimono, and showed her standing in a white dress with his son, Jean, in another painting. Later in this man's life, he added more and more red into his paintings of a Japanese-style (*) bridge and floating flowers in his garden in Giverny. Earlier in his career, this man painted an early morning scene in La Havre that accidentally named the Impressionists. For the point, name this French artist who painted *Water Lilies* and *Impression: Sunrise*.

Answer: (Oscar-)Claude Monet

BONUS: This composer is often used as an example of the "Curse of the Ninth," a phenomenon in which composers write nine symphonies and die before completing a tenth. For 10 points each,

[10] Name this German composer, who wrote piano pieces like *Für Elise* and the *Moonlight Sonata* before going dear, and whose ninth symphony includes the "Ode to Joy" chorus.

Answer: Ludwig van Beethoven

[10] This Beethoven symphony's "short-short-long" motif has been nicknamed "fate knocking at the door."

Answer: Beethoven's **Fifth** Symphony

[10] This symphony was originally dedicated to Napoleon Bonaparte, but Beethoven withdrew the dedication to please a royal patron, and nicknamed this symphony to evoke military strength.

Answer: Beethoven's **Third** Symphony (accept **Heroic** Symphony or Sinfonia **Eroica**)

14. This country's turbulent colonial history featured the Eureka Stockade revolt and the Rum Rebellion. The Japanese bombed this country's north in 1942, concentrating their attacks on a city named for Charles (*) Darwin. Barriers in this nation were erected to keep out rabbits, introduced by Western settlers, as well as its wild dogs, called dingoes. State names like Victoria and Queensland reflect the British colonial past of, for 10 points, what southern hemisphere country with capital Canberra?

Answer: Australia

BONUS: This quantity is meant to stay within 1.5 to 2 percent per year. For 10 points each, [10] Give this term for the general increase in the price of goods and services in the economy.

Answer: **inflation** rate

[10] This central banking system of the United States uses monetary policy to keep inflation in check. It is currently led by Janet Yellen.

Answer: Federal Reserve (System)

[10] The Federal Reserve has three Congressionally-required objectives: stabilizing prices, maximizing employment, and controlling these values over the long run. For investments, if this rate is less than the inflation rate, the investment's value will decrease over time.

Answer: interest rate

15. Two of these particles fuse to form deuterium in the start of one of the two fusion chain reactions. These particles, which make up one-third of the mass of a tritium atom, are composed of two up (*) quarks and one down quark and are essentially chemically equivalent to hydrogen ions. The atomic number of an element is determined by the number of, for 10 points, what subatomic particles, found with neutrons in the nuclei of atoms, which have positive charge?

Answer: **proton**s

BONUS: One of these shapes is isosceles if and only if the base angles each equal 45 degrees. For 10 points each, [10] Name these specific shapes that are neither acute nor obtuse.

Answer: right triangles

[10] This theorem states that, in a right triangle with legs of length a and b and hypotenuse of length c, the formula a squared plus b squared equals c squared will always be true.

Answer: **Pythagorean** Theorem (or Formula)

[10] A law named for this trigonometric function extends the Pythagorean Theorem to non-right triangles.

Answer: cosine

16. This literary character murders Jehan [zhay-ahn] when he attempts to rescue the wife of Pierre Gringoire [pee-ayr gran-wahr]. He acts as a messenger between Gudule's lost daughter, Agnes [ah-nyes], and the captain of the king's archers, (*) Phoebus; later, this title character kills his adopted father, Archdeacon Claude Frollo. His remains are eventually found mingled with those of Esmeralda, a beautiful gypsy girl. For 10 points, name this Victor Hugo protagonist, the deformed bell ringer of a Paris cathedral.

Answer: Quasimodo (or the Hunchback of Notre-Dame)

BONUS: In this play, John Proctor cries that he is "not worth the dust on the feet of them that hang." For 10 points each,

[10] Name this Arthur Miller play, set in 17th century Salem and written as an allegory of Joseph McCarthy's hunt for Communists in the government.

Answer: The Crucible

[10] *The Crucible* concerns these events in Salem, in which twenty people were tried and executed on children's suspicions that they were practicing sorcery.

Answer: Salem witch trials (accept any description of a trial about witchcraft)

[10] Near the end of the play, John Proctor refuses to submit his signed confession, shouting "I have given you my soul; leave me [this thing]."

Answer: his <u>name</u>

TIEBREAKER TOSSUP: This city is home to the Marina City building complex and an excavated hole that was going to be the site of a 2,000 foot tall spire at 400 North Lake Shore Drive. Fazlur Khan's tube design was used for this city's (*) John Hancock Building and for a 108-story skyscraper that changed its name in 2009. The Willis Tower, formerly the Sears Tower, is the tallest building in, for 10 points, what largest city in Illinois?

Answer: Chicago