

## PACKET NO. 1

1. Name this number that is the number of sides in a icosikaioctagon [I- COSY- KAI - OCTAGON].

This number is also the sum of Euler's Totient function for the first nine integers. Additionally, this is the number of ways to express 1000 as the sum of 2 prime numbers. This number is the 2nd perfect number where it can be represented as the sum of its proper divisors. For 10 points, state this number which is the summation of the first 7 natural numbers, starting with 1.

**ANSWER: 28**

2. This musical was written by three different people in 1950. It was adapted from stories by Damon Runyon. As Nathan Detroit tries to find a location for an underground craps game, he bets Sky Masterson that he can't convince a girl of his choice to go to dinner with him in Havana. Sky wins the bet. Name this musical written by Frank Loesser, Jo Swerling, and Abe Burrows.

**ANSWER: *Guys and Dolls***

3. **[Paper and Pencil Ready]** Consider Liam is playing a video game where he collects gems, and the best gem to obtain is the red gem, which spawns in a 1 in 25 probability. After obtaining any color gem, there is a chance to get a bonus, which occurs in a 1 in 4 probability. For 10 points, what is the probability that Liam gets a red gem but does not get a bonus?

**ANSWER:  $\frac{3}{100}$  (Accept fractional equivalents, and 0.03)**

4. The national museum of this country is called the Te Papa Museum and sits on a harbor in a major strait that separates two portions of this country. The northernmost point of this country, one of two that claims inventorship of the Pavlova, is called Cape Reinga. Prior to European colonization, this country named after a region in the Netherlands possessed a peculiar ecosystem in which there was extremely limited mammalian involvement. This country made up of two islands is the home country of director and actor Taika Waititi [TI-kuh Wi-TEE-tee] and is often also known as Aotearoa [OW-tay-uh-RO-a]. For 10 points, what country is home to the Maori [MOW-ree] people and served as the film location for Peter Jackson's Lord of the Rings Trilogy?

**ANSWER: New Zealand, accept Nova Zeelandia and Aotearoa until mentioned**

## PACKET NO. 1

5. When this person was offered knighthood in 1658, he claimed descent from the lesser nobility in order to qualify, however, his grandparents may have been tradespeople. This person was born in Seville, Spain in 1599. One of his final works was "Las Hilanderas" [ee-lon-DAIR-as], "The Spinners" in English, painted circa 1657, a depiction of Ovid's fable of Arachne. This painter was a part of the Baroque movement. This Spanish painter painted during the Spanish Golden Age. This painter has many paintings in the Prado museum. This painter painted King Philip IV [four] and his family. This painter's most famous painting raises questions about the uncertain relationship between the figures and viewers. For ten points name this painter that has a replica of his painting "Las Meninas" in upstairs Plymouth C Pod.

**ANSWER: Diego Velasquez**

6. This war was waged by WWI veterans in their home country during the Great Depression to improve wheat production and prevent secession. In 1932, military involvement in this war was set to begin and ammunition and Lewis guns were gathered, but rainfall delayed the campaign. Farmers requested military aid to help with their opponents three times after this event, but were denied each time. Leaders of the Australian military claimed this war was effective and that thousands of opponents were killed, but the ratio of kills to rounds used is suspicious. The war, carried out by the Australian military, proved ineffective, and very few of the opponents were killed. Ornithologists [or-ni-THAWL-uh-gists] described, for 10 points, what Australian military campaign as an attempt to exterminate an endemic flightless bird.

**ANSWER: Emu War (Prompt on Emu)**

7. Being almost four hours, many showings of this movie include an intermission that splits the movie in two halves. This movie is set during the Civil War on the Georgia plantation of Tara. It was directed by Victor Fleming and stars Vivian Leigh and Clark Gable. Vivian Leigh won an Oscar for her role in this. This movie includes the quote, "Frankly, my dear, I don't give a damn." After being asked, "Where will I go? What will I do?" and leaving his wife. Hattie McDaniel was the first African American to win an academy award while playing the character Mammy. This

## PACKET NO. 1

movie is based on a 1936 novel of the same name by Margaret Mitchell and came out three years later. Name this movie with the characters Scarlett O'Hara, Rhett Butler, and Ashley Wilkes.

**ANSWER: Gone with the Wind**

8. The first patent for one of these household objects was filed in 1956 by Donald G. Moore, but it did not see mainstream commercial success until recently. One of these objects was on display at the American National Exhibition in Moscow in the 1950s despite the first commercially available version, called Trilobite, only being available in 1996. The lowest end model of the predominant brand of this object, which was founded in 1990, is available for 199.99 plus tax at time of writing. An article published in the New York Times about these household objects, which often use Camera, RCON, and Light touch sensors, speculated on misuse of data collected thereby, specifically in devices produced by industry leader, iRobot. For 10 points, name this type of household object, often referred to as a roomba.

**ANSWER: Robot Vacuum or clear knowledge equivalent, accept Roomba until mentioned.**

9. In the 1925 book *The Great Gatsby* by F. Scott Fitzgerald the character James Gatz, more commonly known as Gatsby, uses this colloquialism to describe the main character Nick Carraway. Activities that can also be described by this phrase are running, discus throwing, javelin throwing, and wrestling. This colloquialism is a friendly term of endearment and of affection similar to the words "buddy or pal". This colloquialism can also mean "Old friend", "old classmate", and "old man".

**ANSWER: "Old Sport"**

10. This country, named after a monarch of its former colonizer, is one of 8 with a currency called a peso. More recently, this country was ruled by Rodrigo Duterte [Doo-tare-tay], a political figure who was later arrested by the International Criminal Court for crimes against humanity in his war on drugs. This country's main island, Luzon [looZ-ON], is home to Mount Pinatubo [PEE-nuh-TOO-bow]. One of this country's two national languages is derived from Tagalog

## PACKET NO. 1

[Tug-AW-lug], the language from which the expression “in the boondocks” derives. For 10 points, name this archipelagic nation in the Pacific Ocean whose capital is Manila.

**ANSWER: the Philippines, accept Las Filipinas**

11. These monogamous second-largest rodents, considered fish in Catholic tradition according to the bishop of Quebec [kwuh-BECK], share their name with the title character of a famous 1950s sitcom. Closely related to kangaroo rats, these highly intelligent rodents with both North American and Eurasian varieties are able to produce castoreum [cast-OR-ee-um] from their anal glands, which can be used to imitate both vanilla and raspberry flavors. While not necessarily rabid, these rodents are known to be agitated by the sound of running water, and have teeth that continue growing their whole life. For 10 points, name these land rodents that live in lodges built in calm waters created by their respective dams.

**ANSWER: Beavers, do not accept Capybaras, Woodchucks or any other non-beaver rodents.**

12. This woman’s popularity dipped after numerous scandals including one where she accused one of her mother’s unmarried ladies of being pregnant and another when chose her own ladies from only one political party. This woman’s uncle Leopold was elected the first King of the Belgians. Judi Dench played this woman in two films while Emily Blunt played her in one 2009 film about this woman. The current kings of Sweden, Norway, the UK, Denmark, and Spain, as well as the defunct Russian, Romanian, and Greek monarchies, are all descended from this woman, called the “Grandmother of Europe.” The capital of the Canadian province of British Columbia, a large Canadian island, and an Australian state are all named for this woman. Despite being known by her companions as a happy and laughing person, this woman is attributed with saying "we are not amused". Following her husband Albert’s death, this woman went into full mourning for 40 years. For 10 points, name this British monarch, the second-longest reigning monarch in British history and the woman who gives her name to a period from 1837 to 1901.

**ANSWER: Queen Alexandrina Victoria (Accept just Victoria after monarch mentioned)**

## PACKET NO. 1

13. This American social psychologist is famous for two distinct experiments in the field of social psychology, one taking place at Harvard and the other at Yale. The first of the two experiments performed by this man involved mailing out a specially designed package and came to the skepticized conclusion that people are separated by only about 6 degrees on average. The second major experiment was inspired by concerns over the Holocaust and involved a subject believing they were shocking an experiment confederate under the guidance of an experimenter. For 10 points, name this psychologist who names a famously controversial experiment on obedience.

**ANSWER: Stanley Milgram**

14. Most of this disease's fatalities are caused by *P. falciparum* [fal-CI-par-um]. The WHO recommends testing for this disease if a patient has recently traveled to sub-Saharan Africa. This disease is spread by the *Anopheles* [an-OFF-a-leez] mosquito, and can also affect non-human primates. This disease is caused by Genus plasmodium, [plaz-MO-dee-um] and typically causes intense fever-and-chills cycles. For 10 points, name this disease, which kills roughly 600,000 people annually and whose contraction can be prevented through the use of mosquito nets.

**ANSWER: Malaria**

15. This monument, once vandalized by Just Stop Oil and from which a decapitated skeleton was unearthed in the 1920s, has a replica made out of automobiles in the US State of Nebraska. Located on the Salisbury Plain, and subject to great debate as to its constructed methods, this monument is one of three versions constructed in a circular form at the same site over time, using rocks. The rocks that make this monument are known to make a loud sound, when struck, which is a hypothesized justification for their transportation from Wales to their final destination 140 miles away. For 10 points, name this monument, made of stones suspended in the air by other stones, some of which have fallen, which is located in England.

**ANSWER: Stonehenge**

16. Name this experiment where Feynman described it as similar to a machine gun shooting bullets inaccurately. Afsar showed the principle of complementarity by using a version of this

## PACKET NO. 1

experiment and a simpler version of this experiment can be conducted using a device named for Mach and Zender. The concept of negative probabilities is usually demonstrated using this experiment and this experiment also works by producing fringes of light and dark called an interference pattern. For 10 points, name this experiment conducted by Thomas Young which demonstrated the wave nature of light using its namesake apparatus.

**ANSWER: Young's Double Slit Experiment**

17. This element on the periodic table's symbol does not match its modern day name. It's known to have been found in Egyptian tombs, as well as its use in medicine by the Greeks, and the Romans. This element's symbol on the periodic table comes from the Greek word hydrargyrum [hy-DRAR-jər-əm]. Due to its toxic properties, it is no longer used in modern-day thermometers. This element is the only known metal that remains liquid at room temperature. Name this element that shares the same name as a planet.

**ANSWER: Mercury**

18. This economic term is often used in macroeconomics, and well as its sister field of study microeconomics. When this term's value is increased consumers as well as firms choose to hold less of their wealth in the form of money. When purchasing bonds it is more beneficial for this term to be high to earn more profit. Banks charge this when handing out loans. For 10 points what is the name of this term, that is the percentage amount that you pay for borrowing money, or get for lending money.

**ANSWER: Interest**

19. This metropolitan city, once known by another name, was built upon several islands surrounding a major island that is enclosed by two rivers. Upstream on one of these two rivers is the much less populated seat of this city's larger government, as well as a major infrastructure project connecting it to the Great Lakes. It's not New York City, but much of this city's largest island surrounds a park designed by Frederick Law Olmstead. This major city is one of 16 North American cities with a subway system, and has 6 United Nations offices. For 10 Points- name this

## PACKET NO. 1

host of the 1976 Olympics, wherein a kevlar roof resulted in immense construction delay, that is home to the Samuel de Champlain bridge, a Gothic revival Notre Dame Cathedral, and a three pointed mountain, the largest French speaking city in Canada.

**ANSWER: Montreal (accept Ville Saint-Marie)**

20. This slang term first gained popularity early in the year 2020 on many social media platforms: TikTok, Instagram, Facebook, Reddit, Twitch, and Youtube. Though it has existed since the early 2000s it was recently popularized in the past 4 years by streamers such as YourRage and Kai Cenat. This term is very popular among Gen Z and Gen alpha. This term is often used like "I this term in my eye". For ten points, what is the term that is used when a person is surprised when they see a large buttocks.

**ANSWER: Gyatt**