Collective Early Release Entry-level Set (CERES)

Head edited by: Conor Thompson

Edited by: Aatreyo Bhattacharyya, Tanay Bodducherla, Bo Chi, Rohan Ganeshan, Rohan Kher, Lukas Koutsoukos, Jacob Hardin-Bernhardt, and Jeff Xie Written by: the editors, Eamin Ahmed, Nikhil Arjunan, Simon Emmanuel, Andrew Gao, Cindy Gao, Shivani Ganeshan, Soren Gjesfjeld, Kaushik Gollamudi, Deven Hagen, Avery Heinonen, Charles Heydt, Rahul Jogadhenu, Matthew Kohn, Arnav Mahendra, Neev Sahgal, George Tagtmeier, and Charles Young

Packet 12

Tossups:

1. The busiest place in the US for the commercial form of this activity is Dutch Harbor in the Aleutian Islands of Alaska. People might use "traps" whose locations are marked by distinctively-colored (*) buoys to perform this activity. This activity might be done with "flies" or with live bait such as worms. For 10 points, name this activity often done with a rod and reel in which one captures marine wildlife.

ANSWER: <u>fishing</u> [accept specific types of fishing like <u>fly fishing</u> or <u>crabbing</u> or <u>lobstering</u>] <Heinonen, General Knowledge>

- 2. Jake Barnes travels to Pamplona, Spain in this man's novel The Sun Also Rises. Another book by this man features a main character who admires the "great Joe DiMaggio" and is helped by a boy named Manolin. In that book, Santiago breaks his streak of 84 days without catching a (*) fish, but the marlin he catches is eaten by sharks. For 10 points, name this author of The Old Man and the Sea. ANSWER: Ernest Hemingway <Bhattacharyya, Literature>
- 3. A party at the Stahlbaum house opens this work, where Fritz breaks an object given by Drosselmeyer. The "Waltz of the Snowflakes" plays before the seven headed "Mouse King" is defeated in this ballet. In this ballet, a kingdom named The Land of Sweets is ruled by the (*) Sugar Plum Fairy, who is visited by Clara. The title toy becomes a prince in, for 10 points, what Pyotr Ilyich Tchaikovsky ballet set during Christmas?

 ANSWER: The <u>Nutcracker</u> <Jogadhenu, Fine Arts>
- 4. Time zones in the US were first created to coordinate the use of these structures. Chinese workers for the Central Pacific Company built one of these structures that was completed at Promontory Point, Utah. A system to help (*) slaves escape the South was called the "Underground" one of these structures. For 10 points, name this type of structure whose "Transcontinental" type transported steam locomotives across the US.

ANSWER: <u>railroad</u>s [or <u>railway</u>s; accept First <u>Transcontinental Railroad</u> or <u>Underground Railroad</u>] <Koutsoukos, History>

5. In this work, the protagonist and his crew struggle to get past the sea monster Charybdis, and in the process are cursed for stealing Helios's cattle. In this work, half the protagonist's crew are turned into pigs by the sorceress Circe. This work ends with the hero reuniting with his son Telemachus and his wife (*) Penelope. For ten points, name this epic by Homer in which the titular hero returns to Ithaca.

ANSWER: The **Odyssey** <S. Ganeshan, Literature>

6. Over 400 prisoners of war from this state were executed in the Goliad Massacre. The 18-minute long Battle of San Jacinto was the final event of a revolution which began in this state in 1835. James Bowie was killed fighting alongside (*) Davy Crockett to defend a fort in this state at a battle that inspired the cry "Remember the Alamo!" For 10 points, what state has cities named for Sam Houston and Stephen Austin?

ANSWER: Texas < Koutsoukos, History>

7. Lake Ladoga, the largest freshwater lake fully in Europe, is in this country, and this country's exclave of Kaliningrad lies between Poland and Lithuania. The city of Vladivostok is located in the far east of this country, as is the deepest lake in the world, Lake Baikal. The (*) Trans-Siberian Railway traverses, for 10 points, what Eurasian country with its capital at Moscow, the largest country in the world by area?

ANSWER: Russia [accept Russian Federation; accept Rossiya] < Heinonen, Geography>

8. This scientist was sued by the British chemist Joseph Swan for stealing his invention and patenting it. This scientist created inventions from his home at Menlo Park, and promoted the use of DC current in opposition to Nikola Tesla's AC current. This scientist used a carbon (*) filament in the "incandescent" type of his most famous invention. For 10 points, name this scientist credited with inventing the lightbulb.

ANSWER: Thomas Edison [or Thomas Alva Edison] <Kher, Science>

9. Gina Carano, an actress who plays Cara Dune in this TV series, was fired after making several questionable posts on Instagram. In this show, one character demonstrates his powers after his companion is injured by a mudhorn. A character named Grogu, also known as (*) Baby Yoda by fans, is saved by the title character of, for 10 points, what Disney+ series featuring a bounty hunter named Din Djarin?

ANSWER: The **Mandalorian** [moderator's note: when somebody answers the question correctly, tell them that "This is the way".] <Gollamudi, Popular Culture>

- 10. Members of the Śvētāmbara (ss-vet-ahm-barah) sect of Jainism, whose monks wear clothes of this color, are contrasted from the "sky-clad" sect. A garment of this color is worn by Muslims on the hajj. In a Chinese symbol, this color represents yang while (*) black represents yin. In Catholicism, the Pope wears, for 10 points, what color often associated with light and purity? ANSWER: white [accept white-clad Jainism] <Kher, Religion>
- 11. In a novel by this author, Griffin wraps himself in bandages to hide his invisibility. In another novel by this author, the protagonist finds that society has evolved into the Eloi and Morlocks after stopping in the year 802,701. A novel by this author sees (*) Martians invade Earth, only to die from the common cold. The Invisible Man is by, for 10 points, what sci-fi author of The Time Machine and The War of the Worlds?

ANSWER: H.G. Wells [or Herbert George Wells] < S. Ganeshan, Literature>

12. Holders of this post reside in the U.S. Naval Observatory. Geraldine Ferraro was the first woman nominated to this post in 1984. Holders of this post preside and cast tie-breaking votes in the Senate, and before the ratification of the 12th amendment, runners-up in (*) presidential elections would be elected to this office. For 10 points, name this office, the first in the line of succession, currently held by Kamala Harris.

ANSWER: Vice President of the United States of America < A. Gao, Social Science >

13. The product of this quantity and change in entropy is subtracted from the change in enthalpy in the definition of Gibbs free energy. Entropy is defined to be 0 at the lowest value for this quantity, as stated in the 3rd law of thermodynamics. Helium becomes a superfluid when this quantity is close to 0 on the (*) Kelvin scale. For 10 points, identify this quantity which can be measured in Celsius or Fahrenheit.

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

14. This country's civil war was fought between the Nationalists and the Republicans, who were supported by the Abraham Lincoln Brigade. A worldwide flu pandemic that began in 1918 was popularly named for this country because of media coverage of it. Activists in this country advocate for the independence of (*) Catalonia, a region which includes the city of Barcelona. For 10 points, name this country with capital at Madrid.

ANSWER: **Spain** [accept **España** or Kingdom of **Spain**] < Emmanuel, History>

15. This ruler's victory over Porus at the Battle of the Hydaspes River led to the death of his favorite horse Bucephalus. This ruler was the victor at the battles of Issus and Gaugamela. A city this ruler named after himself in (*) Egypt was home to a famous lighthouse and library. This ruler conquered the Persians and built an empire stretching from Greece to India. For 10 points, name this "Great" Macedonian conqueror.

ANSWER: <u>Alexander the Great</u> [or <u>Alexander III</u> of Macedon; prompt on <u>Alexander</u>] <Sahgal, History>

16. This phenomenon is very weak in a region near the equator called the doldrums, and its speed may be measured by an anemometer. Hadley, Ferrell, and polar cells help define the dominant direction in which this phenomenon occurs, also nicknamed their (*) "trade" type because of this thing's importance to maritime shipping. For 10 points, what weather phenomenon is used to power sailboats?

ANSWER: winds <Bodducherla, Science>

17. One man from this country claimed no integer greater than two can satisfy the statement "a to the n plus b to the n equals c to the n," in his "Last Theorem." A man from this country created a "triangle" in which each number equals the sum of the two numbers above it. (*) Cartesian coordinates are named for a man from this country who lived under Louis XIII. For 10 points, in what country did Rene Descartes work in Paris?

ANSWER: **France** <Kher, Math>

18. Mycorrhizae are a mutualistic relationship between organisms of this kingdom and plants. These organisms possess mycelium and a model one called S. cerevisiae is used for fermentation. One of these organisms, along with algae, makes up lichen. Cell walls are made of (*) chitin in these organisms. Some of these organisms include truffles and baker's yeast. For 10 points, name this kingdom which includes mushrooms.

ANSWER: **fungi** [accept **fungus**] < Bhattacharyya, Science>

19. Hephaestus crafted one of these things which contained depictions of constellations for Achilles. Odysseus threw one of these objects down to avoid being the first to land on the shores of Troy. Perseus used a mirrored one of these things when fighting Medusa, and Athena and Zeus used one of them called (*) Aegis. For 10 points, what objects did Ancient Greek heroes use to try to block attacks?

ANSWER: shields < Gollamudi, Mythology>

20. This organization filed for bankruptcy in 2020 over payouts to sexual abuse victims. Members of this organization gather for large meetings called Jamborees, and must complete a board of review to attain its highest (*) rank. Members of this organization can earn merit badges for various accomplishments. A special project is required to attain the Eagle rank in, for 10 points, what American youth scouting organization?

ANSWER: the <u>Boy Scouts</u> of America [or <u>ScoutsBSA</u>, prompt on <u>Scouts</u>] <Heinonen, General Knowledge>

Bonuses:

1. Answer the following about pansexual pop artist Rina Sawayama. For 10 points each:

[10] Rina Sawayama was born in this country's city of Niigata. She penned the lyrics "I guess this is just another song about Tokyo" in a song set in this country, "Tokyo Love Hotel."

ANSWER: **Japan**

[10] The fifth track on Rina's 2020 album SAWAYAMA is titled "Akasaka [this emotion]." This single word titles a song by a deceased rapper nicknamed "X" that includes the lyrics "Who am I? Someone that's afraid to let go / You decide, if you're ever gonna let me know."

ANSWER: sad

[10] The eighth track on SAWAYAMA is titled for a "Bad [one of these people]." A Randy Newman song that opens the movie Toy Story claims "You've got a [one of these people] in me."

ANSWER: **friend** < Young, Popular Culture>

- 2. Mark Twain wrote a satirical "Defense of" a man who dressed as a scout to capture a leader of this country, Frederick Funston. For 10 points each:
- [10] Name this country whose Moro people resisted US occupation while led by Emilio Aguinaldo. After an 1898 conflict, colonial rule over this Asian country was ceded by a European power.

ANSWER: the **Philippines** [or Republic of the **Philippines**]

[10] In 1898, this country defeated Spain in a war and occupied the Philippines. This country granted the Philippines independence in the Tydings-McDuffie Act.

ANSWER: <u>United States</u> of America [or <u>US</u> or <u>USA</u> or <u>America</u>]

[10] The US also occupied this country after the Spanish-American War, though they did not annex it. The CIA tried to use an exploding cigar and a tuberculosis-infected scuba suit to kill Fidel Castro, a Communist who led this country during the Cold War.

ANSWER: **Cuba** [or Republic of **Cuba** or República de **Cuba**] <Emmanuel, History>

3. For 10 points each, answer the following about the life cycle of butterflies:

[10] Butterflies start off life as types of these larvae. The Monarch varieties of these larvae are known for eating milkweed, and these creatures have been used as a source of silk production.

ANSWER: caterpillars

[10] Caterpillars who survive turn into butterflies by performing this process within a chrysalis.

ANSWER: metamorphosis

[10] Butterflies often have this property, making them dangerous to be eaten by birds or other predators. Dart frogs from the Amazon are also known for having this property. A description is acceptable.

ANSWER: they are **poisonous** [accept anything indicating that **eating them makes you not feel so good**] <Gollamudi, Science>

4. The northernmost island group in this region is the Hawaiian islands. For 10 points each:

[10] Name this subregion of Oceania that also includes islands like Tonga and Samoa. This region is contrasted with Melanesia and Micronesia to its north and west, and its name is Greek for "many islands".

ANSWER: **Polynesia**

[10] Polynesia, alongside Micronesia and Melanesia, is located in this largest ocean in the world. Nearly 30 percent of the world's surface is covered by this ocean.

ANSWER: **Pacific** Ocean

[10] This largest nation in Polynesia controls the islands of Niue and Tokelau, which also lie in Polynesia. The largest island in Polynesia is this country's South Island, and Polynesia's most populous city is this country's city of Auckland.

ANSWER: New Zealand [accept Aotearoa] < Arjunan, Geography>

- 5. For 10 points each answer these questions about literary works whose titles are inspired by lines from William Shakespeare:
- [10] This novel by David Foster Wallace is titled for a description of Yorick in *Hamlet*. It is known for its hundreds of endnotes, some of which themselves have footnotes, and depicts the filmmaker James Incandenza's work at Enfield Tennis Academy.

ANSWER: **Infinite Jest**

[10] This author's novel The Fault In Our Stars is taken from a line in Shakespeare's play Julius Caesar. He has also written Looking for Alaska and Paper Towns.

ANSWER: John Green

[10] This man titled his novel Something Wicked This Way Comes after a line spoken by one of the Three Witches. He is better known for writing Fahrenheit 451.

ANSWER: Ray **Bradbury** <Heydt, Literature>

- 6. In the secret Operation Wrath of God, the intelligence agency Mossad was authorized to kill the perpetrators of a terrorist attack at one of these events. For 10 points each:
- [10] Name these international events whose 1972 iteration saw members of the group Black September kill eleven Israelis in the Munich massacre.

ANSWER: Summer **Olympics** [or **Olympic Games**; do NOT accept or prompt on "Winter Olympics"] [10] The 1972 Summer Olympics, at which the massacre occurred, were held in this country's city of Munich. This country had earlier hosted the 1936 Summer Olympics, during which its leader Adolf Hitler spread Nazi propaganda.

ANSWER: Federal Republic of **Germany** [or Bundesrepublik **Deutschland**; accept **Nazi Germany** or the **German Reich**]

[10] As part of Operation Wrath of God, Israeli agents killed an innocent waiter in this country, believing him to be one of the perpetrators of the Munich massacre. The Kalmar Union included this country and its eastern neighbor Sweden.

ANSWER: Kingdom of **Norway** [or Kongeriket **Norge**] < A. Gao, History>

7. For 10 points each, answer the following about the Argonauts:

[10] The Argonauts were led by this hero, who eventually married the sorceress Medea.

ANSWER: **Jason** [or **Iason**]

[10] This was the only female member of the Argonauts. In another story, she lost a footrace after her future husband threw some golden apples on the ground.

ANSWER: **Atalanta**

[10] The Argonauts went on a quest to retrieve this object, which was made from the wool of the winged ram Chrysomallos.

ANSWER: the **Golden Fleece** [or **Chrysómallo déros**] <Gollamudi, Mythology>

- 8. The Koch **(kahk)** snowflake is one of these constructs. For 10 points each:
- [10] Name these self-similar constructs which also include the dragon curve, Sierpiński triangle, and Mandelbrot set.

ANSWER: **fractal**s

[10] Many fractals have an infinite value for this quantity. For a polygon, this quantity is equal to the sum of the lengths of its sides.

ANSWER: **perimeter**

[10] Another fractal is the set named for this mathematician, which is created by removing the inner third of a line segment, doing that to the remnants, and repeating infinitely many times. This mathematician also proved the uncountability of the real numbers with his "diagonal argument". ANSWER: Georg **Cantor** <A. Gao, Math>

- 9. This philosopher was forced to drink hemlock for "corrupting the youth" of his city. For 10 points each:
- [10] Name this ancient philosopher who appears in many dialogues written by his student Plato. A modern style of discussion is named for him.

ANSWER: **Socrates**

[10] Socrates was from Athens, which is now the capital of this country.

ANSWER: **Greece** [or **Hellas**]

[10] Plato's most famous dialogue about Socrates is this one. It contains the Allegory of the Cave and considers the ideal government of a city-state ruled by a philosopher-king.

ANSWER: The **Republic** [or **Politeia**, or **De Republica**] <Gjesfjeld, Philosophy>

10. A hare is seen running along a track in the bottom left of a painting depicting one of these vehicles. For 10 points each:

[10] Name this vehicle depicted in Rain, Steam and Speed. Claude Monet painted the "Arrival of the Normandy [one of these vehicles]" inside of a station for one of these large transportation vehicles.

ANSWER: train [accept Arrival of the Normandy Train]

[10] Rain, Steam and Speed is a painting by this British artist, who also painted Dido Building Carthage and The Fighting Temeraire.

ANSWER: Joseph Mallord William **Turner**

[10] Turner depicts one of these objects in his *The Fighting Temeraire*, which is subtitled "tugged to her last Berth to be broken up." Turner painted one of these objects holding slaves after reading about the Zong.

ANSWER: **ship**s [accept The Slave **Ship**] <A. Gao, Fine Arts>

11. The Hubble tuning fork can be used to classify these entities. For 10 points each:

[10] Identify these entities. This tournament is almost surely taking place in the Milky Way, one of these astronomical objects which contains the Solar System.

ANSWER: galaxies

[10] The Milky Way will eventually collide with this closest spiral galaxy to the Milky Way. It is named after the mythological wife of Perseus.

ANSWER: the **Andromeda** Galaxy

[10] The Andromeda Galaxy is one entry in the Messier catalog, whose first entry is a nebula named for this animal. The constellation Cancer is named for its supposed resemblance to one of these animals.

ANSWER: crab < Gollamudi, Science>

- 12. In one of these stories, a famine strikes, resulting in the title character becoming a swineherd. For 10 points each:
- [10] Name these stories, including the one of the Prodigal Son, which are told by Jesus in the Bible. In another one of these stories, a Samaritan helps a traveler on the side of the road after a Priest and a Levite do not.

ANSWER: Biblical **parable**s

[10] In one parable, a beggar with this name is denied entry into a rich man's house. In the gospel of John, Jesus raises a man with this first name from the dead.

ANSWER: **Lazarus**

[10] The Parables appear in this second half of the Bible, which focuses on the story of Jesus and his followers. It is contrasted with a similarly-named "Old" portion.

ANSWER: **New Testament** [prompt on the <u>Gospels</u> by asking "what larger section are the Gospels a part of?"] < Gjesfjeld, Religion>

- 13. One early skirmish in this conflict took place at Fort Necessity. For 10 points each:
- [10] Name this 1754-1763 conflict, a theatre of the Seven Years' War in which France and Britain battled for control over land in eastern North America. The Treaty of Paris, which ended this conflict, ceded all French land east of the Mississippi River to Britain.

ANSWER: French and Indian War

[10] This military leader surrendered at the Battle of Fort Necessity, the only surrender in his entire career. Later in life, this leader led the Continental Army and served as the first President of the United States.

ANSWER: George Washington

[10] During the French and Indian War, British forces expelled the French-speaking Acadians from Maritime Canada, most of whom moved to the area that became this state. This state was the subject of a namesake "Purchase" from France, and its capital is Baton Rouge.

ANSWER: **Louisiana** [or La **Louisiane**] <Koutsoukos, History>

14. This principle was first published in a book known as "Hydrodynamica". For 10 points each:

[10] Identify this principle. It states that the speed of a fluid increases as another quantity or the potential energy of the fluid decreases, and it is only applicable to isentropic flows.

ANSWER: **Bernoulli**'s Principle

[10] Bernoulli's Principle states that the speed of a fluid increases as this quantity decreases. This quantity can be measured in pascals, atmospheres, or torrs.

ANSWER: **pressure**

[10] The simplest forms of Bernoulli's principle work at low Mach numbers for things in this phase of matter as well as gases. This phase of matter has a constant volume and conforms to the shape of a container; common examples include olive oil.

ANSWER: liquid <Gollamudi, Science>

15. The name of this punctuation mark comes from the Greek word for "cut". For 10 points each: [10] Name this punctuation mark which is often used to separate different clauses in a sentence, or to separate members of lists.

ANSWER: comma

[10] The practice of putting a comma before the "and" at the end of a list is frequently named for this English university that also publishes a widely used dictionary of the English language.

ANSWER: **Oxford** University

[10] In a well-known demonstration of why the Oxford comma is necessary, a book was once dedicated to "my parents, Ayn Rand, and [this figure]"; omitting the comma implied that this figure and Ayn Rand were the author's parents.

ANSWER: **God** <Sahgal, General Knowledge>

16. The yellow and blue-spiked Doomslug, the fungi-categorizing spaceship M-Bot, and the pilot Spensa are characters in this author's novel *Skyward*. For 10 points each:

[10] Skyward lies outside of which author's "cosmere," which includes the Mistborn and Way of Kings serieses?

ANSWER: Brandon **Sanderson**

[10] In *The Way of Kings*, Windrunners are an order of "radiant" examples of these warriors. Tamora Pierce's novel *Squire* is part of her series about Kel training to be one of these medieval warriors. ANSWER: **knight**s [accept the **Knight**s Radiant]

[10] In another of Sanderson's non-cosmere novels, *The Rithmatist*, Rithmatics is a magic system based on this area of math. Rithmatics' use of defensive chalk circles and offensive chalk lines are based on this area of math that studies the properties of points, lines, and shapes.

ANSWER: **geometry** < C. Gao, Literature>

17. Answer the following about geologic time periods and their relation to the progressive post-metal band The Ocean. For 10 points each:

[10] This period is the second word in the name of the second track on The Ocean's album Phanerozoic II: Mesozoic | Cenozoic. This period ended with the K-T extinction, which killed the non-avian dinosaurs.

ANSWER: the **Cretaceous** period

[10] This period between the Triassic and Cretaceous periods is the first word in the title of the aforementioned song by The Ocean. Creatures such as the Stegosaurus and Allosaurus lived during this period.

ANSWER: the **Jurassic** period

[10] This period partly names a song by The Ocean named for "Eternal Recurrence." This period's namesake "explosion" greatly increased biodiversity.

ANSWER: the <u>Cambrian</u> period [accept the <u>Cambrian</u> explosion, accept "<u>Cambrian</u> II: Eternal Recurrence] <Young, Science>

18. In a metaphor, this poet compared her father to a Nazi "man in black with a Meinkampf look" that was "chuffing" them "off like a Jew". For 10 points each:

[10] Name this American poet who included the poem "Daddy" in a collection of poems titled for her horse, *Ariel*.

ANSWER: Sylvia **Plath**

[10] Władysław Szlengel (**vwah-DEE-swaff SHLEN-gull**), a poet from this country, wrote poems about his survival of the Holocaust after the Nazi invasion of this country. Szlengel fought in the Siege of Warsaw in this country's capital.

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

[10] This other book about the Holocaust was written by Elie Wiesel (**VEE-sul**). It depicts Wiesel's life in the Buchenwald concentration camp with his father.

ANSWER: Night < Kher, Literature>

19. The command "Don't fire until you see the whites of their eyes" was issued during this battle. For 10 points each:

[10] Name this June 1775 battle in which American forces lost to a British army on the outskirts of Boston. The location of this battle was actually at Breed's Hill, not at its namesake location.

ANSWER: Battle of **Bunker Hill**

[10] The Battle of Bunker Hill took place during this 1775-1783 conflict in which American patriots won independence from England.

ANSWER: **Revolutionary War** [accept **American Revolutionary War**; accept **American Revolution**] [10] This pair of battles that began the American Revolution took place earlier the same year. Joseph Warren, a physician and general who died at the Battle of Bunker Hill, sent Paul Revere on his midnight ride just prior to these battles.

ANSWER: Battles of **Lexington** and **Concord** [accept in either order] <Koutsoukos, History>

20. Contrary to what many say, Connecticut is fantastic! Answer the following about the Nutmeg State, for 10 points each:

[10] This capital city of Connecticut is also known as the "Insurance Capital of the World". The longest published newspaper in America is this city's "Courant".

ANSWER: **Hartford**

[10] New Haven, one of the first planned cities in the United States, is home to a namesake Green, the Peabody Museum of Natural History, and this Ivy League University. After Harvard, this university was the second Ivy League school to be founded.

ANSWER: **Yale** University

[10] New Haven is located on this body of water that lies to Connecticut's south. Both the Quinnipiac River and the Connecticut River drain into this estuary, and cities that lie on this body of water include Stamford and Bridgeport.

ANSWER: **Long Island Sound** [prompt on the Sound] <Sahgal, Geography>