Packet 1

Tossups:

1. Ceres was sometimes depicted carrying a caduceus, which is a staff with two of these creatures on it. In Norse mythology, Thor attempts to lift a cat, which is actually the "World" one of these creatures. That creature is the son of Loki and is named Jörmungandr (YOER-mun-gahn-dur). In Greek mythology, Medusa's (*) hair is made of these animals. For 10 points, name these animals, one of which, known as Python, was killed by Apollo.  
   ANSWER: snakes [accept serpents or other similar answers] <Gollamudi, Mythology>

2. Michel de Montaigne first popularized this form of writing, and Ralph Waldo Emerson critiqued "foolish consistency" in a work in this form titled 'Self-Reliance'. This form of writing has "expository," "descriptive," and (*) "argumentative" types. Many high school English classes teach the "five-paragraph" form of, for 10 points, what short type of writing in which you prove a thesis statement with supporting examples?  
   ANSWER: essays <Kher, Literature>

3. A 12th-century set of equipment for this activity discovered on the Scottish island of Lewis is made of walrus ivory. This activity was the subject of a series of competitions between a computer named Deep Blue and world champion Garry (*) Kasparov. The Ruy Lopez is a common opening in this game, which is the subject of Netflix’s The Queen’s Gambit. For 10 points, what game is won by checkmating your opponent’s king?  
   ANSWER: chess <R. Ganeshan, General Knowledge>
4. Epic Games is headquartered in this state's city of Asheville. This state's college basketball rivalries are collectively described by the term "Tobacco Road". A university in this state produced the first pick in the 2019 NBA Draft, (*) Zion Williamson. This state contains the Research Triangle, and its Outer Banks were the site of the first powered flight. For 10 points, what US state's capital is Raleigh?
ANSWER: North Carolina <Tagtmeier, Popular Culture>

5. The background of this painting depicts the Dibble House in Eldon, Iowa. This painting's name comes from a window seen between its two central figures, one of whom wears an apron and the other of whom is wearing overalls. The artist's sister and his dentist were the models for the people in this painting. A (*) pitchfork is held by the right figure of, for 10 points, what painting by Grant Wood?
ANSWER: American Gothic <Young, Fine Arts>

6. A philosopher from this country described "father to son" and "ruler to subject" as two of his five fundamental human relationships, as part of his teachings in the Analects. Many philosophers from this country advocated venerating one's (*) ancestors, a practice known as "filial piety". Taoism was developed in, for 10 points, what country where Confucius was from, and where his teachings were adopted in the Forbidden City?
ANSWER: China [or Zhongguo] <Kher, Philosophy>

7. This work opens by describing an egg on a leaf in the moonlight, out of which comes the title creature. On Saturday night, the title character of this work has a stomachache after eating foods such as chocolate cake and ice cream. At the end of this story, that creature stays in a (*) cocoon for two weeks before becoming a butterfly. For 10 points, what picture book by Eric Carle details the food eaten by the title insect?
ANSWER: The Very Hungry Caterpillar <Bodducherla, General Knowledge>

8. A song sung during this holiday repeats the line "It would have been enough", or "Dayenu". People read from a Haggadah while observing traditions on this holiday like asking the "four questions" and recounting the story of the Exodus during a (*) seder. During this holiday, Jews abstain from eating leavened bread in favor of matzah. For 10 points, what holiday celebrates the escape of the Jews from Egypt?
ANSWER: Passover [accept Pesach] <Kohn, Religion>

9. In ASCII (ASK-ee) code, this number represents the end of text. Calcite has this value on the Mohs scale. Computer displays build all colors from this many base colors. Newton's law of this number states that every action has an (*) equal and opposite reaction. This is the smallest number in the only known prime triplet. For 10 points, what number, the smallest odd prime, is the number of sides in a triangle?
ANSWER: three <Gollamudi, Science>

10. After a crowd in this city threw snowballs at Thomas Preston's soldiers, Crispus Attucks was killed. The Intolerable Acts were passed in response to an event in this city in which members of the Sons of Liberty dressed as Mohawk Indians. British soldiers committed a 1770 (*) massacre in this city, where rebels threw crates into the Atlantic Ocean in a namesake "Tea Party." For 10 points, name this capital of Massachusetts.
ANSWER: Boston, Massachusetts <Koutsoukos, History>

11. A prophecy in this play is satisfied when an army dresses as trees to camouflage themselves. A woman in this play sleepwalks through a castle while guiltily trying to wash invisible blood off her hands, declaring "Out, damned spot!" The title character of this play kills (*) Banquo to defend his throne after earlier killing Duncan. For 10 points, name this Shakespeare play about the schemes of a Scottish king.
ANSWER: The Tragedy of Macbeth <S. Ganeshan, Literature>
12. Scott Kelly spent a year at this location as part of a study with his twin, Mark. This object's Mobile Servicing Unit contains the robotic Canadarm2. This object, powered by 16 solar arrays, can support the docking of the Soyuz and Dragon capsules. (*) Skylab was NASA's predecessor to this satellite. Astronauts conduct experiments on space in, for 10 points, what artificial satellite, the largest man-made object in space?
ANSWER: International Space Station [or ISS; prompt on space station] <A. Gao, Science>

13. In the Harry Potter series, Hagrid owns a multi-headed one of these animals named Fluffy which guards the Sorcerer's Stone. Kate DiCamillo wrote a book about one of these animals, named after and found in the supermarket (*) Winn Dixie. After a cyclone hits in The Wizard of Oz, Dorothy searches for one of these animals named Toto. For 10 points, name these canines, exemplified by a "big red" one named Clifford.
ANSWER: dogs [accept Clifford the Big Red Dog; prompt on canine before mention] <A. Gao, Literature>

14. This man, who built a settlement at La Navidad, names an "exchange" that sent people, ideas, and goods across the Atlantic Ocean. Many native Taíno (tie-EE-noh) people were enslaved by this man. After the king of Portugal rejected this man, the Spanish rulers (*) Ferdinand and Isabella sponsored his voyage on the Niña (NEEN-yaa), Pinta, and Santa María. For 10 points, what explorer is credited with discovering the Americas in 1492?
ANSWER: Christopher Columbus [or Cristoforo Colombo, or Cristobal Colón] <Kher, History>

15. Playfair's axiom describes the number of lines that satisfy this property given a line and a point not on the line. When crossed by a transversal, lines with this property have the same corresponding angles. Euclid's fifth postulate is named for this property, and two lines with it have the same (*) slope and are always equidistant from each other. For 10 points, what property do two lines have if they never intersect?
ANSWER: parallel <Kher, Math>

16. A group of empires named for this substance due to their military technology includes the Safavid, Ottoman, and Mughal Empires. A plot to kill English king James I that was planned by Guy Fawkes was named for this substance. Like paper, this substance was one of the Four Great Inventions of (*) China, where it was used to make fire arrows. For 10 points, name this explosive powder used in firearms.
ANSWER: gunpowder <Kher, History>

17. Keratinocytes form the top layer of this organ, and sebaceous glands secrete oily matter that covers this organ. The stratum basale is a layer of cells in this organ, which also includes subcutaneous tissue. The (*) epidermis, dermis, and hypodermis are the three layers of this largest human organ. For 10 points, identify this organ which covers your entire body.
ANSWER: the skin <Gollamudi, Science>

18. This city's namesake river is dyed green every St. Patrick's Day, and was engineered to flow backwards. Millennium Park and Navy Pier are located in this city, and this city's "Cloud Gate" sculpture is shaped like a reflective (*) bean. The tallest building in this city, the Willis Tower, was formerly named for Sears. For 10 points, name this city on the shores of Lake Michigan, the largest city in Illinois.
ANSWER: Chicago, Illinois <A. Gao, Geography>

19. A period of state violence in this country was referred to as the "Dirty War." Eva was the popular wife of this country's leftist leader Juan Peron. In 1982, this country fought a ten-week war with Great Britain over the (*) Falkland Islands. A 1978 border dispute almost led to this country declaring war on its western neighbor, Chile. For 10 points, name this South American country whose capital is Buenos Aires.
ANSWER: Argentina [or Argentine Republic, or República Argentina] <Emmanuel, History>
20. A framework which explains both quantum mechanics and this force is called a "theory of everything". According to general relativity, this force causes space-time to bend. This is the (*) weakest of the four fundamental forces, and on Earth it causes acceleration of 9.81 meters per second squared. An apple falling on Isaac Newton's head supposedly inspired the discovery of, for 10 points, what force which makes things fall?
ANSWER: gravity <Kher, Science>
Bonuses:

1. If you're going on a vacation to the Aloha State, you might fly into this city's Daniel K. Inouye (IN-ooh-wee) International Airport. For 10 points each:
   [10] Name this capital city of Hawaii. It is home to the only royal palace in the USA, Iolani Palace, as well as Waikiki Beach.
   ANSWER: Honolulu
   [10] Honolulu is on this Hawaiian island, which is also home to the volcanic Diamond Head cone. This most populous Hawaiian island is the third-largest after the Big Island and Maui.
   ANSWER: O‘ahu
   [10] This dormant volcano can be found on Hawaii’s Big Island alongside other volcanoes like Kilauea. Although its height above sea level is 13,803 feet, this volcano is the tallest mountain on Earth measured from base to peak at around 33,500 feet.
   ANSWER: Mauna Kea [accept Mauna a Wākea] <Bodducherla, Geography>

2. FLOOSH! For 10 points each, answer the following about toilet flushes:
   [10] The first toilet flush was shown on screen in Psycho, a 1960 film by this director, who also directed Vertigo and Rear Window.
   ANSWER: Sir Alfred Joseph Hitchcock
   [10] A toilet flush interrupted Roman Martinez during oral arguments in front of this “highest court of the land”. John Roberts is the Chief Justice of this court.
   ANSWER: Supreme Court of the United States [or SCOTUS]
   [10] Waste from toilets caused an 1858 “great stink” in this city, which was further exacerbated by bad sewage treatment and hot weather. John Snow traced back an 1854 cholera outbreak in this city to the Broad Street Pump, distributing water that had been contaminated by sewer waste.
   ANSWER: London, England <A. Gao, General Knowledge>

3. For 10 points each, answer the following about the bottom of the ocean:
   [10] The only primary producers in the deepest parts of the ocean are bacteria who can metabolize hydrogen and this gas. This simplest alkane has formula CH4 and is the primary component of natural gas.
   ANSWER: methane
   [10] Some parts of the seafloor are covered in small nodules made of this metallic element. A compound of potassium and an ion containing this element is known for its deep purple color in solution.
   ANSWER: manganese
   [10] The deep ocean is inhabited by these creepy-looking fish, which have a bioluminescent appendage that dangles in front of their mouth to attract prey.
   ANSWER: angler fish <Gollamudi, Science>

4. For 10 points each, answer the following about the creation of the universe in various myth systems:
   [10] Two answers required. In Norse mythology, the first giant Ymir emerges from the Ginnungagap, which is surrounded by Niflheim and Muspelheim, worlds which contain these two substances.
   ANSWER: fire and ice
   [10] In Greek myth, the first being known as Gaia emerged from light and created the rest of the universe. Gaia is a personification of this planet, where you are currently located.
   ANSWER: the Earth
   [10] In some versions of the Egyptian creation myth, the creation of the universe was attributed to Atum, who is closely associated with this other deity. This sun deity is also known for divulging his secret name to Isis after being bitten by a snake.
   ANSWER: Ra [or Ri‘uw] <Gollamudi, Mythology>
5. In this situation, players can choose whether to stay silent and cooperate or betray the other person and benefit at their expense. For 10 points each:
[10] Name this game, where although both players staying silent in the game benefits them more, the most rational solution is mutual betrayal.
ANSWER: the prisoner’s dilemma
[10] For the prisoner’s dilemma, mutual betrayal is an example of this state named for John Nash. Because players don’t benefit from changing their strategy, they reach one of these balanced states.
ANSWER: equilibrium
[10] In a game in which participants choose numbers from 0 to 100 to guess what 2/3 of the average of all guesses will be, the equilibrium is this number. This is because players reason that the 2/3 point can’t be above 66.7, then 44.4, until they lower to this number.
ANSWER: zero

6. For 10 points each, answer the following about places in North America that have returned to using their Indigenous names:
[10] This tallest mountain in Alaska and in the United States was once known as Mount McKinley before being renamed in 2015.
ANSWER: Denali
[10] Lake Calhoun, the largest lake in this city, was renamed Bde Maka Ska in 2017. This city is grouped together with St. Paul as part of the “Twin Cities”.
ANSWER: Minneapolis, Minnesota
[10] The community of Behchoko (beh-choh-kohn) in this Canadian territory was renamed from Rae-Edzo in 2005. Great Bear Lake, Great Slave (SLAVE-EE) Lake, and the mouth of the Mackenzie River lie in this territory, whose capital is Yellowknife.
ANSWER: Northwest Territories [accept les Territoires du Nord-Ouest; prompt on NT or NWT]

7. Immediately following this speech, a member of the opposition party traditionally gives a response. For 10 points each:
[10] Name this speech given by the president every year. A joint session of Congress gathers to listen to this address.
ANSWER: State of the Union Address [accept SOTU]
[10] Since all members of Congress and the Cabinet are gathered in the House chamber, one individual is given this role and chosen to stay in a secret location in the event of a mass-casualty incident. The practice of giving this role was started in the 1950s during the Cold War.
ANSWER: designated survivor
[10] A show on this network called State of the Union is hosted by Jake Tapper. Wolf Blitzer hosts The Situation Room on this Atlanta-based network which pioneered 24/7 news coverage.
ANSWER: CNN [or the Cable News Network] <A. Gao, Social Science>

8. Lennie breaks Curley’s wife’s neck, eventually killing her, at the end of a novel by this author. For 10 points each:
[10] Name this author who wrote Of Mice and Men. He also wrote about the Joad family in The Grapes of Wrath.
ANSWER: John Ernst Steinbeck Jr.
[10] The Joad family travels from this state to California in Steinbeck’s The Grapes of Wrath. Tom Joad is released from prison in this state after serving manslaughter charges.
ANSWER: Oklahoma
[10] Another Steinbeck work, The Pearl, takes place in this country’s peninsula of Baja California. Sandra Cisneros’s The House on Mango Street depicts the life of an immigrant to Chicago from this country.
ANSWER: Mexico
9. Opportunity, Spirit, and Curiosity were rovers which visited this planet. For 10 points each:

[10] Identify this red planet which is the fourth planet from the Sun. The asteroid belt is located between it and Jupiter.

ANSWER: Mars

[10] This moon of Mars is predicted to eventually collide with it and create a planetary ring. It is named after the Greek personification of fear, and is the larger of the two Martian moons

ANSWER: Phobos

[10] Mars is home to the Valles Marineris, a giant one of these geological formations several miles deep. It is believed to have been carved by water in the distant past.

ANSWER: canyons [prompt on valleys] <Gollamudi, Science>

10. The song "Ding-Dong! The Witch is Dead" rose to #2 on the UK Singles chart following the death of this leader. For 10 points each:

[10] Name this "Iron Lady" who was the first female British prime minister. She was labelled the "milk snatcher" for eliminating a policy of free milk in schools.

ANSWER: Margaret Thatcher [or Margaret Hilda Thatcher]

[10] Thatcher was a member of this British political party that opposes the Labour Party. It shares its name with a right-wing political ideology.

ANSWER: Conservative Party [or Conservative and Unionist Party, or Tory Party, or Tories]

[10] Thatcher was targeted in an assassination attempt at the Brighton Hotel by Patrick Magee, a nationalist and member of this region's Provisional IRA during The Troubles.

ANSWER: Northern Ireland [accept Tuaisceart Éireann; prompt on Ulster; prompt on Ireland; prompt on United Kingdom or UK; do not accept or prompt on "Republic of Ireland" or "Éire"] <A. Gao, History>

11. The main character of this novel lives with her uncle's family because both her parents died of typhus. For 10 points each:

[10] Name this novel where the title orphan eventually gets a job as a governess in Thornfield Hall and marries Mr. Rochester after Bertha Mason's death.

ANSWER: Jane Eyre

[10] Jane Eyre goes to the "Lowood" one of these places where she is cruelly punished in the red room by the headmaster, Mr. Brocklehurst.

ANSWER: schools [accept institutions or the Lowood Institution]

[10] This author of Jane Eyre wrote with the pen name Currer Bell. She was the eldest of her sisters Emily and Anne.

ANSWER: Charlotte Brontë [prompt on Brontë] <A. Gao, Literature>

12. For 10 points each, answer the following about the experiments of Gregor Johann Mendel in biology:

[10] Mendel is most notable for using types of these plants to create the science of genetics. Like beans, these plants grow in pods, but unlike beans they are spherical.

ANSWER: pea plants [or peas]

[10] Mendel coined the terms for traits being either "dominant" or having this other name. In order to inherit a trait of this type, one must have two alleles for that trait.

ANSWER: recessive

[10] Mendel concluded that dominance in genes existed due to observing these things for his pea plants. They are the set of physical characteristics of an object, and are contrasted with the genotype, or genetic characteristics of an object.

ANSWER: phenotypes <Gollamudi, Science>
13. You are a tourist at the Parthenon. Answer the following about the history of the city around you, for 10 points each:
[10] The Parthenon and the Acropolis on which you stand are located in this modern-day capital city of Greece.
ANSWER: **Athens**, Greece [accept **Athína**]

[10] If you look towards the northeast, you might see the place where Pheidipides entered Athens after this 490 BCE battle. Miltiades defeated the Persians at this battle, which lends its name to a type of athletic competition.
ANSWER: Battle of **Marathon** [accept Machē tou **Marathōn**os]

[10] The Parthenon in front of you was completed during the leadership of this man, who led Athens at the start of the Peloponnesian War before dying during the Plague of Athens in 429 BC.
ANSWER: **Pericles** <Koutsoukos, History>

14. For 10 points each, answer the following about Dungeons and Dragons in pop culture:
[10] Dungeons and Dragons was played during the start of the first episode of this series, where they fight a monster known as a Demogorgon. Characters in this show include Eleven.
ANSWER: **Stranger Things**

[10] Dungeons and Dragons is produced by this company, which also produces Magic: the Gathering.
ANSWER: **Wizards of the Coast** [or **WotC**; prompt on **Wizards**]

[10] The largest die used in typical Dungeons and Dragons gameplay is shaped like an icosahedron, which means it has this many faces. Rolling this number "naturally" can result in a critical hit.
ANSWER: **20** <Gollamudi, Popular Culture>

15. The Royal Albert Hall annually hosts a "scratch" performance of this piece in which the audience is encouraged to join in the chorus. For 10 points each:
[10] Name this oratorio by Georg Frideric Handel and Charles Jennens about the life of Jesus Christ. It is traditional for members of the audience to stand during its Hallelujah Chorus.
ANSWER: **Messiah**

[10] Messiah, unlike many 18th century musical compositions, was written with lyrics in this language. Another Handel piece in this language, Zadok the Priest, is sung at the coronation of British monarchs.
ANSWER: **English**

[10] A 1992 Grammy Award was given to Handel's Messiah: A Soulful Celebration, a reinterpretation of Messiah in this genre. This genre of music is often sung by large Black church choirs and has its origins among African slaves who converted to Christianity.
ANSWER: **gospel** music <Emmanuel, Fine Arts>

16. Let's take a field trip to the Exit 8 Big Top Mall. For 10 points each:
[10] Name this novel which is set at the Exit 8 Big Top Mall, whose title animal is accompanied by Stella, Ruby, and Bob.
ANSWER: **The One and Only Ivan** [do NOT accept or prompt on "The One and Only Bob"]

[10] Ivan is one of these animals, and so is Kinyani. "Silverbacks" are large males of this primate species, which has "lowland" and "mountain" types.
ANSWER: **gorillas**

[10] This author of **The One and Only Ivan** also wrote **Crenshaw** and **Wishtree**. She also wrote a sequel called **The One and Only Bob**.
ANSWER: Katherine Alice **Applegate** <A. Gao, Literature>
17. Answer the following about the book of Genesis, for 10 points each:

[10] The book details Adam and Eve's banishment from this place, where Eve ate a fruit from the tree of knowledge.

ANSWER: Garden of Eden [or Gan-Eden, or the Garden of God]

[10] Later in Genesis, Noah sailed on an ark for this number of days and nights to preserve the world's animals during a great flood. This is also the number of days and nights Jesus spent in the desert while being tempted by Satan.

ANSWER: forty

[10] Later chapters of Genesis talk about a man of this name with a "coat of many colors" who becomes the vizier of Egypt. Another Biblical figure with this name from Arimathea is in charge of the burial of Jesus.

ANSWER: Joseph [or Yosef]

18. For 10 points each, answer the following about various thought experiments in physics:

[10] Maxwell theorized one of these creatures which can divide particles into hot and cold chambers, violating the second law of thermodynamics.

ANSWER: a demon [accept Maxwell's Demon]

[10] The Chinese room experiment claims that these things cannot be proven to have a mind, even if they seem humanlike. The Turing test is a metric for determining if these things are intelligent.

ANSWER: computers [or artificial intelligence, or AI, or other things like robots]

[10] Probably the most famous thought experiment in physics was posed by Erwin Schrödinger and concerns one of these animals which is both alive and dead.

ANSWER: a cat

19. After a brutal 1975 invasion, this country occupied East Timor until 2002. For 10 points each:

[10] Name this Asian island nation formerly led by presidents Sukarno and Suharto. The largest Buddhist temple in the world, Borobudur, was built in the 9th century by the residents of this country's island of Java.

ANSWER: Republic of Indonesia

[10] Prior to World War II and Japanese Invasion, Indonesia was a colonial holding of this European country. This country's capital of Amsterdam is home to many speakers of the Dutch language.

ANSWER: The Netherlands [or Holland, or Kingdom of the Netherlands]

[10] Indonesia's president Sukarno held a conference for members of the Non-Aligned Movement, which he co-founded with leaders like this man, who was the first prime minister of an independent India.

ANSWER: Jawaharlal Nehru

20. 1963 wasn't the only time protestors marched on Washington. For 10 points each:

[10] The Bonus Army of 1932 marched on Washington to receive their "bonus" money from serving in World War I since many were poor due to this event. The Dust Bowl worsened this event, which was started by a 1929 stock market crash.

ANSWER: the Great Depression

[10] A March on Washington in 1941 was organized to protest in favor of desegregating the military, which was eventually achieved by a 1948 executive order issued by this president, who succeeded FDR.

ANSWER: Harry S. Truman

[10] In 2018, many students took to Washington after the Parkland massacre as part of this event. X González and David Hogg both spoke at this event.

ANSWER: the March for our Lives