



2023 Summer Open (T3) – Pack 3

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PACK 3

FIRST QUARTER

4-Part Blitz

1. Creutzfeld-Jakob [“KROYTZ-feld YAK-ob”] disease and mad cow disease are caused by misfolded proteins called what?

A: **prions**

2. Who sculpted *The Ecstasy of Saint Teresa*?

A: Gian Lorenzo **Bernini**

3. Who is the protagonist of a series of graphic novels about himself, his girlfriend Ramona Flowers, and her seven evil exes?

A: **Scott Pilgrim** (accept either underlined part)

4. Contrasted with marshes, which are wetlands dominated by grasses, what general class of wetlands is characterized by an abundance of trees?

A: **swamps**

Jackpot

5.

Part 1: A solo for what instrument introduces the title character of one work, after an opening "Once Upon a Time" theme and before a brief clarinet solo?

Part 2: Franz Sussmeyer finished one of Mozart's four concertos for this instrument, all of which were written for Joseph Leutgeb [“LOYT-geb”].

Part 3: This instrument plays a solo known as the “Long Call” in Act 2 of the opera *Siegfried*, which also calls for four larger versions of this instrument named after the composer.

Part 4: Prior to Heinrich Stölzel creating a valved version of it, if hand-stopping was not used, only natural harmonics could be played on this coiled brass instrument.

A: **French horn** (prompt on: horn)

Set of 4: Calendars

9. What civilization's “long-count” calendar was mistakenly believed by some to have predicted that the world would end in 2012?

A: **Mayans**

10. What kind of calendar may use leap months, often 7 out of 19 years, to keep years aligned with Earth's orbit, while months follow the orbit of the Moon?

A: **lunisolar** calendar

11. What was the last year that was a multiple of 100 but not a leap year in the Gregorian calendar?

A: **1900**

12. Within 30 years, the Islamic calendar begins in what year of the Gregorian calendar?

A: **622** AD (accept answers between **592** and **652**, inclusive)

Set of 4: Kings and Queens

13. What youngest daughter of Maria Theresa and Francis I became the queen of France when her husband ascended the throne as Louis the Sixteenth?

A: **Marie Antoinette**

14. Who was the first person to be referred to as "King of Spain", while he was married to Isabella of Castile?

A: **Ferdinand** I (accept: **Ferdinand** II of Aragon, **Ferdinand** V of Castile)

15. "Off with her head!" is a repeated catchphrase of what character in *Alice's Adventures in Wonderland*?

A: **Queen of Hearts**

16. Lili'uokalani ["lil-EE-o-ka-LA-ni"] was the last monarch and only queen of what archipelago in the Pacific Ocean?

A: **Hawaii**

Double Jumps

17. What band performed at the Rogers K-Rock Centre in Kingston on August 20th, 2016, their last concert before the death of their lead singer Gord Downie?

A: The **Tragically Hip** (prompt on: The **Hip**)

18. The Hip's final concert ended with a performance of what song, one of their biggest hits? "And disappointing you's getting me down" was the last line ever sung by Gord Downie.

A: **"Ahead by a Century"**

19. What anthropologist compared the "guilt culture" of America to the "shame culture" of Japan in *The Chrysanthemum and the Sword*?

A: Ruth **Benedict**

20. Benedict advocated for her view of cultural relativism in what earlier work, whose central idea is that human cultures are “personalities writ large”?

A: **Patterns of Culture**

Set of 5: Mountain Ranges

21. Jasper and Banff National Parks are located in what mountain range in Alberta?

A: **Rocky** Mountains (accept: the **Rockies**)

22. What eastern portion of the Great Escarpment forms a natural border between Lesotho and South Africa?

A: **Drakensberg** Mountains

23. Mount Elbrus is located in what mountain range that extends through Azerbaijan, Georgia, and Armenia?

A: **Caucasus** Mountains (reject: Caucasian Mountains)

24. The Apuseni Mountains and what larger mountain range form the natural borders of Transylvania?

A: **Carpathian** Mountains

25. What mountain range is home to Mont Tremblant?

A: **Laurentian** Mountains (accept: **Laurentides**)

SECOND QUARTER

Splits: Scientific Etymologies & Early Soviet History

Scientific Etymologies

26. Name either of the two chemical elements named after a US state.

A: **californium** (accept: **Cf**) OR **tennessine** (accept: **Ts**)

27. In addition to first isolating benzene, what physicist gives his name to the SI unit of electrical capacitance?

A: Michael **Faraday**

28. Figures from the works of Alexander Pope and Shakespeare name most of the moons of which planet?

A: **Uranus**

29. The name of what phylum, the largest in the animal kingdom, is derived from the Greek for "jointed limb"?

A: **Arthropoda** (accept: **arthropods**)

Early Soviet History

30. What author of *The State and Revolution* served as the first leader of the Soviet Union?

A: Vladimir **Lenin** (accept: Vladimir Ilyich **Ulyanov**)

31. Felix Dzerzhinsky ["jer-ZHIN-skee"] led the OPGU and what other secret police force, the Soviet Union's first?

A: The **Cheka** (accept: **All-Russian Extraordinary Commission**)

32. What St. Petersburg building was stormed by the Bolsheviks on October 25, 1917? It served as the official residence of the house of Romanov and now houses the Hermitage museum.

A: **Winter Palace**

33. From 1919 to 1921, the Soviet Union fought a war against what other European nation, which successfully defended its capital in the Miracle on the Vistula?

A: **Poland**

Set of 3: Mythical Creatures

34. What is the more common 4-letter name for the "abominable snowman" purported to inhabit the Himalayas?

A: **Yeti**

35. The chupacabra is named for the fact that it preys on what animals?

A: **goats**

36. What Canadian lake is said to be inhabited by the monster Ogopogo?

A: **Okanagan** Lake

Set of 4: M.M. Initials

First and last name are required for each answer.

37. What Canadian actor voiced Shrek and played Austin Powers?

A: **Mike Myers** (accept: **Michael Myers**)

38. One of the greatest switch hitters in history was what star of the Yankees throughout the '50s and '60s?

A: **Mickey Mantle**

39. Initially due to a mistake made by Pope Gregory I, what companion of Jesus is often portrayed as a prostitute?

A: **Mary Magdalene**

40. Found in the titles of two of his albums, what is Eminem's real name?

A: **Marshall Mathers**

Double Jumps

41. Who stars alongside Bella Ramsey in *The Last of Us* and plays the title role in *The Mandalorian*?

A: Pedro **Pascal**

42. Who plays Moff Gideon in *The Mandalorian*, but is best known for his role as Gus Fring in *Breaking Bad* and *Better Call Saul*?

A: Giancarlo **Esposito**

43. Denoted by a small inline circle, what operation on functions is equivalent to evaluating one function at the output of the other?

A: function **composition** (accept word forms)

44. What rule is used to compute the derivative of the composition of two functions?

A: **chain** rule

6-Part Blitz

45. What Southern Hemisphere city will host the 2032 Summer Olympics?

A: **Brisbane**

46. Princess Peach is the ruler of what kingdom in the Mario universe?

A: **Mushroom** Kingdom

47. What name is given to periods of comparatively warm climate during an ice age?

A: **interglacial** period

48. What musical is based on *Monty Python and the Holy Grail*?

A: *Monty Python's* **Spamalot**

49. Many paintings by Georges Seurat, such as *A Sunday Afternoon on the Island of La Grande Jatte*, are prominent examples of what artistic technique?

A: **pointillism** (accept: **pointillist**)

50. What kind of object is collected by philatelists?

A: postage **stamps**

THIRD QUARTER

Splits: *Hamlet* & IATA Airport Codes

Hamlet

51. An act 3, scene 1 soliloquy by Hamlet begins with what six-word phrase, which is followed by "that is the question"?

A: **To be, or not to be**

52. What pair of characters, university friends of Hamlet, later became the protagonists of a Tom Stoppard play whose title claims that they are dead?

A: **Rosencrantz** AND **Guildenstern**

53. Whom does Hamlet duel in the final scene of the play?

A: **Laertes**

54. The first unabridged film version of *Hamlet* was directed by and starred what British filmmaker? He also directed and starred in a 2017 adaptation of *Murder on the Orient Express*.

A: Kenneth **Branagh**

IATA Airport Codes

55. All 13 of Canada's international airports have codes that begin with what letter?

A: **Y**

56. PKX and PEK are codes for airports in what city?

A: **Beijing**

57. What code, mentioned at the start of "Party in the USA", is used by Los Angeles International Airport?

A: **LAX**

58. What major city is served by airports with codes ORY and CDG?

A: **Paris**

Set of 3: In the Lab

59. What device used to carry samples for spectroscopy has a name that comes from the French for "little vessel"?

A: **cuvette**

60. Often built in teaching labs with two styrofoam cups, what sort of device measures the heat of chemical reactions?

A: **calorimeter**

61. What thin sheets of glass are used to hold objects for examination under microscopes?

A: glass **slide** (accept: microscope **slide**)

Jailbreak

62. A heavily distorted skull is shown in the centre of which painting by Hans Holbein the Younger?

A: *The* **Ambassadors**

63. Whom would the singer not touch with a thirty-nine-and-a-half-foot pole, according to a Christmas song?

A: The **Grinch** (accept: Mr. **Grinch**)

64. Hans Geiger and Ernest Marsden worked with what scientist to discover the existence of the positively charged atomic nucleus in a namesake gold foil experiment?

A: Ernest **Rutherford**

65. What TV show follows a high school soccer team forced to survive when their plane crashes into the Canadian wilderness?

A: **Yellowjackets**

66. In what modern-day country did the Trung ["troong"] sisters rebel against China?

A: **Vietnam**

67. The small form of what tartan garment is worn around the legs in traditional Scottish dress?

A: **kilt**

68. Name all three Canadian cities that have hosted the Olympics.

A: **Montreal** AND **Calgary** AND **Vancouver**

69. What is the first section of the small intestine, immediately following the stomach?

A: **duodenum**

70. Meryl Streep and Dustin Hoffman played a divorcing couple fighting for custody of their children in what 1979 Academy Award for Best Picture winning film?

A: **Kramer vs. Kramer**

71. Which American state uses parishes instead of counties?

A: **Louisiana**

72. What adjective describes pizza topped with bacon, pepperoni, and mushrooms, as well as Tim Hortons' cream-filled doughnut with maple glaze?

A: **Canadian**

73. What is the first odd composite number?

A: **9**

74. In what city is the Little League World Series held annually?

A: **Williamsport**

75. In the mid-1800s, the British Empire won two wars fought over its trafficking of what drug in China?

A: **opium**

FOURTH QUARTER

Jackpot

76.

Part 1: The Table of Six and the Nation Alliance formed in opposition to what person?

Part 2: In 2022, this world leader mediated the negotiation of the grain export deal between Russia and Ukraine.

Part 3: This politician is the co-founder and longtime leader of the Justice and Development Party, or AKP. In July 2016, he was the target of an unsuccessful coup.

Part 4: After serving as Prime Minister from 2003 to 2014, this man has been the President of Turkey since 2014.

A: Recep Tayyip **Erdogan** ["re-JEP TA-yeep AIR-doe-on"]

Streak

80. Other than alpha, name up to all of the other six vowels in the Greek alphabet.

A: **epsilon**
eta
iota
omicron
upsilon
omega

Set of 4

83. What term was coined in an 1868 essay by John William de Forest to refer to a hypothetical book that would "paint the American soul" and present a "tableau" of the country's society?

A: **Great American novel** (reject partial answers)

84. The monomaniacal quest of Ahab and his struggle against nature are themes in what novel set on a whaling ship?

A: **Moby-Dick**

85. What 1884 sequel, which broke new ground by being written in local vernacular, criticized antebellum racism while celebrating the free spirit of the American frontier?

A: **Adventures of Huckleberry Finn**

86. The title character's struggle to break into the social elite by building a fortune through bootlegging is used to cast doubt on the American dream in what Jazz Age book?

A: *The* **Great Gatsby**

14-Part Blitz

87. Succeeding Monterey, what California city names the current version of macOS?

A: macOS **Ventura**

88. At what temperature do the Fahrenheit and Celsius scales converge?

A: **-40** degrees

89. What word is used to refer to any eukaryote that is not a plant, animal, or fungus?

A: **protists**

90. Who directed *The Conversation*, *Apocalypse Now*, and the *Godfather* trilogy?

A: **Francis Ford Coppola** (prompt on: Coppola)

91. In what fictional town could you shop at Bob's Brilliant Axes or bake a cake for Duke Horacio in *RuneScape*?

A: **Lumbridge**

92. What horse gait is faster than a canter?

A: **gallop**

93. What is the name of Taylor Swift's ongoing 2023 tour?

A: **Eras** Tour

94. Give any two of the three Canadian provinces that name territories in the board game *Risk*.

A: (any two of:) **Alberta, Ontario, Quebec**

95. To the nearest degree Celsius, what is the average human body temperature?

A: **37** degrees Celsius

96. The Chinese poets Du Fu and Li Bai lived under the rule of which dynasty, remembered as a cultural golden age?

A: **Tang** dynasty

97. Often applied to the relationship between a corporation and its shareholders, what "F"-word refers to the legal duty of a person who is trusted to act in the best interests of another?

A: **fiduciary**

98. What team did Canada defeat in the final to win the 2020 Olympic gold medal in women's soccer?

A: **Sweden**

99. Nur-Sultan is a former name of what capital of Kazakhstan?

A: **Astana**

100. What term refers to the areas to the side and back of a car that cannot be seen through mirrors?

A: **blind spot**