



## 2024 Summer Open (T1) – Pack 1

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**Head Editor:** *Paul Kasiński*

**Writers/Editors:** *Odin Fisher-Skau, Max Gedajlovic, Ian Greig, Paul Kasiński, Jenny Mao, Jack van Nostrand, Ryan Sharpe, Joe Su, Isaac Thiessen, Gaian Valdegamo, Zhongtian Wang, Joyce Xi*

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# PACK 1

## 5-Part Blitz

1. Weeks before his 51st birthday, who won the PGA Championship in May 2021, becoming the oldest golfer ever to win a major?  
A: Phil **Mickelson**
2. What leader was likely killed at the Battle of the Silarus river, bringing an end to the slave revolt he led against the Roman Republic?  
A: **Spartacus**
3. After swapping portfolios with Stephen Lecce on Thursday, who is Ontario's new minister of education?  
A: Todd **Smith**
4. What word comes before the phrase "you can meet with Triumph and Disaster/And treat those two impostors just the same" in a poem by Rudyard Kipling?  
A: **if**
5. Squid, scallops, and snails belong to what phylum?  
A: **mollusca** (accept: **molluscs**)

## Double Jumps

6. A control unit directs the operations of what core processing element of a computer?  
A: **central processing unit** (accept: **CPU**)
7. What part of the CPU, also known by a three-letter acronym, is responsible for integer calculations?  
A: **arithmetic logic unit** (accept: **ALU**)
8. Before the arrival of the Spanish in 1519, what empire was ruled from Tenochtitlan by Montezuma II?  
A: **Aztec** Empire
9. The Aztec Empire was an alliance of three Nahua city-states, including Tenochtitlan. Name either of the other two.  
A: **Tlacopan** OR **Texcoco** (accept: **Tetzcoco**)

## Set of 4: Cult Films

10. What film, the feature directorial debut of Kevin Smith, shows a day in the life of Randal and Dante working at a video store and convenience store, respectively?  
A: **Clerks**
11. What musical stars characters such as a criminologist, an ex-delivery boy, and a mad scientist from Transsexual, Transylvania?  
A: *The* **Rocky Horror Picture Show**
12. In what Jake Gyllenhaal film is the title character haunted by visions of an entity in a rabbit costume foretelling the end of the world?  
A: **Donnie Darko**
13. What film inspired the "Dudeism" religious movement and follows a bowler who is mistaken for a millionaire?  
A: *The* **Big Lebowski**

## Jackpot

14. Part 1: What was the first name of the economist whose 1920 article "Economic Calculation in the Socialist Commonwealth" argued that central planning could never efficiently meet the demands of a population?
15. Part 2: An architect with this first name designed the Kluczynski Federal Building as part of the Chicago Federal Center.
16. Part 3: A philosopher with this first name put forward seven top-level propositions in one text, including "Whereof one cannot speak, thereof one must be silent" and "The world is everything that is the case".
17. Part 4: Many ambitious architectural projects, including Linderhof Castle and Neuschwanstein Castle, were undertaken by a king of Bavaria with this name, who is sometimes known as the "Mad King".  
A: **Ludwig**

### Set of 3: Statistics

18. In ANOVA, what letter is used to represent the test statistic equal to the between-group variance divided by the within-group variance?  
A: **F**
19. The standard deviations follow the 68-95-99.7 rule in what statistical distribution?  
A: **normal** distribution (accept: **Gaussian** distribution) (prompt on: bell curve)
20. Flipping a fair coin is one example of what kind of statistical trial that only has two possible outcomes, success or failure?  
A: **Bernoulli** trial/experiment

### 5-Part Blitz

21. What instrument, similar to a baritone horn, has a name coming from the Greek for "good sound"?  
A: **euphonium**
22. Ray Kroc is credited with the success of what restaurant chain that features mascots like the Hamburglar and a clown named Ronald?  
A: **McDonald's** Corporation
23. What tart, bright green variety of apple is named for an Australian grandmother?  
A: **Granny Smith** apple
24. What iconic *Call of Duty* map is set in the slums of Rio de Janeiro?  
A: **Favela**
25. Who describes herself as having "always depended on the kindness of strangers" in *A Streetcar Named Desire*?  
A: **Blanche DuBois** (accept either bolded part)

## END OF FIRST QUARTER

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## SECOND QUARTER

### Splits: The Great Depression & the Arrowverse

#### The Great Depression

26. What multi-year climatic event contributed to the Depression through a massive drought and the destruction of topsoil across the Great Plains?  
A: **Dust Bowl**

27. What photograph by Dorothea Lange shows Florence Owens Thompson and her children in California during the Dust Bowl?  
A: **Migrant Mother**
28. What longstanding policy did Britain abandon in 1931 and the United States abandon upon FDR's accession to the presidency, in both cases stimulating economic recovery?  
A: the **gold standard**
29. The New Deal created what agency to provide jobs for unemployed people, often by building large public projects?  
A: **Works Progress Administration** (accept: **Works Projects Administration, WPA**)

### **The Arrowverse**

30. What American television network airs the shows in the Arrowverse?  
A: The **CW** Network
31. In what city do Kate Kane and Ryan Wilder take on a new superhero identity after the disappearance of Bruce Wayne?  
A: **Gotham** City
32. What superhero befriends Winn Schott and Lena Luthor while protecting National City with her adoptive sister Alex and sometimes helping her cousin, Clark Kent?  
A: **Supergirl** (accept: Kara **Zor-El**, **Kara** Danvers) (prompt on: **Danvers**)
33. What December 2019 crossover between the Arrowverse shows resulted in the creation of Earth-Prime in a new multiverse?  
A: **Crisis on Infinite Earths**

### **Double Jumps**

34. In September 2023, what country's prime minister publicly alleged that the murder of its citizen Harjit Singh Najjar had been orchestrated by the Indian government?  
A: **Canada**
35. While living in Canada, Harjit Singh Najjar advocated for the creation of a breakaway Sikh state with what name?  
A: **Khalistan**
36. What is the most populous island in Canada?  
A: Island of **Montreal** (accept: Île de **Montreal**)
37. What is the fourth-most populous island of Canada and second-most populous island in Quebec, located beside the Island of Montreal and home to most of the city of Laval?  
A: **Jesus** Island (accept: Île **Jesus**)

### **Set of 4: Waves**

38. Sound waves are what type of wave, in which the vibrations happen parallel to the direction of wave propagation?  
A: **longitudinal** waves
39. What scientist names the equation for the wave function of a quantum system, such as an atom?  
A: Erwin **Schroedinger**
40. First observed in a Scottish canal, what kind of wave packet preserves its shape while propagating at a constant velocity?  
A: **soliton**
41. Two waves that cancel each other out demonstrate what sort of interference?  
A: **destructive** interference

#### Set of 4: Facial Hair

42. What kind of facial hair shares its name with a part of a bicycle?  
A: **handlebar moustache** (prompt on: handlebar)
43. Adolf Hitler sported what kind of narrow, straight-combed moustache?  
A: **toothbrush** moustache
44. What kind of facial hair consists of hair in a small spot above the chin and below the lower lip?  
A: **soul patch**
45. What kind of facial hair, famously sported by Elvis, is named for a Union general?  
A: **sideburns**

#### 5-Part Blitz

46. What acronym refers to games where participants physically portray their characters in real-world environments?  
A: **LARPing**
47. "Juice", "About Damn Time", and "Truth Hurts" are hits by what musician?  
A: **Lizzo** (accept: Melissa **Jefferson**)
48. What industry is regulated through legislation such as MIFID 2, in Europe, or the Dodd-Frank Act, in America?  
A: **financial** services (accept: **finance, banking**)
49. What archeological site is home to a group of soapstone eagles that also adorn the flag of the southern African country it is located in?  
A: **Great Zimbabwe**
50. What word refers to the calm central area around which a hurricane rotates?  
A: **eye**

#### END OF FIRST HALF

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#### THIRD QUARTER

#### Splits: Grasslands and African Literature

##### Grasslands

51. Most of Brazil's eastern highlands are covered by what biodiverse region of savanna?  
A: the **Cerrado**
52. About a third of India's population live on the plains around what river, the world's second-largest by discharge and Hinduism's holiest?  
A: **Ganges**
53. Analogous to "Prairies" in Canada and "Great Plains" in the United States, what term is used to refer to the grasslands that stretch across Eurasia?  
A: Great **Steppes** (accept: Eurasian **Steppes**)
54. What region, where huge migrations of leopards, zebras, and lions across the savannah take place annually, is partially protected by a namesake national park in Tanzania?  
A: **Serengeti**

##### African Literature

55. What kind of vegetable is central to the plots of *Kongi's Harvest* and *Things Fall Apart*, as well as many other works of Igbo literature?  
A: **yams**
56. What language was called a "cultural bomb" in an essay by Ngũgĩ wa Thiong'o, who swore off its use in an attempt to decolonize African literature?  
A: **English**
57. What country produced a novel in which Tambu mourns the death of her brother Nhamo at missionary school, titled *Nervous Conditions* and written by Tsitsi Dangarembga?  
A: **Zimbabwe**
58. Often described as actively immoral in contrast with Meursault's moral indifference, what character's assault of an Arab woman incites the fight on the beach in *The Stranger*?  
A: **Raymond Sintes** (accept either bolded part)

### Double Jumps

59. Aside from a narrow loss to his teammate and bitter rival Nico Rosberg in 2016, what British racing driver won every Formula One Driver Championship from 2014 to 2020?  
A: Lewis **Hamilton**
60. On the back of an intense rivalry between its drivers Alain Prost and Ayrton Senna, what team dominated the 1988 and '89 Formula One seasons?  
A: **McLaren** - Honda
61. What fruit did Andy Warhol draw for the album cover of *The Velvet Underground & Nico*?  
A: **banana**
62. The lyrics "Here she comes, you better watch your step / She's going to break your heart in two, it's true" refer to the title character of what song on *The Velvet Underground & Nico*?  
A: "**Femme Fatale**"

### Set of 3: Simple Translations

63. What is the meaning of the German word "Geburtstag" and the French word "anniversaire"?  
A: **birthday**
64. In what language does the word "jambo" mean "hello"?  
A: **Swahili**
65. What is the English translation of the Russian word "mir" and the Arabic word "salam"?  
A: **peace**

### Set of 5: Islam

66. Because their leaders claimed to be rightful successors of Mohammed, what term refers to the three Islamic empires that arose following Mohammed's death?  
A: **Caliphate**
67. What Arabic word refers to the practice of ritually cleansing parts of the body before prayer?  
A: **wudu**
68. What building, faced by the mihrab wall in a mosque, stands at the centre of the Masjid-al-Haram in Mecca and has a notably cubic shape?  
A: **Kaaba**
69. What is the oldest and most-followed school of Sunni jurisprudence, established by Abu Hanifa in the 8th century?  
A: **Hanafi** school (accept: **Hanafism**)

70. Al-Baqara or "The Cow," is an example of what sacred writings, which recount revelations that God told to Mohammed?  
A: **Surahs**

### 5-Part Blitz

71. Kenneth J. Alford and John Philip Sousa are known primarily for composing what type of music?  
A: military **marches**
72. How many periods are on the periodic table?  
A: **seven**
73. From the late 18th century to the end of World War I, what modern-day country made up the core of the Qajar ["kah-JAR"] Empire?  
A: **Iran**
74. Knave is an alternate name for what kind of card in a standard deck?  
A: **Jacks**
75. When an NFL coach throws a red flag onto the field, what does it signify?  
A: they are **challenging** the call (accept word forms)

### END OF THIRD QUARTER

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### FOURTH QUARTER

#### Jackpot

76. Part 1: Leonor Michaelis invented Janus Green to stain what?
77. Part 2: These objects can be donated through methods such as polar body transfer and pronuclear transfer.
78. Part 3: These objects are found in the nickname of a hypothetical "Eve", the matrilineal most recent common ancestor of all living humans.
79. Part 4: These objects contain features known as cristae ["KRISStay"], folds along their inner membranes which expand their internal surface area. These organelles are responsible for generating most ATP.  
A: **mitochondria** (accept: **mitochondrion**)

#### Streak

80. Identify up to every prime number from 80 to 99.  
A: **83**  
A: **89**  
A: **97**

#### Streak

82. Name up to any five of South Africa's eleven official languages.  
A: **English**  
A: **Zulu**  
A: **Xhosa** ["KO-ssa"]  
A: **Afrikaans** (accept: **Cape Dutch**) (prompt on: **Dutch**)  
A: **Sepedi** (accept: **Northern Sotho** ["SOO-too"])

- A: **Tswana**
- A: Southern **Sotho** ["SOO-too"]
- A: **Tsonga**
- A: **Swati**
- A: **Venda**
- A: **Ndebele**

### Set of 5: Young Adult Media

84. What is the largest and most powerful vampire coven in the *Twilight* series?  
A: **Volturi**
85. What faction of soldiers and police, associated with bravery, does Tris join in the book *Divergent*?  
A: **Dauntless**
86. What young adult author hosted the World History series of *Crash Course*?  
A: **John Green** (prompt on: Green)
87. What prequel to *Life is Strange* is set before Max's return to Arcadia Bay and follows the development of Chloe's relationship with Rachel?  
A: *Life is Strange: **Before the Storm***
88. What book's sequel *The Hawthorne Legacy* continues the story of heiress Avery Grambs?  
A: *The **Inheritance Games***

### 12-Part Blitz

89. Two parallel and overlapping p-orbitals form what kind of bond?  
A:  **$\pi$**  bond
90. What Holy Roman Emperor ruled Spain at the time of Hernan Cortes's and Francisco Pizarro's expeditions?  
A: **Charles V** (accept: **Charles I** of Spain) (prompt on: Charles)
91. Musicians Ricky Martin, Daddy Yankee, and Bad Bunny are all from what US territory?  
A: **Puerto Rico**
92. What name is given to the range of orbits around a star that can support liquid water, and therefore life?  
A: **circumstellar habitable zone** (accept: **CHZ, goldilocks zone**)
93. In *Sushi Go*, the player with the most of what kind of card at the end of the whole game scores six points, while the player with the fewest loses six points?  
A: **pudding**
94. What song's lyrics declare "Yo no soy marinero, soy capitán, soy capitán, soy capitán"?  
A: **"La Bamba"**
95. Insincere tears are often given what animalian name?  
A: **crocodile** tears
96. What kind of object is carried by Claude Monet's wife while she strolls with their young son in an 1875 oil painting?  
A: **parasol** (accept: **umbrella**)
97. What pair of 9th-century saints are credited with formulating the Glagolitic script, the first alphabet used to transcribe a Slavic language?  
A: Saint **Cyril** AND Saint **Methodius**
98. What term refers to a baseball player who can bat from either side of the plate?  
A: **switch-hitter**
99. "Lay Low", "10:35", and "The Business" are tracks by what Dutch DJ and EDM icon?  
A: **Tiësto** (accept: Tijs Michiel **Verwest**)



100. Alaric I, who led the Sack of Rome in 410, was a king of what Germanic people?  
A: **Visigoths** (prompt on: Goths)

**END OF GAME**