



GRADWRITE '24

Contributors:

Asha Basu

Charlotte Bauer

Tai Belke

Tomas Bertovic

Brendan Bridle

Ava Butler

Kunaal Chandrashekar

Idan Chinnik

Simon Choist

Soham Dhar

Amir Dolansky

James Ferrabee

McKenna Gray

Lucas Hall

Zach Higgins

Joyann Hua

Lee Huynh

Susanna Liao

Eva Mandelbaum

Will Marcotte

Nina Nakamura

Eli Nason

Adrian O'Leary

Nathan O'Leary

Stephen Ottewell

Olivia Parisotto

Anna Reso

Matthew Stasiw

Dylan Steptoe

Serena Suleman

Denali Tran-Le

Stefan Vlad

Chris Wang

Chloe Wei

Alvin Yeung

PACK 10

Pack Editor:

Chris Wang

5-Part Blitz

1. Who, along with Simon Newcomb, names a law that observes that larger leading digits are less frequent in real-world data?

A: Frank **Benford**

2. Who has the longest winning streak of any Canadian *Jeopardy!* player, with 23 consecutive wins in April 2023?

A: Mattea **Roach**

3. Credited to Samuel E. Martin, what is the most common gender neutral term for a niece or nephew?

A: **nibling**

4. In 2013, what seven-time Formula One World Champion suffered severe brain injuries due to a skiing accident?

A: **Michael Schumacher** (prompt on: Schumacher)

5. Name either of Mozart's two symphonies nicknamed for European capital cities.

A: **Paris** Symphony (accept: Symphony no. **31** in D Major) OR **Prague** Symphony (accept: Symphony no. **38** in D Major)

Set of 4: Chinatown

6. First settled by Catholic Chinese, what city is home to Binondo, the oldest Chinatown in the world?

A: **Manila**

7. The famously-narrow Jack Chow Building is found in what city's Chinatown, the largest in Canada?

A: **Vancouver**

8. Who starred as Jake alongside Faye Dunaway in the 1974 film *Chinatown*, for which he won a Golden Globe for Best Actor?

A: Jack **Nicholson**

9. Name one of the two Chinese provinces that immigrants in early North American Chinatowns primarily came from.

A: **Fujian** OR **Guangdong**

Jackpot

10. Part 1: What element is the centre of Tabun, a chemical compound developed in Germany for World War II?

Part 2: A natural cycle of this element lacks interaction with the atmosphere, as it does not enter the gaseous phase easily, and concerns runoff of fertilizer and sedimentary rocks seeping into the ground and plants.

Part 3: This element is the second pnictogen ["NICK-tow-jen"] on the periodic table, and it has red and white allotropes.

Part 4: This element has an atomic mass of 30.97, an atomic number of 15, and an atomic symbol of P.

A: **phosphorus** (prompt on: **P**)

Set of 3: Redundant Geography

11. Emerald Bay State Park is located near the south shore of what lake, which straddles the border between California and Nevada?

A: Lake **Tahoe**

12. The Gerboise nuclear test series was conducted in what hot desert, the world's largest by area?

A: **Sahara** Desert

13. What is the northernmost arm of the Baltic Sea, located between Sweden and Finland?

A: Gulf of **Bothnia**

Double Jump

14. What is the Arabic name of the fifth Pillar of Islam, which requires followers to make a pilgrimage to Mecca?

A: **Haji** (accept: **Haji**)

15. Pilgrims on the Hajj typically first arrive in what city, whose airport has a dedicated Hajj terminal that can serve 80,000 passengers at once?

A: **Jeddah**

Double Jump

16. What is the largest object by diameter in the Kuiper ["KAI-per"] belt, being classified as a dwarf planet in 2006?

A: **Pluto**

17. Behind Pluto, what is the second largest object in the Kuiper Belt?

A: **Eris**

5-Part Mystery Link

18. What crime partially titles a Shondaland legal thriller starring Viola Davis as Annalise Keating?

A: **murder**

19. The Centennial Flame and Peace Tower sit on what hill in Ottawa, named for a collection of buildings that surround it?

A: **Parliament** Hill

20. In John Milton's *Paradise Lost*, what is the capital of Hell?

A: **Pandaemonium**

21. Which of the seven deadly sins is considered the deadliest and the source of all sins, as it is believed to cause blinding vanity?

A: **pride**

22. Didaskaleinophobia ["dih-DAH-ska-lay-no-FOE-bee-ah"] is the fear of going where, most common in young children?

A: **school**

Link: All answers are collective nouns for groups of animals.

END OF FIRST QUARTER

SECOND QUARTER

Splits: Organic Chemistry & Women in Painting

Organic Chemistry

23. How many carbon atoms are in 2-methylpropanoic acid?

A: **4**

24. What functional group is yielded along with water in a substitution reaction between an alcohol and a carboxylic acid?

A: **ester**

25. What aromatic compound, with formula C₆H₅CH₃, consists of a phenyl group bonded to a methyl group?

A: **toluene** (accept: **1-methylbenzene**)

26. Along with hydrogen, what element is necessarily present in thiol groups, taking the place of oxygen in alcohols?

A: **sulfur** (accept: **S**)

Women in Painting

27. A portrait of whom, extremely controversial due to her pale skin and revealing dress, was painted in 1884 by John Singer Sargent?

A: **Madame X** (accept: Virginie Amélie Avegno **Gautreau**)

28. Josephine Nivison modelled for which painter's *Morning Sun* and *Nighthawks*?

A: Edward **Hopper**

29. Marie Bracquemond, Berthe Morisot, and Mary Cassatt are known as the "trois grandes dames" of what art movement of the late 19th century?

A: **Impressionism** (accept: **Impressionist** movement)

30. Bronzino, Velazquez, and Botticelli have all depicted what Roman goddess of love in their works?

A: **Venus**

Set of 3: Short People

31. Who is believed to be the shortest British monarch, standing at around five feet tall?

A: Queen **Victoria**

32. A society of people under 6 inches inhabit what island on which Gulliver first washed ashore?

A: **Lilliput**

33. In his most recent namesake film, what character, along with his "blip activist" daughter, became so small that he entered the "quantum realm?"

A: **Ant-Man** (accept: Scott Edward Harris **Lang**)

Set of 4: Lesbians in Film

34. The setting of the 2016 historical thriller *The Handmaiden* was changed from Victorian-era Britain to what modern day country?

A: **South Korea** (accept: **Republic of Korea**) (prompt on: Korea)

35. In what period drama directed by lesbian filmmaker Céline Sciamma ["ski-AH-muh"] must Marianne secretly paint Héloïse ["eh-loo-EEZ"]?

A: **Portrait of a Lady on Fire**

36. What practice was Megan Bloomfield subjected to in *But I'm a Cheerleader*, and was outlawed in Canada in 2022?

A: **conversion therapy**

37. What 2023 release starring Rachel Sennott and Ayo Edebiri sees Josie and PJ start a fight club in their high school to hook up with cheerleaders?

A: **Bottoms**

Double Jump

38. For what collection of articles did John Jay write 5 papers, James Madison write 29, and Alexander Hamilton write 51?

A: **Federalist** Papers

39. Federalist 78 was famously cited in the majority opinion for what case which struck down Section 13 of the Judiciary Act, establishing the principle of judicial review?

A: **Marbury v. Madison**

Double Jump

40. Performers of what athletic event include Becky Lynch and "Stone Cold" Steve Austin, who are best known for their time at the WWE?

A: professional **wrestling** (accept: pro **wrestling**)

41. Andre the Giant, "Macho Man" Randy Savage, and "Stone Cold" Steve Austin are all examples of what kind of wrestling character who functions primarily as a villain?

A: **heel**

Linked Set of 6

42. The fleur-de-lis is a stylised depiction of what flower?

A: **lily**

43. What kind of structure is present in all of Claude Monet's *Water Lily* paintings from 1899 and 1900?

A: **bridge**

44. What is the second cheapest suit in the game of bridge?

A: **diamonds**

45. What actress, who played Lorelei Lee in *Gentlemen Prefer Blondes*, sang "Diamonds Are a Girl's Best Friend"?

A: Marilyn **Monroe**

46. First admitted as a slave state, what state names a compromise signed by James Monroe?

A: **Missouri**

47. Every year more than one million visitors take a tram to the top of what catenary landmark in St. Louis, Missouri?

A: **Gateway Arch** (prompt on: Arch)

END OF FIRST HALF

THIRD QUARTER

Splits: Science Fiction & Chile

Science Fiction

48. In what sci-fi novel does Billy become "unstuck in time" after experiencing the bombing of Dresden, which was also experienced by its author, Kurt Vonnegut?

A: **Slaughterhouse-Five**

49. What 2016 movie, inspired by Ted Chiang's short story "Story of Your Life," features a linguist played by Amy Adams translating alien language?

A: **Arrival**

50. What author wrote about psychohistory being invented by Hari Seldon in his *Foundation* series?

A: Isaac **Asimov**

51. The popularity of the cyberpunk subgenre is often credited to what novel by William Gibson?

A: **Neuromancer**

Chile

52. The Very Large Telescope is an astronomical facility located in what desert in northern Chile, the driest non-polar desert in the world?

A: **Atacama** Desert

53. On September 11th, 1973, which democratically-elected Marxist Chilean leader was overthrown by Augusto Pinochet?

A: Salvador Guillermo **Allende** Gossens

54. Chuquibambata ["choo-key-ka-MAH-ta"] is the largest open-pit mine in the world for what metal, which Chile is the world's largest producer and exporter of?

A: **copper**

55. What explorer names the passage separating Chile's land on South America and Antarctica for his sailing through it on the Golden Hind during his circumnavigation of the world?

A: Vice Admiral Sir Francis **Drake**

Set of 4: Spelling Sauces

All answers must be spelled.

56. It is a fermented sauce invented in 19th century England. Spell "worcestershire" ["WUR-ster-shur"].

A: **W-O-R-C-E-S-T-E-R-S-H-I-R-E**

57. It is a fermented fish sauce used in ancient Greece, Rome, and Carthage. Spell "garum" ["GAH-rum"].

A: **G-A-R-U-M**

58. It is the best-selling brand of Japanese mayonnaise. Spell "kewpie" ["KYOO-pee"].

A: **K-E-W-P-I-E**

59. It is a kind of chili sauce originating from its namesake town in Thailand. Spell "sriracha" ["sir-AH-cha"].

A: **S-R-I-R-A-C-H-A**

Jailbreak

60. Robert Falcon Scott was beaten to the South Pole by what Norwegian explorer who led the first team to reach the pole?

A: Roald **Amundsen**

61. What letter represents the subshell in an atom with angular momentum quantum number 2 and 5 orbitals, meaning it can hold 10 electrons?

A: **d**

62. Matthew Gray Gubler plays Spencer Reid in what ongoing CBS drama, where FBI profilers use behavioural analysis to investigate crimes?

A: **Criminal Minds**

63. What is the largest Canadian province by area?

A: **Quebec**

64. What shell command is used to display all contents of the current directory?

A: **ls** ["ell-ess"]

65. The Sultanate of Rum was the last sultanate of what dynasty?

A: **Seljuk** Turks

66. What is the NATO code word for the letter K and the metric prefix for a thousand?

A: **kilo**

67. What drink brand features flavours such as "Strawberry Passion Awareness" and "Fruit Integration"?

A: **Fruitopia**

68. Who wrote about a poet who punningly demands to know "to whom [he] was like to give offense" in "Mending Wall"?

A: Robert **Frost**

69. Due to his healing powers, the Rx symbol for prescriptions is believed to come from the eye of what Egyptian god?

A: **Horus**

70. How many humps does a bactrian camel have?

A: **2**

71. What YouTuber released the video "Goodbye Internet" in March 2024, in which he announced his retirement?

A: **MatPat** (accept: Matthew Robert **Patrick**)

72. In law, a defendant who is knowledgeable of their wrongdoing is said to have what Latin phrase, translating to "guilty mind"?

A: **mens rea**

END OF THIRD QUARTER

FOURTH QUARTER

Jackpot

73. Part 1: At what university did Albert Bandura carry out the Bobo doll experiment, where he was also a professor?

Part 2: This university, together with psychologist Alfred Binet, names a common intelligence test.

Part 3: This university also named a psychology experiment that claimed children who were able to wait for a second marshmallow had better life outcomes.

Part 4: Philip Zimbardo ran another psychology experiment at this university which divided subjects into guards and prisoners.

A: **Stanford** University

Set of 3: Periods

74. In radians, the wave function sine of x has what period?

A: **2 pi** (accept: **tau**)

75. What is the name for the outer layer of the uterus, shed during a menstrual period?

A: **endometrium**

76. The Crystal Period is part of what broader art movement, which was pioneered by Georges Braque and Pablo Picasso?

A: **Cubism** (accept: **Cubist** movement)

Streak

77. Name up to all optional crewmate roles in *Among Us*.

A: **Engineer**

A: **Guardian Angel**

A: **Scientist**

A: **Tracker**

A: **Noisemaker**

Streak

78. Name up to all 5 members of the US Women's Gymnastics team at the 2024 Paris Olympics.

A: Simone **Biles**

A: Sunisa **Lee** (accept: Suni **Lee**)

A: Jordan **Chiles**

A: Jade **Carey**

A: Hezly **Rivera**

13-Part Blitz

79. What term is used to describe the continuation of a line of poetry to the next without any punctuation?

A: **enjambment**

80. In 1962, Crayola changed what crayon's name to peach?

A: **flesh**

81. What title was last given to Mohammad Reza Pahlavi as ruler of Iran?

A: **Shah** of Iran

82. What alliterative term is followed by "do not eat" in fanfiction tags, referencing a scene in *Arrested Development* where this item is found in a paper lunch bag?

A: **dead dove**

83. Name either of the two countries where Vietnamese is an official minority language.

A: **Czechia** (accept: **Czech Republic**) OR **Slovakia** (accept: **Slovak Republic**)

84. With major mines including Greenbushes, Mount Marion, and Pilgangoora, what country is the world's largest miner of lithium?

A: Commonwealth of **Australia**

85. Reported in the same units of the mean of a distribution, what measure of spread is equal to the square root of the distribution's variance?

A: **standard deviation** (accept: **sigma**)

86. For which English Colony did the First Fleet leave Portsmouth in 1787?

A: **New South Wales** (accept: **NSW**)

87. Buick, Chevrolet, and Cadillac are all divisions of what company?

A: **General Motors** (accept: **GM**)

88. What word results from using a forward Caesar cipher with a key of 2 on the letters "z-y-j-j"?

A: **ball**

89. What artist released photos of herself dressed as various stars including Dolly Parton and Britney Spears in an 18-day countdown to her 2024 album *The Great Impersonator*?

A: **Halsey** (accept: Ashley Nicolette **Frangipane**)

90. What type of writing system is used in scripts like Chinese and hieroglyphics?

A: **logographic** system

91. A yellow pentagram with lines extending from the inner pentagon's vertices in a blue circle is at the centre of what African country's flag?

A: Federal Democratic Republic of **Ethiopia**

END OF GAME