Academic Bowl Round 1

First Half

(1) This man names a double-arched bridge crossing the Harlem River in New York City. This man also names a prestigious university in St. Louis and is memorialized with a 555-foot tall obelisk (*) capped with aluminum in the U.S. The largest city named for this man sits in federal territory originally taken from Virginia and Maryland. For ten points, give the namesake of both a Pacific Northwest state and the capital of the United States.

ANSWER: George <u>Washington</u> (accept <u>Washington</u> Bridge; accept <u>Washington</u> Monument; accept <u>Washington</u> University in St. Louis; accept <u>Washington</u>, D.C.; prompt on "WashU" or "WUSTL")

(bonus) The name for this range translates as Pahá Sápa in the language of a Sioux tribe in the region. For ten points each,

* Name this mountain range in which the Jewel Cave National Monument can be found near the town of Custer.

ANSWER: Black Hills

* The Black Hills are home to Mount Rushmore, which can be found in this state, also home to Sioux Falls.

ANSWER: South Dakota

* This Sioux tribe from the region around what is today South Dakota are also known as the Teton Sioux and include the Oglala as a sub-tribe.

ANSWER: Lakota Sioux (or Lakotas)

(2) This artist, who designed sets for his friend, Federico García Lorca, used his wife, Gala, as a model for the artwork *The Madonna of Port Lligat* [[YEE-gaht]]. An odd conversation between this person and poet Edward James led to this artist's creation titled *Lobster Telephone*. (*) Clocks melt on a Catalonian shore in, for ten points, what surrealist artist's work *The Persistence of Memory*?

ANSWER: Salvador <u>Dalí</u> (or Salvador Domingo Felipe Jacinto <u>Dalí</u> i Domènech; or 1st Marquess of <u>Dalí</u> of Púbol)

(bonus) In one piece by this artist, a winged figure sits in front of a building that contains an hourglass and a magic square on its wall. For ten points each,

* Name this engraver of *St. Jerome in His Study* and *Knight, Death, and the Devil.*

ANSWER: Albrecht **Dürer**

* Dürer was a Renaissance artist from what is now this country, whose architecture includes a royal palace in Munich.

ANSWER: Federal Republic of <u>Germany</u> (accept Bundesrepublik <u>Deustchland</u>)

* An elk, a goat, and a tropical bird unusually appear in Dürer's 1504 engraving of these two people. Masaccio placed a single cherub above these two people in a fresco depicting their expulsion.

ANSWER: <u>Adam</u> and <u>Eve</u> (accept in either order; prompt on partial answers)

(3) In Sparta, this deity was worshipped in a warlike aspect under the name Areia. This deity was worshiped in the form of a blank black rock in Cyprus. This deity promised Paris the most (*) beautiful woman in the world in exchange for a golden apple. Most sources list this deity as being born from the foam of the ocean. For ten points, name this Greek goddess of love.

ANSWER: <u>Aphrodite</u> (accept <u>Venus</u> before "Greek" is mentioned)

(bonus) The Phrygian [[FRIH-jee-un]] prince Adrastus killed this man's son with a spearhead while hunting a boar. For ten points each,

* Name this Lydian king known for his fabulous wealth. This Anatolian king lost to the Persians at Thymbra.

ANSWER: **<u>Croesus</u>** (accept <u>Krowiśaś</u>; or <u>Kroisos</u>)

* Croesus is given credit for inventing this specific type of money, using an alloy of silver and gold called *electrum*.

ANSWER: Minted <u>Coin</u>s (prompt on "Currency" or "Money")

* Croesus neighbored a Phrygian king with this name. A mythological king of this name turned everything he touched into gold.

ANSWER: <u>Midas</u> (accept <u>Midas</u> touch)

(4) This leader worked together with Clement Attlee to create a coalition government and was later defeated in an election by Attlee. This person coined the term "iron curtain" to describe Soviet influence and declared that future (*) generations would call their country's defense of the Blitz "their finest hour." For ten points, name this prime minister of the United Kingdom during World War Two.

ANSWER: Winston Churchill (or Winston Leonard Spencer Churchill)

(bonus) This event led to the myth that graves must be dug six-feet deep due to 17th century officials believing it inhibited the spread of disease. For ten points each,

* Name this 1665 to 1666 event, sometimes known as the Second Pandemic, taking place in the English capital during the reign of King Charles II.

ANSWER: Great **Plague** of **London** (prompt on "Plague" or "Great Plague")

* The Royal Court moved to Salisbury and then to this city north of London. It contains the oldest English university in the world.

ANSWER: **<u>Oxford</u>** (accept University of <u>**Oxford**</u>; accept <u>**Oxford**</u> University)

* This Englishman wrote in his diary, "Lord! How empty the streets are..." in reference to the Great Plague. He also wrote on the Great Fire of London later that year in a namesake diary.

ANSWER: Samuel <u>Pepys</u> [[PEEPS]] (accept *Diary of Samuel <u>Pepys</u>*; accept <u>Pepys</u>'s Diary)

(5) One of this man's works features Parmenides (par-MEN-ih-deez) and his student arguing with each other and provides one of the first distinctions between subject and predicate. This author of the Sophist dialogue also lends his name to a type of solid, (*) derived from a discussion of them in *Timaeus*. This founder of the Academy in Athens also posited his Theory of Forms, exemplified in the Allegory of the Cave. For ten points, name this author of the *Republic*.

ANSWER: <u>Plato</u> (accept <u>Plato</u>nic solid; accept <u>Plato</u>'s *Republic*)

(bonus) Jehovah's Witnesses believe that just 144 thousand people will enter heaven due to the text of the Book of Revelation. For ten points each,

* The text of the Book of Revelation was delivered by a figure with this name, who may or may not have been a "Beloved Apostle."

ANSWER: St. <u>John</u> the Apostle (accept Apostle <u>John</u>; accept <u>John</u> the Evangelist; accept <u>John</u> of Patmos; accept <u>John</u> the Presbyter)

* The Book of Revelation is the only Biblical book to overtly tell of this event. "Four Horsemen" are said to herald this event, which will involve the Last Judgement.

ANSWER: The **Apocalypse** (accept answers indicating the end of the world)

* The Book of Revelation is addressed to this group. One member of this group "is granted to eat from the tree of life" and is located in Ephesus [[EFF-eh-sus]].

ANSWER: The <u>Seven Churches</u> of Asia (accept <u>Seven Churches</u> of Revelation; accept <u>Seven Churches</u> of the Apocalypse; prompt on partial answers) (6) The "tricyclic" class of these drugs blocks the SERT and NET transporter proteins. Drugs of this type such as MAOIs block the enzyme monoamine [[mon-oh-AM-een]] oxidase, which can break down norepinephrine [[nor-ep-in-EFF-rin]]. The SSRI (*) class of these drugs includes Zoloft and Prozac, which increase extracellular levels of the neurotransmitter serotonin. For ten points, name these drugs that treat a mental disorder characterized by inactivity and persistently low mood.

ANSWER: <u>Antidepressant</u>s (accept descriptive answers regarding drugs that treat <u>depression</u>; prompt on "psychiatric drugs" or "psychotropic drugs" or "psych drugs")

(bonus) A golden jackal eating what is left of a tiger's prey is an example of this phenomenon. For ten points each,

* Name this form of symbiosis in which one species benefits and another is neither helped nor harmed.

ANSWER: <u>Commensal</u>ism (accept word forms)

* A mosquito sucking on the blood of a host is an example of this relationship in which one species benefits and the other is harmed.

ANSWER: **Parasit**ism (accept word forms)

* Egg mimicry is a common form of this sub-type of parasitism in which a member of a species tricks another into raising its offspring.

ANSWER: **<u>Brood</u>** parasitism

(7) This man ordered the construction of the Church of the Holy Sepulchre [[SEPul-ker]] and attempted to solve the Arian controversy by convening the First Council of Nicaea. This ruler made his soldiers inscribe the Chi-Rho (*) in their shields after viewing a cross in the sky. After this emperor defeated Maxentius at the Battle of the Milvian Bridge, he unified the Roman Empire. For ten points, name this first Christian emperor of Rome.

ANSWER: <u>Constantine</u> I (or Flavius Valerius <u>Constantinus</u>; accept <u>Constantine</u> "the Great")

(bonus) This man supposedly earned one epithet after convincing the anti-Hadrian senators to deify his predecessor, who had recently died. For ten points each,

* Name this one of the Five Good Emperors whose 2nd Century AD reign was characterized by relative peace. He names a wall that temporarily superseded Hadrian's Wall.

ANSWER: <u>Antoninus</u> Pius (accept the <u>Antonine</u> Wall; prompt on "Pius")

* Antoninus Pius adopted both Lucius Verus and this Stoicist to rule as co-emperors. This emperor, who wrote *Meditations*, won the Marcomannic Wars.

ANSWER: Marcus Aurelius Verus (accept either underlined portion)

* The term "Five Good Emperors" was coined in 1531 by this Florentine author of *The Prince*.

ANSWER: Niccolò <u>Machiavelli</u> (or Niccolò di Bernardo dei <u>Machiavelli</u>)

(8) The proposal of the shell model of these structures won a Nobel Prize for Maria Goeppert Mayer. These structures are more stable at "magic numbers," and in one experiment, Hans Geiger and Ernest Marsden beamed alpha (*) particles off of this structure. For ten points, what are these dense structures at the center of an atom?

ANSWER: Atomic <u>Nucleus</u> (accept Atomic <u>Nuclei</u>; accept answers regarding the <u>nucleus</u> of an atom)

(bonus) Philipp Lenard continued the cathode ray studies of this man, who was also known for his early work on radio waves. For ten points each,

* Identify this physicist who names an SI unit measured in cycles per second.

ANSWER: Heinrich Hertz (or Heinrich Rudolf Hertz)

* Hertz names the SI unit for this aforementioned quantity that measures how many instances of an event occur in a given amount of time.

ANSWER: Frequency (accept Temporal frequency; accept Ordinary frequency)

* This term refers to the amount of time in a given cycle for which frequency is measured.

ANSWER: **Period**

Halftime

The categories are:

- 1. Mark Twain
- 2. 20th-Century China
- 3. Engineering Failures

Mark Twain

Concerning the works and life of author Mark Twain, name the...

(1) Animal that is celebrated in Calaveras County for its jumping ability.

ANSWER: **Frog** (accept "The Celebrated Jumping **Frog** of Calaveras County")

(2) U.S. state, home to Hank Morgan who is transported from Hartford to medieval times.

ANSWER: <u>Connecticut</u> (accept A <u>Connecticut</u> Yankee in King Arthur's Court

(3) Work of mistaken identity in which Tom becomes royalty and Edward becomes poor.

ANSWER: The Prince and the Pauper

(4) Number of fathoms from a "river depth" term from which he took his pen name.

ANSWER: <u>**Two</u>** fathoms</u>

(5) Satirical novel that warns against greed and names an era of U.S. history.

ANSWER: The <u>Gilded Age</u>: A Tale of Today

(6) Book in which he described the three years he spent in Nevada.

ANSWER: *Roughing It*

20th-Century China

Regarding the 20th Century in China, name the...

(1) Communist leader who initiated the Great Leap Forward.

ANSWER: <u>Mao</u> Zedong (or Chairman <u>Mao</u>; accept <u>Mao</u> Tse-tung)

(2) Island to which Chiang Kai-Shek and the Nationalists fled.

ANSWER: Taiwan (or Formosa)

(3) Region which seceded in 1912 under the Dalai Lama.

ANSWER: **<u>Tibet</u>** (or <u>Böd</u>; or <u>Xizang</u>)

(4) Group of birds killed during the Great Leap Forward, leading to a locust plague.

ANSWER: Old World **Sparrow** (accept True **sparrow**; accept *Passeridae***; accept Passerine**; accept **Maque** [[ma-CHWEH]])

(5) Founder of the Chinese Republic and the Kuomintang.

ANSWER: <u>Sun</u> Yat-sen (or <u>Sun</u> Zhognshan; or <u>Sun</u> Deming; or <u>Sun</u> Wen; prompt on "Yatsen")

(6) First region of China to be invaded by the Japanese Army.

ANSWER: <u>Manchuria</u> (accept <u>Dongbei</u>; accept <u>Manchukuo</u>; prompt on "Northeast")

Engineering Failures

Tragic cases of poor design, maintenance, or engineering have led to disasters. Name the...

(1) Type of environmental disaster caused by the explosion of the BP *Deepwater Horizon*

ANSWER: **<u>Oil spill</u>** (accept similar answers involving <u>**Oil**</u> getting into the ocean)

(2) Type of substance released from a Union Carbide plant in Bhopal, India in 1984.

ANSWER: <u>Pesticide</u> (accept <u>Insecticide</u>; accept <u>Carbaryl</u>; accept <u>Sevin</u>; accept <u>Methyl</u> <u>isocyanate</u>)

(3) First NASA Space Station, whose decaying orbit led to scattered debris in Western Australia.

ANSWER: <u>Skylab</u>

(4) Pennsylvania city which flooded due to the failure of the South Fork Dam.

ANSWER: Johnstown

(5) Rubber seals which shattered at low temperature, causing the *Challenger* explosion.

ANSWER: **<u>O-ring</u>s (or <u>Toric joint</u>; prompt on "packing")**

(6) Form of oscillation in which winds matched the natural frequency of the Tacoma Narrows Bridge, causing vibrations and collapse.

ANSWER: Mechanical resonance

Second Half

(1) This material was used by Edvard Eriksen to create *The Little Mermaid* overlooking the water in Copenhagen. The ancient Greek *Boxer at Rest* and *Charioteer of Delphi* are two of the oldest (*) statues created using this material. Used to create Donatello's *David*, for ten points, what is this alloy composed primarily of copper?

ANSWER: Bronze

(bonus) This artist is considered to be the founder of modern sculpture. For ten points each,

* Name this French sculptor whose works include *The Gates of Hell, The Age of Bronze,* and *The Thinker*.

ANSWER: Auguste **Rodin** (or François Auguste René **Rodin**)

* Rodin was the mentor of this Romanian sculptor, whose works include *The Endless Column* and *Bird in Space*.

ANSWER: Constantin **Brâncuși** [[bran-KOOSH]]

* Both Rodin and Brâncuși had works with this name. It is also the name of a famous painting by Gustav Klimt, depicting a couple performing the title action.

ANSWER: The <u>Kiss</u> (or Le <u>Baiser</u>)

(2) One of the defending tank commanders who participated in this battle was former Olympic gold medalist Takeichi Nishi. During this battle, General Kuribayashi engineered a system of underground tunnels and prohibited *banzai* charges. Joe Rosenthal (*) took an iconic photograph during this battle depicting six Marines raising the U.S. flag on top of Mount Suribachi. For ten points, name this World War Two battle that took place in 1945 on a Japanese island.

ANSWER: Battle of **Iwo Jima**

(bonus) Operation Torch was a strategic invasion of this modern day nation, and its western neighbor meant to overthrow the Axis occupation of North Africa. For ten points each,

* Name this modern state which, along with neighboring Morocco, faced naval invasions by the Allies in ports like Oran during Operation Torch.

ANSWER: People's Democratic Republic of <u>Algeria</u> (or Al Jumhuriyah <u>al Jaza'ir</u>iyah ad Dimuqratiyah ash Sha'biyah; accept French <u>Algeria</u>)

* The success of Operation Torch led to the collapse of this collaborationist regime of France led by Marshal Pétain [[peh-TAHN]].

ANSWER: <u>Vichy</u> France (or Régime de <u>Vichy</u>; or <u>French State</u>; or <u>État français</u>; prompt on "France")

* The operational headquarters of Operation Torch was this city in Southern Spain which to this day is an overseas territory of the British.

ANSWER: Gibraltar

(3) A 1966 prequel to this novel recasts one of its characters as Antoinette Cosway and was written by Jean Rhys under the title *Wide Sargasso Sea*. The attic of Thornfield Hall, the estate of Edward Rochester, (*) is revealed to be the prison of the "madwoman" Bertha Mason in this novel. For ten points, name this novel, written under the pseudonym "Currer Bell," by Charlotte Brontë.

ANSWER: Jane Eyre: An Autobiography

(bonus) The title character of this poem is described as having "a heart too soon made glad." For ten points each,

* Name this poem, thought to have been narrated by a nobleman from Ferrara.

ANSWER: "<u>My Last Duchess</u>"

* "My Last Duchess" is among the best-known poems of this Englishman who married fellow poet Elizabeth Barrett.

ANSWER: **<u>R</u>obert <u>Browning</u>**

* These first five words that form a question from Sonnet 43 in Elizabeth Barrett Browning's *Sonnets from the Portuguese* come immediately before "Let me count the ways."

ANSWER: "How do I love thee?"

(4) **Drugs that target this structure include cephalosporins [[see-fah-loh-SPOHrins]], which have a four-membered lactam ring. Alternating NAG and NAM sugars make up a polymer within this structure that is cleaved by lysozyme. This structure's retention (*) of crystal violet is used to classify bacteria as Gram-positive or negative based on its peptidoglycan [[pep-tih-doh-GLY-kan]] content. For ten points, name this rigid structure that surrounds the cell membrane in bacteria.**

ANSWER: Cell **wall** (do not accept or prompt on "cell membrane")

(bonus) Six molecules of carbon dioxide and six molecules of water are the reactants in this common reaction undergone by plants. For ten points each,

* Name this reaction that involves the conversion of chemical to light energy.

ANSWER: **Photosynthesis**

* This organelle in plants is the site of the photosynthesis.

ANSWER: <u>Chloroplast</u>

* Chloroplasts are considered endosymbiotic varieties of these Gram-negative bacteria.

ANSWER: **Cyanobacteria** (accept **Cyanophyta**; accept **Blue-green algae**)

(5) This 1922 work follows its protagonist through the events of one day, specifically June 16, 1904. Davy Byrne's pub, Bella Cohen's brothel, and the Ormond Hotel are among the locations that Leopold Bloom visits as he crisscrosses (*) Dublin, this novel's setting. For ten points, name this modernist classic novel by James Joyce that draws parallels to a Homeric epic poem.

ANSWER: <u>Ulysses</u>

(bonus) Historians often see this work as a legitimization of the rule of the Julio-Claudian Dynasty. For ten points each,

* Name this epic about a Trojan whose voyage to Italy led him to become an ancestor of the Romans.

ANSWER: The <u>Aeneid</u>

* *The Aeneid* was written by Vergil, a prominent poet from the Augustan period of this empire.

ANSWER: **<u>Roman</u>** Empire (accept <u>Rome</u>)

* The *Pharsalia* was another prominent Roman epic chronicling a conflict which was "lost" by this man whose head was later sent to the victor.

ANSWER: **<u>Pompey</u>** the Great (accept Gnaeus <u>**Pompeius**</u> Magnus)

(6) At the Battle of the Thames in the War of 1812, this man led a force that killed Tecumseh in battle, which followed his victory in Tippecanoe two years earlier. This president delivered the longest inaugural (*) address in American history, after which he contracted pneumonia. For ten points, name this ninth U.S. president whose term was shorter than any other.

ANSWER: <u>W</u>illiam Henry <u>Harrison</u> (prompt on Harrison; do not accept or prompt on "Benjamin Harrison")

(bonus) One namesake of this treaty put out a false map supposedly drawn by Benjamin Franklin which showed a New England state's borders being akin to the borders for which he negotiated in this treaty. For ten points each,

* Name this 1842 treaty between the UK and the US which fixed the borders of Maine and New Brunswick.

ANSWER: Webster-Ashburton Treaty

* The Webster-Ashburton Treaty also created bylaws agreeing to share this geographic region, which includes Lake Huron and Lake Superior.

ANSWER: Great Lakes Region

* The Webster-Ashburton Treaty was signed during the presidency of this Whig, who later earned a seat in the Confederate House of Representatives.

ANSWER: John <u>**Tyler**</u>

(7) **Creep and stress in these objects are related by Glen's Flow Law. Bergschrunds** [[BEHRG-shrunds]] can form when one of these objects in motion separates from the headwall. Collections of debris carried along by these (*) objects are known as moraines, while calving is the breaking off of parts of these objects. For ten points, name these large masses of ice, the "alpine" variety of which is found on the slopes of mountains.

ANSWER: **<u>Glacier</u>s** (accept Alpine **<u>glacier</u>**)

(bonus) Tides on earth are powered by the relative gravitational pulls of the sun, moon, and Earth. For ten points each,

* When the moon is in the first or third quarter, tidal range is at its minimum and has this name, taken from the Anglo-Saxon for "without the power."

ANSWER: <u>Neap</u> tide

* When tidal range is at its maximum, it has this name, not taken from the name of a season but from the tide "bursting forth."

ANSWER: **<u>Spring</u>** tide (accept <u>Syzygy</u> tide)

* During a Spring tide, this period in between tidal reversals is shorter than average. It takes its name from the fact that the water is "unstressed."

ANSWER: <u>Slack</u> water

(8) These objects are awarded the Bellwether Prize for their excellence in addressing issues of social justice. These objects, if created in the United Kingdom, are eligible to win a Costa Award, as *The Lie Tree* (*) did in 2015. Edgar Awards and the Booker Prize are given for the creation of, for ten points, what literary objects which include biographies and novels?

ANSWER: **<u>Book</u>**s (accept **<u>Novel</u>**s and similar answers before mentioned)

(bonus) Hari Seldon's attempts to preserve civilization are the focus on this author's *Foundation* series. For ten points each,

* Name this Russian-born science fiction author also known for writing the *Foundation* and *Galactic Empire* series.

ANSWER: Isaac Asimov

* Asimov created a set of this many laws of robotics, including a law stating, "A robot may not injure a human being."

ANSWER: <u>Three</u> (accept <u>Three</u> Laws of Robotics)

* The Three Laws of Robotics were introduced in this Asimov novel that also names a 2004 Will Smith film loosely based on the novel.

ANSWER: <u>I, Robot</u>

Extra Question

(1) The Mongolian variant of this day is called Tsagaan Sar. A major offensive took place in Vietnam named after the Vietnamese celebration of this day, its full name being Tet Nguyen [[WIN]] Dan. Japanese give their children gifts of *otoshidama* on this day, which is celebrated by the Chinese with (*) lion dances and red packets in a "lunar" version of this day. For ten points, name this day celebrated all over the world, recognizing the end of the previous year.

ANSWER: <u>New Year</u>'s Day (accept Lunar <u>New Year</u>; accept <u>Tet</u> Nguyen Dan or <u>Tet</u> Offensive before mentioned)

(bonus) Many record shops and art galleries line this city's Cuba Street. For ten points each,

* Name this capital city that lies next to the Cook Strait.

ANSWER: <u>Wellington</u>

* Wellington is the capital of this country, whose name is "Aotearoa" [[OW-teh-ah-ROH-ah]] in the Maori language.

ANSWER: <u>New Zealand</u>

* Nicknamed "The Garden City," this New Zealand city is the seat of the region of Canterbury and was the site of numerous 2010-2012 earthquakes.

ANSWER: <u>Christchurch</u>