1. Interdisciplinary
This noun can refer to a musical arrangement for an instrument other than the one that the original composer planned for. The same term is used for a process that occurs in prokaryotic cytoplasms, creating RNA based on codes within DNA. Give this term that also is used to describe the process of putting oral speech into written words.

ANSWER: Transcription (do not accept alternatives)

2. Pyramidal Math (30 Seconds)
This number is the twentieth term in the arithmetic sequence that begins 21, 19, 17, etcetera. It also equals the determinant of the matrix that has the top row one five and the bottom row four three. Find this number equal to the slope of the line through the points (1,61) and (4,10).

ANSWER: -17 (do not accept 17)

3. World Literature
(Note to moderator: Euripides is four syllables.) This play starts with a conversation between The Nurse and The Tutor in the presence of the title character’s two sons. The title character can be heard crying and muttering, “I can't stand this pain, this misery. What do I do? I wish I could die!” She has been brought to Corinth and abandoned by her husband, who is a great hero. Name this work by Euripides about the wife of Jason.

ANSWER: Medea

4. Current Events
She attended orientation at the University of Hawaii at Hilo and took classes at Hawaii Pacific, North Idaho, and Matanuska-Susitna before graduating from the University of Idaho in 1987. In 2003 and 2004, she chaired an Oil and Gas Conservation Commission following an election loss. She has been investigated by Steven Petumenos and Stephen Branchflower for her firing of Walt Monegan, who had refused to fire Mike Wooten, her former brother-in-law. Name this Governor who was John McCain’s running mate.

ANSWER: (Sarah) Palin (accept Heath)

5. Biology
Research on it was done in the 19th Century by Charles Gerhardt, who studied anhydrides, and Felix Hoffman, who wanted to help his father. Its mechanism was described by John Vane, who showed that it decreased the production of prostaglandins. Ancient Egyptians used it by eating myrtle leaves and Greeks by willow bark. It is known to scientists as acetylsalicylic acid, and in some cases it causes Reye’s Syndrome. Name this medication used as an anti-inflammatory that reduces fevers and relieves pain.

ANSWER: Aspirin (accept Acetylsalicylic Acid before it is mentioned)
6. Music
Her career began in 1935 with four big hits, including What A Little Moonlight Can Do. One of her most controversial songs was written by a Jewish schoolteacher and was included on the B Side of Fine And Mellow. That song was Strange Fruit, which describes a lynching. One of her most popular songs was Lady Sings The Blues, which also was the title of her autobiography. Identify this singer nicknamed Lady Day who wrote the song God Bless The Child.

ANSWER: (Billie) Holliday (or (Eleanora) Fagan)

7. United States History
Its first leader, Edward Maria Wingfield, was jailed and accused of being an atheist after four months in office. A few years later, at the end of Starving Time, Lord Delaware saved it by convincing its residents to stay. It was burned to the ground during Bacon’s Rebellion, almost seventy years after settlers had arrived on The Godspeed, The Discovery, and Susan Constant. Name this settlement in what is now Virginia named after the King of England in the early 17th Century.

ANSWER: Jamestown (Virginia or Settlement) (prompt Virginia)

8. Physics (10 Seconds)
One of the basic assumptions of general relativity is that the two types of this are equal. These types are inertial and gravitational, and no legitimate experiment has ever found a difference between them. The inertial type is equal to net force divided by acceleration, while the gravitational type varies directly with the force of gravity. Name this quantity that can be measured in slugs or grams.

ANSWER: Mass (do not accept Weight)

9. Vocabulary
This seven-letter term is derived from the surname of a character in the New Testament. The character, a repentant sinner who is often depicted crying in art, witnessed the death of Jesus. Though she was sincere, this term has come to refer to people who are easily moved to tears, sometimes due to drunkenness. Give this adjective beginning with the letter M that refers to sentimental people.

ANSWER: Maudlin

10. Religion/Mythology
Some people believe that these animals have some basis in reality based on Aepyornis Maximus fossils found in Madagascar, but those animals probably were vegetarians. The legendary ones could carry elephants and were described in the writings of Marco Polo and in One Thousand And One Nights. Name this type of bird that destroyed Sinbad the Sailor’s ship.

ANSWER: Roc(s)
11. Pop Culture
(Note to moderator: No singing, please.) Two of the soft rhymes in this song are visions with engines and wire with rider. It mentions Highway 9 and is addressed to a woman named Wendy. First released in 1975 with Meeting Across the River on its B Side, it was also the title track of a successful album. It contains the lines, “The highways jammed with broken heroes on a last chance power drive, Everybody’s out on the run tonight but there’s no place left to hide,” and the phrase “Tramps like us.” Name this hit by Bruce Springsteen.

ANSWER: Born To Run

12. Geometry/Trigonometry (30 Seconds)
Find all solutions in radians between zero and two pi for the equation sine x plus cosine x equals zero.

ANSWER: 3Pi/4, 7Pi/4 (any order, accept equivalents, must have both answers without extras)

13. Nonfiction
He described his experiences in Hawaii in 1980 in *The Curse of Lono*. Research for his first book resulted in him receiving a vicious beating; that book was *Hell’s Angels*. Many of his essays and columns, including one titled “The Kentucky Derby is Decadent and Depraved”, were collected into various volumes of *The Gonzo Papers*. Name this writer associated with the phrase *Fear and Loathing*.

ANSWER: (Hunter Stockton) Thompson

14. British Literature
James Mortimer appears near the beginning of this novel. Sir Henry plays a major role at the end, and the work revolves around the death of Henry’s uncle Charles, who had been preparing to invest a lot of money. Name this Arthur Conan Doyle novel that includes a family curse involving a black dog.

ANSWER: (The) Hound of the Baskervilles

15. Geography/Earth Science/Astronomy
A good view of this city can be had from Collserola Tower. Its most famous street is La Rambla, found near its Gothic Quarter, and its most famous unfinished building is Sagrada Familia, which was designed by Antoni Gaudi. It is the capital of Catalonia, which is part of Spain. Name this large city on the Mediterranean Sea that hosted the 1992 Summer Olympics.

ANSWER: Barcelona
16. Algebra (30 Seconds)
Include units. At what altitude will two planes collide if one of them starts at one thousand feet and rises at three feet per second, and the other one starts at two thousand feet and goes down at two feet per second?

ANSWER: 1600 Feet

17. Art/Architecture
Picasso made forty-four versions of this 17th Century painting about three hundred years after it was first completed. The left side of the painting shows the artist working on a very large canvas, and the right side of the painting shows two dwarfs, one of whom has his foot on a dog. The center of the picture shows the girl Margarita dressed in white, and the back of the picture has a mirror reflecting the image of the King and Queen. Name this 17th Century masterpiece by Diego Velazquez.

ANSWER: Las Meninas (accept Maids of Honor, Ladies in Waiting, or Family of Felipe IV)

18. Chemistry
These types of reactions are used to create polystyrene and can be seen in the combination of hydrogen gas with halogen gases. Investigations into the one involving DNA Polymerase won a Nobel Prize for Kary Mullis. A reaction of this type involving fission and neutrons is used in atom bombs. Name these processes in which products become reactants.

ANSWER: Chain (Reaction)

19. United States Literature
The subject of this poem is described as, “Fierce as a dog with tongue lapping for action, cunning as a savage pitted against the wilderness, Bareheaded, Shoveling, Wrecking, Planning, Building, breaking, rebuilding.” It is also described as wicked, crooked, and brutal. Written in 1916, the poem uses phrases such as, “Tool Maker, Stacker of Wheat, Player with Railroads and the Nation's Freight Handler; Stormy, husky, brawling, City of the Big Shoulders.” Name this work by Carl Sandburg about a major city.

ANSWER: Chicago

20. World History
This battle’s outcome was due in part to Marshal Ney’s slow seizing of a nearby town. The losing side was also harmed by a delay caused by strong rains the day before and by their General’s reluctance to use the Imperial Guard. This allowed the British to hold their position until Prussian support joined them, and the combined forces eventually broke down the French Army. The fighting took place on June 18th, 1815 in what is now Belgium. Name this victory by the Duke of Wellington over Napoleon.

ANSWER: Waterloo
Tiebreakers:
If you need to replace a question, take the corresponding question from the Replacement Packet rather than one of these questions. In case of a tie, use these questions in order until one is answered correctly.

This unit of measure was coined in 1782 as a marketing tool. In scientific studies, a unit named after the man who invented this unit has replaced it. Though conversions vary, it is equivalent to about 2500 British thermal units per hour, 550 foot pounds per second, or 750 Watts. It was originally based on how much coal animals could lift. Name this unit still used to rate car engines.

ANSWER: Horsepower

In the Book of Mormon, this is the name of the youngest brother of Nephi and Jacob. The name is shared by two major characters in the New Testament Gospels, one of whom wraps the body of Jesus in a clean linen cloth and places it in his tomb. The other prominent man with this name is told by an angel of the Lord to go to Egypt because Herod is going to try to kill his adopted son. Give the name of the husband of Mary.

ANSWER: Joseph (do not accept Joe)

This country borders Afghanistan, Bhutan, India, Kazakhstan, Kyrgyzstan, Laos, Mongolia, Myanmar, Nepal, North Korea, Pakistan, Russia, Tajikistan, and Vietnam. Name this country whose capital is Beijing.

ANSWER: China