



2023-24 High School Qualifier (T3) – Pack 8

Head Editor: *Ian Greig*

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

PACK 8

5-Part Blitz

1. What love interest of Captain America and director of SHIELD is played by Hayley Atwell in the MCU?
A: Agent **Peggy Carter** (accept either bolded part)
2. The line "Call the roller of big cigars" opens what poem by Wallace Stevens?
A: "The **Emperor of Ice Cream**"
3. Along with his brother Bleda, what Barbarian leader repeatedly raided the Roman Empire in the 5th century before bleeding to death?
A: **Attila** the Hun
4. The musical drama films *Jesus Christ Superstar* and *Fiddler on the Roof* were both directed by what Canadian who died in early 2024?
A: Norman **Jewison**
5. Found between Yahya and Muhammed in the list, who is the penultimate prophet in Islam?
A: **Jesus** (accept: **Isa**)

Double Jump

6. The Sierpinski triangle and Koch snowflake are both examples of what sort of self-similar mathematical objects, which have intricate patterns no matter how far you zoom in?
A: **fractals**
7. What mathematician published the paper "How Long Is the Coast of Britain?" when studying fractals? His namesake set on the complex plane is a notable fractal.
A: Benoit **Mandelbrot**

Double Jump

8. The cities of Akron, Cincinnati, and Columbus are all in what US state?
A: **Ohio**
9. What Ohio city saw the signing of the peace agreement that ended the Bosnian war?
A: **Dayton**

Set of 4: Airports

10. What former airport was the home of De Havilland Canada for over 80 years and is located just north of Yorkdale Mall in Toronto?
A: **Downsview** Airport
11. What airport is the McCallister family shown running through near the start of *Home Alone* as they are rushing to catch their flight to Paris from Chicago?
A: Chicago **O'Hare** International Airport
12. Aside from Trudeau International Airport, name either of the two commercial airports in the Montreal metropolitan area.
A: **Mirabel** International Airport OR **Saint-Hubert** Longueuil Airport
13. On what island is the *Mario Kart* track Sunshine Airport, also the setting of *Super Mario Sunshine*?
A: Isle **Delfino**

Jackpot

14. Part 1: The palace of Sanssouci ["SONN-soo-see"] belonged to a ruler of what European country?
15. Part 2: The first ruler of this country was a grand master of the Teutonic Knights.
16. Part 3: This country's troops were crushed at Jena ["YEE-na"] in 1806, but came back to play a pivotal role in Napoleon's final defeat at Waterloo.
17. Part 4: Frederick the Great was among the rulers of this German-speaking European kingdom, which no longer exists today.
A: **Prussia**

Set of 3: Eurovision 1974

18. What pop group won Eurovision in 1974 with their song "Waterloo" while representing Sweden?
A: **ABBA**
19. What country's Eurovision entry served as a signal for rebels to begin the Carnation Revolution, which overthrew the Estado Novo regime?
A: **Portugal**
20. The UK was represented by what Australian singer, who later recorded "Physical" and starred opposite John Travolta in the movie *Grease*?
A: Olivia **Newton-John**

5-Part Blitz

21. Perchloric acid, sulfuric acid, and hydrochloric acid are three of the seven acids described by what term?
A: **strong** acids
22. On what TV show are Finn Collins and Clarke Griffin part of the title group of teenagers, who are sent down from space to repopulate the earth a century after a nuclear apocalypse?
A: *The* **100** ["the hundred"]
23. In math, what "D"-word describes a system where the same input will always produce the same output, with no randomness involved?
A: **deterministic**
24. The burning at the stake of Grandmaster Jacques de Molay marked the end of what crusading order, purged by Phillip the Fair in the early 14th century?
A: Knights **Templar**
25. What term refers to a purse or bag whose strap runs diagonally from one shoulder to the opposite hip?
A: **crossbody** purse/bag

END OF FIRST QUARTER

SECOND QUARTER

Splits: Musical Instruments & The Canadian Prairies

Musical Instruments

26. What unusual instrument, more commonly seen on a battlefield, features prominently at the end of Tchaikovsky's *1812 Overture*?
A: **cannon** (accept: **artillery**)
27. What instrument includes 7 pedals and 47 strings?
A: **harp**

28. Before a performance begins, what instrument plays the A that tunes the orchestra?
A: **oboe**
29. The ancient Greek words for “wood” and “sound” are the source of the name of what mallet percussion instrument?
A: **xylophone**

The Canadian Prairies

30. Most of the rivers in Saskatchewan and Manitoba drain into what body of water?
A: **Hudson's Bay**
31. What name is given to the potassium salts, typically used to make fertilizer, whose extraction makes up a large part of Saskatchewan's economy?
A: **potash**
32. Which national park is found just west of Lake Athabasca, in northeastern Alberta and the southern Northwest Territories?
A: **Wood Buffalo** National Park
33. July 5th to 14th, 2024 will mark the 113th iteration of what iconic event, held in the exhibition grounds surrounding the Saddledome?
A: **Calgary Stampede** (prompt on: the Stampede)

Double Jump

34. Who painted a famous portrait of a shrewd-looking Pope Innocent the Tenth, as well as a candid portrait of the Spanish royal family called *Las Meninas*?
A: Diego **Velazquez**
35. In the 20th century, Francis Bacon painted several Velazquez-inspired portraits of popes performing what action?
A: **screaming** (accept: **yelling**, **shrieking**)

Double Jump

36. Nile Rodgers and Pharrell Williams collaborated with what electronic duo on their 2013 song “Get Lucky”?
A: **Daft Punk**
37. “One More Time” and “Harder, Better, Faster, Stronger” are singles from what 2001 Daft Punk album?
A: **Discovery**

Set of 4

38. In what musical is a flower girl with a Cockney accent named Eliza taught to speak upper-class English by professor Henry Higgins?
A: **My Fair Lady**
39. What author wrote the play that *My Fair Lady* was based on, *Pygmalion*?
A: George Bernard **Shaw**
40. What “stays mainly in the plain” in a song where Eliza proudly demonstrates how she is losing her Cockney accent?
A: the **rain in Spain** (prompt on: the rain)
41. What musical number is sung by Eliza and the servants following “The Rain in Spain”, as Eliza realizes her attraction to Professor Higgins?
A: **“I Could Have Danced All Night”**

Set of 5

42. Isaac Newton used an inverse square relationship to relate the masses of two objects with what force between them?
A: **gravity** (accept: **gravitational** force)
43. LIGO observed what phenomena produced by the merger of black holes?
A: **gravitational waves** (reject: **gravity waves**)
44. What actor's character Matt Kowalski sacrifices himself to transfer momentum so that Sandra Bullock's character can return to their spaceship in the film *Gravity*?
A: George **Clooney**
45. What single word is used to refer to the force of gravity an object experiences, often mistakenly used instead of "mass" outside of physics?
A: **weight**
46. While on the moon, rounded to the nearest tenth, what is the acceleration due to gravity in metres per second squared?
A: **1.6** metres per second squared (accept: **-1.6** metres per second squared)

Linked Set of 4

47. What lenses are mounted on the nosepiece of a microscope and usually come in magnifications of 4X to 100X?
A: **objective** lenses
48. What Russian-American writer developed a philosophical system known as Objectivism, expressed in works like *Atlas Shrugged*?
A: Ayn **Rand**
49. What country uses a currency called the rand?
A: **South Africa**
50. What country was recently prosecuted at the International Court of Justice on charges of genocide brought by South Africa?
A: **Israel**

END OF FIRST HALF

THIRD QUARTER

Splits: Presidential Properties & Fictional Islands

Presidential Properties

51. Appearing on the reverse of the American nickel, what Virginia National Historic Landmark was Thomas Jefferson's plantation?
A: **Monticello**
52. What president's name formerly adorned the St. Regis hotel in Toronto, which was colloquially known as one of his namesake towers?
A: Donald **Trump**
53. What New Brunswick island is home to Franklin Roosevelt's old summer home?
A: **Campobello** Island
54. What presidential winter retreat in Maryland was the site of secret negotiations that led to the 1979 Egypt-Israel peace treaty?
A: **Camp David**

Fictional Islands

55. The fictional Caribbean island nation of San Lorenzo is the setting of what novel, which features the religion Bokomonism and the doomsday substance ice-nine?
A: **Cat's Cradle**
56. First mentioned in Plato's *Timaeus* and *Critias*, what fictional island was originally a powerful naval empire that was eventually submerged in the ocean?
A: **Atlantis**
57. The Professor, Mary Ann, movie star Ginger Grant, the Skipper, and the titular first mate are trapped on what island after being shipwrecked during a boat tour?
A: **Gilligan's** Island
58. Along with Blefuscu, what island visited by Lemuel Gulliver is inhabited by tiny people?
A: **Lilliput**

Set of 3: Boxing

59. At the Olympics, how many rounds are in a boxing match?
A: **3**
60. What British boxer has held the WBC heavyweight title since 2020?
A: Tyson **Fury**
61. To what two insects did Muhammad Ali famously compare himself, one of which floats and the other stings?
A: **butterfly** AND **bee**

Jailbreak

62. Directly across the water from Zanzibar, what is the largest city in Tanzania?
A: **Dar es Salaam**
63. What is the largest stock exchange in the world?
A: **New York** Stock Exchange (accept: **NYSE**)
64. Who played Captain Kirk on the original series of *Star Trek*?
A: William **Shatner**
65. The word "san" means what number in both Mandarin and Japanese?
A: **three**
66. In what board game does one player attempt to deduce a sequence of coloured pegs set by the other player?
A: **Mastermind**
67. Who repeatedly declared "Carthage must be destroyed" at the end of speeches he delivered to the Roman Senate?
A: **Cato the Elder** (prompt on: **Cato**)
68. What young man is driven to despair by unrequited love in a titular Sturm und Drang novel by Johann Wolfgang Goethe ["GUH-tuh"]?
A: Young **Werther**
69. The third-largest city in Australia is what capital of Queensland?
A: **Brisbane**
70. In Java, two vertical bars represent what operation?
A: **or**
71. Kaapstad is the Dutch name for what African city?
A: **Cape Town**
72. What scale measures the hotness of chili peppers?
A: **Scoville** scale

73. What two Canadian cities will host matches in the 2026 FIFA World Cup?
A: **Toronto** AND **Vancouver**
74. What is the holiest city in Islam, to which Muslims are required to undertake a pilgrimage?
A: **Mecca**
75. C₆H₆ is the chemical formula for what cyclic compound?
A: **benzene**

END OF THIRD QUARTER

FOURTH QUARTER

Jackpot

76. Part 1: Richard Heart was charged with fraud after buying what kind of thing? It was originally called the Enigma, but he wanted to rename it after his cryptocurrency website HEX.com.
77. Part 2: Moissanite is often used as an alternative to this.
78. Part 3: This resource was first industrially extracted near the town of Kimberley in South Africa.
79. Part 4: This mineral is used to commemorate 60th anniversaries and features prominently in engagement rings.
A: **diamonds**

Streak

80. Name up to all six vehicle models currently sold by Tesla.
- A: Model **S**
- A: Model **Y**
- A: Model **X**
- A: Model **3**
- A: Tesla **Semi**
- A: **Cybertruck**

Set of 3: Taxonomy

83. Arthropoda and Chordata are examples of which taxonomic rank, which is one level below kingdom in the standard seven-rank system?
A: **phylum** (accept: **phyla**)
84. What author of *Systema Naturae* is considered the father of taxonomy?
A: Carl **Linnaeus** (accept: Carolus **Linnaeus**)
85. Which taxonomic rank can be defined as the largest group of organisms that can produce fertile offspring with each other?
A: **species**

Set of 3: Also a Sound

All answers will consist of a single word that is also an example of onomatopoeia.

86. What term refers to the phenomenon of video game developers working long hours of overtime before the release of a game?
A: **crunch**

87. A doctor who prescribes bogus treatments is colloquially referred to as a what?
A: **quack**
88. The tissues found outside of the vascular cambium of a tree are collectively known by what name?
A: **bark**

12-Part Blitz

89. Doing so on its so-called "grand tour" of the Solar System, what is the only spacecraft to have visited Uranus and Neptune?
A: **Voyager 2** (prompt on: *Voyager*)
90. What is the name of Hermione's cat in the *Harry Potter* franchise?
A: **Crookshanks**
91. A deltiologist collects what kind of objects?
A: **postcards**
92. Cenk Uygur ["Jenk YOO-gur"] is a founder of what progressive news network, named for a political movement of the early 20th century?
A: The **Young Turks**
93. What letter must be added to a term for a shrubland region with sandy soil to get a word meaning the area in front of a fireplace?
A: **R** (heath -> hearth)
94. What article of clothing is Bill Belichick famous for wearing on the sidelines?
A: **hoodies** (prompt on: *sweatshirts, sweaters*)
95. What organization uses the catchphrase "blasting off again" when they flee from a situation that's gotten out of hand in the *Pokemon* franchise?
A: **Team Rocket**
96. Venison refers to the meat of what animal?
A: **deer**
97. What "P"-word can refer to an ominous sign or warning that a calamitous event may happen?
A: **portent**
98. What word refers to horizontal layers of sedimentary rock?
A: **strata** (accept: **stratum, beds**)
99. In which month is International Talk Like a Pirate Day?
A: **September**
100. What curse word, derived from the name of the box in which the Eucharist is stored, is considered the most profane word in Quebecois French?
A: **tabarnak**

END OF GAME