

Collective Early Release Entry-level Set (CERES)

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Packet 7

Tossups:

1. **Barry Marshall won a Nobel Prize for his research on this organ, in which he drank a bacteria called *H. pylori* and discovering that it caused ulcers to form in it. This organ creates chyme out of molecules that arrive from the esophagus to it. A layer of mucus helps protect this organ from the (*) hydrochloric acid that breaks apart proteins before they enter the intestines. For 10 points, name this digestive organ that breaks down food.**

ANSWER: stomach <Kher, Science>

2. **A massacre of this religious group was ordered by French queen Catherine de Medici (MEH-dih-chee) on St. Bartholomew's Day. The rise of this religious group provoked the Council of Trent and catalyzed the Thirty Years' War. This religion's (*) "Reformation" in Europe was started by a German who may have nailed the 95 Theses to a church door. For 10 points, Martin Luther started what religious movement that broke off the Catholic Church?**

ANSWER: Protestantism [accept word forms; accept the Protestant Reformation; accept Huguenots; accept Lutheranism before "Martin Luther" is read; prompt on Christians or Christianity by asking "what branch of Christianity?"] <Kher, History>

3. **The year this man was born is referred to as the Year of the Elephant. The sayings and actions of this man are recorded as *Hadith*. Sunnis believe that it is blasphemous to produce images of this man. The *Shahada*, one of a certain religion's Five (*) Pillars, reaffirms one's faith in God and this man. In a cave on Mount Hira, the archangel Jibril revealed the Qur'an to, for 10 points, what founder and prophet of Islam?**

ANSWER: Muhammad [or Abū al-Qāsim Muhammad] <Bhattacharyya, Religion>

4. **Route G318, this country's longest national highway, has its western terminus at a "Friendship Bridge" to Nepal. Millions of people were displaced by the construction of this country's Three Gorges Dam, which lies on its (*) Yangtze River. This country's capital contains the Forbidden City, formerly home to its imperial court. For 10 points, what country contains cities like Shanghai and Beijing?**

ANSWER: People's Republic of China [accept Zhongguo; accept PRC; do not accept or prompt on "Taiwan", "Republic of China", or "ROC"] <Emmanuel, Geography>

5. **Archimedes approximated this value using polygons with progressively larger numbers of sides. Buffon's needle is another way to estimate this number. A circle inscribed inside a square has an (*) area equal to this number over four times the square's area, because the area of a circle is equal to the radius squared times pi, for 10 points, what ratio between the circumference and diameter of a circle, approximately 3.14?**

ANSWER: π <Jogadhenu, Math>

6. **This novella's main character meets a man who lights a lamp every minute and a businessman who owns the stars. The title character of this novella is told "it is only with the heart that one can see rightly" by a "tamed" fox and loves a rose on his home (*) asteroid. That character is drawn as a sheep in a box by a pilot who crash-lands in the Sahara in, for 10 points, what novella about a royal by Antoine de Saint-Exupéry?**

ANSWER: *The Little Prince* [or *Le Petit Prince*] <C. Gao, Literature>

7. **Daedalus built a wooden animal to help Pasiphae become pregnant with this creature. King Minos ordered that a certain structure be built to contain this creature. This creature was killed by a hero who used a ball of twine given to him by Ariadne to navigate its home, the (*) Labyrinth. For 10 points, Theseus slew what man-eating creature with the body of a man and the head of a bull?**

ANSWER: the Minotaur <Gollamudi, Mythology>

8. **One strategy that can be employed against these people involves checking whether a green progress bar has moved forward when they claim to have performed certain actions. These people can win the game either by comprising a majority of players or performing a successful (*) sabotage. These players benefit from increased mobility through vents. For 10 points, what "sus" players compete with crewmates in Among Us?**

ANSWER: impostors in Among Us <Thompson, Popular Culture>

9. **A member of this family was involved in a car accident that killed Mary Jo Kopechne in the Chappaquiddick incident. Another member of this family was killed at the Ambassador Hotel by Sirhan Sirhan. A president from this family ordered the Bay of Pigs invasion after dealing with the (*) Cuban Missile Crisis and was assassinated by Lee Harvey Oswald in 1963. For 10 points, what family included the 35th US president, John F.?**

ANSWER: Kennedy family [accept John F. Kennedy or John Fitzgerald Kennedy or Robert Kennedy or Robert Francis Kennedy or Ted Kennedy or Edward Moore Kennedy] <A. Gao, History>

10. **The protagonist of this novel runs away from Mr. Antolini after he pats his head while he sleeps. The main character of this novel loses his team's fencing equipment on the subway and is expelled from (*) Pencey Prep after failing classes. This novel's protagonist writes poetry on his brother's baseball glove and complains endlessly about "phonies". For 10 points, name this J. D. Salinger novel about Holden Caulfield.**

ANSWER: *The Catcher in the Rye* <Emmanuel, Literature>

11. **NFL player Cole Beasley was booed by fans because of his outspoken opposition to using this technology. Many current types of this technology are based on mRNA, allowing the spike protein to be replicated by cells. The (*) Johnson & Johnson type of this technology is only one dose. For 10 points, name this technology produced by companies like Pfizer and Moderna to protect against COVID-19.**

ANSWER: COVID-19 vaccine <Bhattacharyya, Current Events>

12. **After failing to defend this city at the Battle of Brandywine, George Washington's army retreated for the winter to Valley Forge. This city, which was the capital of the US before Washington D.C. was built, was where both Continental Congresses met. This city's (*)** Independence Hall, where the Declaration of Independence was drafted, is across from the Liberty Bell. For 10 points, name this largest city in Pennsylvania.
ANSWER: **Philadelphia** <Emmanuel, History>

13. **The Cave of the Winds and Goat Island can be found near this landmark. This landmark gives its name to two cities, one in the US and one in Canada, which are northwest of Buffalo. Tourists can ride the Maid of the (*)** Mist at this place, which thrill-seekers have attempted to traverse in barrels. Horseshoe Falls and American Falls make up, for 10 points, what giant waterfall complex in Western New York?
ANSWER: **Niagara Falls** <Emmanuel, Geography>

14. **In 2020, confusion over this company's stock symbol led to an unrelated but similarly named network technology company's stock shooting up in price. This company offers paid subscriptions which allow users to avoid (*)** 40-minute time limits on their use of its product. A picture of the Golden Gate Bridge is among the default backgrounds available to users of, for 10 points, what video conferencing service?
ANSWER: **Zoom** Video Communications <Mahendra, General Knowledge>

15. **Three of these objects are stacked on top of each other in a Jasper Johns painting. Joe Rosenthal depicted six Marines raising this object "on Iwo Jima." Emanuel Leutze (LOYTZ-uh) depicted James Monroe on the way to the Battle of Trenton holding a historically incorrect one of these objects in (*)** *Washington Crossing the Delaware*. For 10 points, name these objects, the subject of the John Philip Sousa march *Stars and Stripes Forever*.
ANSWER: **American flags** [accept equivalents like **US flags**; accept **Raising the Flag on Iwo Jima**; prompt on **flag** with "from what country?"] (The Jasper Johns painting is *Three Flags*) <A. Gao, Fine Arts>

16. **Lodestones are naturally occurring minerals which have this property, and were used in ancient times to make compasses as a result. Compass needles have this property, which allows them to align themselves to (*)** north. Objects with this property generally have a North and South pole, which attract each other. For 10 points, what property held by some metals, like iron, might be used to stick things to your refrigerator?
ANSWER: **magnetism** [accept specific types like **ferromagnetism** or **paramagnetism**] <Gollamudi, Science>

17. **The "transit method" may identify these bodies, sixteen of which have been found in the ideal "Goldilocks zone". These bodies, which must be in hydrostatic equilibrium and must clear their neighborhoods per an IAU definition, are given the prefix (*)** "exo" when outside the Solar System. These bodies may be "terrestrial" or "gas giants". For 10 points, eight of what bodies orbit the Sun, including Mercury and Mars?
ANSWER: **planets** [accept **exoplanets** before "exo" is read; do not accept or prompt on "dwarf planets"] <Kher, Science>

18. **In a novel by this author, Professor Lidenbrock and his nephew Axel embark on a journey which ends with them emerging from a volcano in Italy. In another novel by this author, Professor Aronnax and others aboard the Abraham Lincoln set out to destroy the submarine (*)** *Nautilus*, which is manned by Captain Nemo. For 10 points, name this French author of *Journey to the Center of the Earth* and *20,000 Leagues Under the Sea*.
ANSWER: Jules **Verne** <Heydt, Literature>

19. **The Byzantines threw "Greek fire" at these things to destroy them. Themistocles oversaw the construction and use of hundreds of things in war. Persian examples of these vehicles were defeated by Athenian ones at the battle of (*) Salamis.** The trireme was a common type of these vehicles, which the Persian Empire would tie together to make temporary bridges across rivers. For 10 points, name these vehicles used in Athens' navy.

ANSWER: **ships** [accept equivalents such as **boats**; accept **dromons**; accept **trireme** before it is read] <Kher, History>

20. **In computer programming, this symbol can be preceded by an exclamation point to negate it, and it is used once to assign values to variables and twice to compare two things. On computer keyboards, this symbol shares a key with the (*) plus sign.** This symbol has a wavy line put on top of it to indicate congruence in geometry. For 10 points, what symbol is used to show that two numbers are the same?

ANSWER: the \equiv sign [or the **equal sign**] <Gollamudi, Science>

Bonuses

1. At the end of this novel, a family rescues a toad from being hit by a truck, only to find it was immortal. For 10 points each:

[10] Name this Natalie Babbitt novel in which Winnie Foster refuses to drink water from a family's spring, despite knowing it will give her immortality.

ANSWER: **Tuck Everlasting**

[10] This character is not only immortal but forever youthful. In a J. M. Barrie novel, he is the leader of the Lost Boys and archenemies with Captain Hook.

ANSWER: Peter **Pan**

[10] The short story "The Immortal" was written by Jorge Luis Borges, an author who wrote in this language. Other works originally in this language include Gabriel Garcia Marquez's *One Hundred Years of Solitude*.

ANSWER: **Spanish** [or **español**] <Gjesfjeld, Literature>

2. Systems of linear equations can be solved with these objects using Cramer's rule. For 10 points each:

[10] Name these mathematical objects which consist of a rectangular array of numbers.

ANSWER: **matrices** [accept **matrix**]

[10] Cramer's rule uses these values to solve systems of linear equations. These values are zero if a matrix is not invertible, and for a 2-by-2 matrix this value is equal to the difference between the products of the diagonals.

ANSWER: **determinants**

[10] Matrices can also be used to model this sort of geometric transformation. This transformation consists of spinning a shape around a point.

ANSWER: **rotation** <Bhattacharyya, Math>

3. Researchers recently discovered that ancient humans reared one of the most aggressive varieties of these animals, cassowaries. For 10 points each:

[10] Identify these winged animals descended from prehistoric dinosaurs. They are extremely diverse, with types ranging from the ostrich to the seagull.

ANSWER: **birds** [or **avians**]

[10] Unlike humans, birds with two copies of the same sex chromosome are male. Bird sex chromosomes are described by two letters; name either of them.

ANSWER: **W** or **Z** chromosomes [accept either underlined part]

[10] Cuckoos and cowbirds often engage in the "brood" type of this phenomenon in which one organism lives off of another organism. Tapeworms and fleas are other examples of organisms who engage in this practice.

ANSWER: **parasitism** <Gollamudi, Science>

4. Seth Grahame-Smith wrote a parody of this novel which added "and Zombies" to its title. For 10 points each:

[10] Name this 19th century novel about Elizabeth Bennett, who eventually marries Mr. Darcy.

ANSWER: **Pride and Prejudice**

[10] This prolific author wrote *Pride and Prejudice*. She also wrote books such as *Emma* and *Sense and Sensibility*.

ANSWER: Jane **Austen**

[10] Jane Austen's *Emma* was adapted into the 1995 teen movie *Clueless*, which takes place in this city's suburb of Beverly Hills. This Southern California city's suburb of Hollywood is the center of the American film industry.

ANSWER: **Los Angeles** [or **LA**] <Sahgal, Literature>

5. The first binary compound containing an element from this group that was discovered featured that element bonded to four fluorine atoms. For 10 points each:

[10] Identify this group of elements, which have complete valence shells. These elements, which include krypton and xenon, are known for being more unreactive.

ANSWER: **noble gases**

[10] This element is the lightest noble gas, with an atomic number of two. It has an atomic symbol of He, and is commonly used to inflate balloons.

ANSWER: **helium**

[10] Helium was first discovered during one of these events by Jules Janssen, after he noticed a bright yellow spectral line coming from a certain entity. Namesake "beads" were observed by Francis Baily during these events.

ANSWER: **solar eclipses** [prompt on **eclipses** by asking "of what?"] <Gollamudi, Science>

6. This poet wrote about a pianist "Droning a drowsy syncopated tune" and doing "a lazy sway" in his poem "The Weary Blues." For 10 points each:

[10] Name this poet, who described how "my soul has grown deep" like the title bodies of water in "The Negro Speaks of Rivers." In another poem, he wondered "what happens to a dream deferred?"

ANSWER: Langston **Hughes** [or James Mercer Langston **Hughes**]

[10] Hughes was a prominent member of an African-American movement in the 1920s and 30s named for this city's Harlem neighborhood. Emma Lazarus wrote the poem "The New Colossus" about this city's Statue of Liberty.

ANSWER: **New York** City

[10] A line from Hughes' poem "Harlem" titles this Lorraine Hansberry play set in Chicago, about the African-American Younger family's move into the all-white Clybourne Park neighborhood.

ANSWER: A **Raisin in the Sun** <Kher, Literature>

7. This player led Slovenia to a fourth-place finish at the Tokyo 2020 Olympics. For 10 points each:

[10] Name this all-star guard for the Mavericks. He was originally selected by the Atlanta Hawks but was traded for Trae Young.

ANSWER: Luka **Dončić** [prompt on **Luka** alone; note that Dončić is pronounced (**DON-cheech**)]

[10] The Mavericks are based in this North Texas city. The NFL's Cowboys are also based in this city.

ANSWER: **Dallas**

[10] Luka Dončić (**DON-cheech**) started his basketball career in this Spanish club's basketball branch. This club's soccer team includes players such as Sergio Ramos and Luka Modrić (**MOH-dreech**).

ANSWER: **Real Madrid** Club de Fútbol [accept **Real Madrid** Baloncesto; prompt on **Real**; do not accept or prompt on just "Madrid"] <Bhattacharyya, Popular Culture>

8. This constellation's A* (**A star**) object is believed to be a massive black hole at the center of the Milky Way galaxy. For 10 points each:

[10] Name this constellation. Latin for "The Archer," this constellation's brightest star is Kaus Australis, which is located in its "Teapot" asterism.

ANSWER: **Sagittarius**

[10] Polaris, a star in the Ursa Minor constellation, is often named for this cardinal direction, because it always points almost exactly in this direction.

ANSWER: **north** [accept **North Star**]

[10] This constellation, which is meant to represent a hunter, features the stars Betelgeuse and Rigel. The stars Alnilam, Alnitak, and Mintaka form this constellation's namesake "belt."

ANSWER: **Orion** <A. Gao, Science>

9. For 10 points each, answer the following about famous campaign ads:

[10] The "Daisy" ad was aired in 1964 by this successor of John F. Kennedy. It depicted a girl counting petals on a daisy, followed by the explosion of a nuclear weapon.

ANSWER: Lyndon Baines **Johnson** [or **LBJ**; prompt on **Johnson** alone; do NOT accept or prompt on "Andrew Johnson"]

[10] This president aired the "Morning in America" ad in the 1984 election, in which he defeated Walter Mondale to win his second term.

ANSWER: Ronald **Reagan** [or Ronald Wilson **Reagan**]

[10] A president with this last name attacked Michael Dukakis (**du-KAH-kiss**) in the "Revolving Door" and "Willie Horton" ads. This was the last name of two presidents named George.

ANSWER: **Bush** [accept George H.W. **Bush** or George W. **Bush** or George Herbert Walker **Bush** or George Walker **Bush**] <A. Gao, History>

10. Oh no! You have been arrested and charged with a crime! For 10 points each:

[10] You may be asked to make this kind of payment to the court as a condition of your release before the trial. It is refunded if you attend all your court appearances and is meant to prevent you from skipping court.

ANSWER: **bail** bonds [prompt on just **bonds**]

[10] In your trial, the case against you will be made by one of these people. These people are lawyers whose job is to represent the government in criminal cases.

ANSWER: **prosecutors** [prompt on (district) **attorneys**]

[10] Thanks to the Sixth Amendment, you have the right to be tried in front of one of these groups of people. These groups are typically made up of twelve people and must reach a unanimous verdict to convict you.

ANSWER: a **jury** (of your peers) <Heinonen, Social Science>

11. For 10 points each, answer the following about the stratosphere:

[10] A layer of this molecule with formula O₃ is found in the stratosphere. CFCs were responsible for the creation of a "hole" in that layer.

ANSWER: **ozone**

[10] The ozone layer is responsible for protecting the earth from this kind of light, which is named for the fact that it is found beyond purple light on the spectrum. Exposure to this kind of light can cause sunburns and skin cancers.

ANSWER: **ultraviolet** light [or **UV** light]

[10] The stratosphere is located directly above this lowest region of the atmosphere, which is where most weather occurs.

ANSWER: the **troposphere** <Gollamudi, Science>

12. This politician once declared "segregation now, segregation tomorrow, segregation forever." For 10 points each:

[10] Name this governor who infamously tried to block Black students from entering a university in his state in the "Stand in the Schoolhouse Door."

ANSWER: George **Wallace** [or George Corley **Wallace** Jr.]

[10] Wallace was a governor of this state, whose city of Montgomery was the site of a year-long boycott of buses after Rosa Parks was kicked out of one for not giving up her seat.

ANSWER: **Alabama**

[10] Wallace's declaration of "segregation forever" would not come true, as this landmark 1952 Supreme Court case established that segregation in public schools was unconstitutional. In this case, Thurgood Marshall represented a Black resident of Topeka, Kansas.

ANSWER: **Brown v. Board** of Education of Topeka, Kansas <Tagtmeier, History>

13. Langars serve free meals in gurdwaras, the places of worship of this religion. For 10 points each:
[10] Name this religion, whose largest temple, the Golden Temple, is found in the city of Amritsar. Its practitioners are noted for wearing turbans as part of the "five Ks" followed by observant members.

ANSWER: **Sikhism** [or **Sikhi**]

[10] Sikhism is most prevalent in this region of northern India and Pakistan, whose name comes from the Persian for "five rivers".

ANSWER: **Punjab**

[10] This country has a large Sikh minority as a result of extensive Punjabi immigration, including public figures like politician Jagmeet (**jug-meet**) Singh. Sikhs make up almost one-fifth of the population of Brampton, a suburb of this country's city of Toronto.

ANSWER: **Canada** <Bhattacharyya, Religion>

14. For 10 points each, answer some questions about Polynesian mythology:

[10] Tuvaluan mythology attributes the creation of the atolls to a flounder and this other kind of fish. These long fish have types including the conger and the moray.

ANSWER: **eels** [or **pusi**]

[10] This Polynesian goddess has her worship mainly centered around Hawaii. This goddess of fire is also revered by practitioners as the creator of the Hawaiian Islands.

ANSWER: **Pele**

[10] Pele is also known as the goddess of these natural features. Hawaiian examples of these features include Kilauea.

ANSWER: **volcanoes** <Emmanuel, Mythology>

15. Answer some questions about the high end sneaker scene, for 10 points each:

[10] The namesake "Air" shoes of this legendary Chicago Bulls shooting guard are some of the most popular in the sneaker community.

ANSWER: Michael **Jordan** [accept **Air Jordans**]

[10] Air Jordans are manufactured by this athletic wear company based in Oregon, which puts a swoosh on all of its products.

ANSWER: **Nike**

[10] Nike's competitor Adidas collaborated with someone with this occupation on a shoe with SPLY-350 ("**Supply 350**") on its side. Another person with this occupation faced controversy after releasing a limited line of shoes containing real human blood.

ANSWER: **rappers** [accept anything indicating **rap** or **hip-hop** singers or artists; prompt on answers like **singers** or **musicians** by asking "in what genre?"] <Mahendra, General Knowledge>

16. The Great Lakes are overrated. For 10 points each, answer the following about other lakes around the US:

[10] This largest saltwater lake in the United States is located in northern Utah. This lake is a remnant of the ancient Lake Bonneville.

ANSWER: **Great Salt Lake**

[10] Lake Champlain straddles the border between Vermont and this state to its west. The Finger Lakes, which are located southeast of this state's city of Rochester, include Cayuga Lake and Seneca Lake.

ANSWER: **New York**

[10] The modern incarnation of the Salton Sea, which is actually a lake, formed by accident in this state in 1905. The Colorado River, which makes up the entire border between Arizona and this state to its west, used to flow into the Salton Sea.

ANSWER: **California** <Koutsoukos, Geography>

17. In the aftermath of this battle, the earliest known surviving peace treaty was signed by Hattuşili III. For 10 points each:

[10] Name this battle dated to 1274 BC and fought between the New Kingdom of Egypt and the Hittites in a namesake city on the Orontes River in present-day Syria.

ANSWER: Battle of **Kadesh** [or Battle of **Qadesh**]

[10] The Battle of Kadesh was won by an Egyptian pharaoh with this name known as "the Great," who also built the Abu Simbel temple complex and a large tomb for his wife Nefertari.

ANSWER: **Ramses** [or **Ramesses**; accept **Ramses II** or **Ramesses II** or **Ramses the Great** or **Ramesses the Great**]

[10] The Battle of Kadesh was the largest battle in history to use these vehicles, with over 5000 of them involved in the battle. In ancient times, these two-wheeled, horse-drawn vehicles were raced during the Greek Olympics and at Rome's Circus Maximus.

ANSWER: **chariot**s [accept **quadriga**] <A. Gao, History>

18. Answer some questions about the Iowa State Fair, for 10 points each:

[10] One of the highlights of the Iowa State Fair is the construction of a sculpture of a cow made out of hundreds of pounds of this dairy product, a tradition which dates back to 1911.

ANSWER: **butter**

[10] In election years, the Iowa State Fair is frequently visited by politicians, such as this Texas senator and unsuccessful presidential candidate, who tweeted about how much his daughter would enjoy the butter cow.

ANSWER: Ted **Cruz**

[10] The Iowa State Fair is held every year in this city, the capital of Iowa.

ANSWER: **Des Moines** <A. Gao, General Knowledge>

19. Composer Alexander Scriabin spent twelve years working on his piece *Mysterium*, which was to include "visual effects, dancers, a procession, incense, and rhythmic textural articulation", only to die before completing it. For 10 points each:

[10] *Mysterium* was intended to comprise a week-long performance in the Himalayas, after which this event would take place, ushering in an age of ecstasy. Many people believed that the Mayan Long Count calendar indicated that this event would occur in 2012.

ANSWER: the **end of the world** [accept any equivalents like the **apocalypse**]

[10] Scriabin was from this Eastern European country, which also produced a group of composers nicknamed the "Mighty Five" which included Nikolai Rimsky-Korsakov and Modest Mussorgsky.

ANSWER: **Russia** [or **Rossiya**]

[10] Scriabin was heavily influenced by the work of this famous Polish composer of many works for piano, including the Revolutionary Étude and the Minute Waltz.

ANSWER: Frédéric **Chopin** <Thompson, Fine Arts>

20. Answer some questions about the fall of communism in Eastern Europe, for 10 points each:

[10] This man was the last premier of the Soviet Union before its dissolution. He was famous for having a red birthmark on his head, and Ronald Reagan called on him to "tear down this wall" in a famous speech.

ANSWER: Mikhail **Gorbachev**

[10] In this country, Lech Wałęsa (**va-WEN-sa**), a former electrician in its port city of Gdańsk (**g-DAANSK**), led the Solidarity party to a sweeping victory in the first post-communist elections.

ANSWER: **Poland** [or **Polska**]

[10] The dissolution of the Soviet Union led to the independence of a number of countries, including this one with capital Kiev. Russia invaded this country's peninsula of Crimea in 2014.

ANSWER: **Ukraine** <Emmanuel, History>