



2024-25 High School Qualifier (T2) – Pack 7

Head Editor: *Ian Greig*

Writers/Editors: *Odin Fisher-Skau, Max Gedajlovic, Ian Greig, Paul Kasiński, Yadu Kukenthiran, Jenny Mao, Malhaar Moharir, Jack van Nostrand, Ryan Sharpe, Joe Su, Isaac Thiessen, Zhongtian Wang, Adrian Wong*

PACK 7

5-Part Blitz

1. If you suspend a cube from one vertex and shine a light directly down, what shape will its shadow be on the floor?
A: regular **hexagon**
2. Who included the tracks "ATTITUDE", "NEW DROP", and "BANDIT" on his 2024 album *HARDSTONE PSYCHO*?
A: Don **Toliver**
3. What term refers to a rabbit or rabbit breed with ears that droop?
A: **lop** rabbit (accept: **lop-eared** rabbit)
4. According to the OED, what is the most-used common noun in English?
A: **time**
5. With a name alluding to its origins as an offshoot of the International Festival, what annual event in Edinburgh is the largest performing arts festival in the world?
A: Edinburgh **Fringe** Festival (accept: Edinburgh Festival **Fringe**)

Double Jump

6. What is the chemical formula for calcium chloride?
A: **CaCl₂**
7. How many total atoms are in a single molecular formula of calcium perchlorate?
A: **11**

Double Jump

8. Based on a British TV series abbreviated "Strictly", what American show sees celebrities paired with professional dancers?
A: ***Dancing with the Stars***
9. Now named after former judge Len Goodman following his death in 2023, what trophy is given to the winner of *Dancing with the Stars*?
A: Len Goodman **Mirror Ball** Trophy

Set of 4: Fish

10. Homologous to the lungs of tetrapods, what organ consisting of two gas-filled sacs helps fish control their buoyancy?
A: **swim bladder**
11. What non-fish seafood product is often imitated using Alaskan pollock in dishes such as California rolls?
A: **crab** meat/legs/sticks
12. John Cabot's shipmates described fish so plentiful that simply lowering a basket into the water would fill it with catches in what region southeast of Newfoundland?
A: **Grand Banks**
13. What is the largest species of fish in the world, a filter-feeder that can live for well over a hundred years?
A: **whale shark**

Jackpot

14. Part 1: The boss of the plains, which saw most of its use in the late 19th century, was what kind of object?
15. Part 2: Some of these objects are known in Australia as “Akubras”, after the company that makes them.
16. Part 3: A white one of these objects has become a symbol of Calgary, and was incorporated into their city flag.
17. Part 4: John B. Stetson was famous for creating these articles of clothing, including “ten-gallon” examples that are known for being worn by cowboys.
A: cowboy **hats**

Set of 3: Chamber Music

18. What composer wrote the “Ghost” and “Archduke” piano trios?
A: Ludwig van **Beethoven**
19. What Austrian composed the string sextet *Verklarte Nacht*, which is musically quite different from his later atonal work?
A: Arnold **Schoenberg**
20. What is the only instrument shared between a wind quintet and a brass quintet?
A: **French horn** (prompt on: horn)

5-Part Blitz

21. What country has the world’s second-highest military budget and largest active military force?
A: **China** (accept: **People’s Republic of China, PRC**) (reject: Republic of China)
22. The town of Manawaka and the character of Morag Gunn are loosely based on the experiences of what Canadian author who wrote *The Diviners*?
A: Margaret **Laurence**
23. What specific symbol begins an interrogative sentence in Spanish?
A: **upside-down question mark** (accept: **inverted question mark**)
24. Fill in the missing word in this quote: “BLANK is dead, and we have killed him”, written by Friedrich Nietzsche.
A: **God**
25. What is the largest city on the Mediterranean Sea?
A: **Alexandria**

END OF FIRST QUARTER

SECOND QUARTER

Splits: Shakespearean Phrases & First-Person Shooters

Shakespearean Phrases

26. Originating in a speech in *Antony and Cleopatra* in which Cleopatra regrets her affairs with Julius Caesar, what two-word phrase refers to a period of youthful innocence and inexperience?
A: **salad days** (reject: salad day)
27. An excerpt from Miranda’s speech in Act 5, Scene 1 of *The Tempest* is the source of the title of what 1931 Aldous Huxley novel?
A: **Brave New World**

28. According to Malvolio in *Twelfth Night*, what quality are some individuals born with, which others may achieve or have thrust upon them?
A: **greatness** (accept: being **great**)
29. What three groups of people are asked to lend their ears to Marc Antony in Act 3, Scene 2 of *Julius Caesar*?
A: **friends** AND **Romans** AND **countrymen**

First-Person Shooters

30. What government facility is the setting for the first *Half-Life* game?
A: **Black Mesa** Research Facility
31. Name either of the languages that titled the first four *Call of Duty Zombies* maps.
A: **Japanese** OR **German**
32. First-person shooters were originally known as “clones” of what foundational game in which the player fights demons on the moons of Mars?
A: **Doom**
33. What city founded by Andrew Ryan is the setting for *Bioshock*?
A: **Rapture**

Double Jump

34. What three-time winner of the Grammy for Best Country Solo Performance won in 2016, 2018, and 2024 with “Traveller”, “Either Way”, and “White Horse” respectively?
A: Chris **Stapleton**
35. What David Allan Coe song did Stapleton cover as a promotional CD single for the album *Traveller*, and later perform alongside Justin Timberlake at the CMA awards?
A: **“Tennessee Whiskey”**

Double Jump

36. In degrees, what is the smallest positive value of x for which $\cos x$ is zero?
A: **90** degrees
37. You will have 5 seconds. In degrees, what is the smallest positive value of x for which $3 \cos x$ is zero?
A: **15** degrees

Set of 3: Geoglyphs

38. An astronaut, a hummingbird, a monkey, and a spider can be found among what set of pre-Columbian geoglyphs in the Peruvian desert?
A: **Nazca lines** (reject: Nazca line)
39. What designs created by flattened fields of plants are sometimes attributed to aliens?
A: **crop circles**
40. Virtual geoglyphs are often created by users of what popular exercise app with a Swedish name that allows users to track their running and cycling routes using GPS?
A: **Strava**

Set of 3

41. Karsten Warholm, Casper Ruud, and Erling Haaland are all athletes from what country?
A: **Norway**

42. Becoming a Hollywood film star after her skating career, what Norwegian is the most-decorated female figure skater of all time?
A: Sonja **Henie**
43. From 2018 to 2021, what English Premier League club was managed by the former Norway player Ole Gunnar Solskjaer ["SOOL-shar"]?
A: **Manchester United** (accept: **Man United**, **Man U**) (prompt on: United)

Linked Set of 7

44. What was the first model of car ever sold by Volkswagen, famous for its small, rounded design?
A: Volkswagen **Beetle** (accept: Volkswagen **Type 1**) (reveal: Beetle)
45. What ancient civilization venerated scarab beetles because the way they rolled dung resembled the way Ra rolled the Sun across the sky?
A: Ancient **Egyptians**
46. What American city shares its name with the capital of the Old Kingdom of Ancient Egypt?
A: **Memphis**
47. What city was the home of the NBA's Grizzlies until 2001, when they moved to Memphis?
A: **Vancouver**
48. What river flows through the Lower Mainland, surrounding Richmond and bisecting Metro Vancouver?
A: **Fraser** River
49. What kind of institutions across Canada are rated and ranked on an annual list by the Fraser Institute?
A: elementary/middle/high/grade **schools**
50. What kind of animals often form large groups known as schools?
A: **fish**

END OF FIRST HALF

THIRD QUARTER

Splits: Ballet Films & Latin America During the Cold War

Ballet Films

51. The 1984-1985 United Kingdom miners' strike serves as the backdrop to what film about a boy who aspires to be a professional ballet dancer?
A: **Billy Elliot**
52. What franchise's upcoming spinoff film *Ballerina* will feature Ana de Armas in the main role and a cameo from Keanu Reeves as the franchise's namesake?
A: **John Wick**
53. The production of what ballet and the rivalry it inspires between characters played by Mila Kunis and Natalie Portman is the plot of a 2010 Darren Aronofsky film?
A: **Swan Lake**
54. The titular character of what 2024 film is a young ballet dancer who is abducted and reveals herself to be a vampire?
A: **Abigail**

Latin America During the Cold War

55. Who overthrew Salvador Allende in 1973 and became the dictator of Chile?
A: Augusto **Pinochet**

56. The CIA used weapon sales to Iran to fund what Nicaraguan group in their struggle against the Sandinistas?
A: **Contras**
57. While on trial for his attack on the Moncada Barracks, what revolutionary leader made a speech titled "History Will Absolve Me"?
A: **Fidel Castro** (prompt on: Castro)
58. Riots following a sports match led to what brief 1969 war between El Salvador and Honduras?
A: **Soccer** War (accept: **Football** War, **100 Hour** War)

Set of 3: Economists

59. Throughout the 2010s, what centre-left economist argued against austerity and for stimulus spending in a column for the *New York Times*?
A: Paul **Krugman**
60. By theorizing that the Phillips curve becomes vertical in the long run, who predicted the stagflation of the 1970s, and later served as an advisor to the Reagan administration?
A: Milton **Friedman**
61. Who argued that money allows the division of labour, which increases productivity and therefore well-being, in *The Wealth of Nations*?
A: Adam **Smith**

Jailbreak

62. What kind of turnover occurs when a pass is caught by the defence instead of the offence in football?
A: **interception** (accept: **pick**)
63. What common disease has a milder form known as its "walking" type?
A: **pneumonia**
64. The cities of Espoo ["ESS-poh"] and Turku are in what country?
A: **Finland**
65. On what Canadian island do people often visit neighbouring homes in disguise over Christmas in a practice known as "mumming"?
A: **Newfoundland**
66. The Japanese phrase for "empty hand" gives the name of what martial art?
A: **karate**
67. Who, alongside Dave Arneson, created *Dungeons and Dragons*?
A: Gary **Gygax**
68. What German term is used in literary criticism to describe coming of age novels?
A: **bildungsroman**
69. Between August 12th and 13th, 2025, the remnants of Comet Swift Tuttle will be visible from the Earth as what meteor shower?
A: **Perseid** meteor shower (accept: the **Perseids**)
70. What scientist gives his name to the inverse-square law that calculates the electromagnetic force between two charged particles?
A: Charles-Augustin de **Coulomb**
71. What philosopher's method of repeatedly asking questions to defeat his interlocutor's argument is visible in many of Plato's dialogues?
A: **Socrates**
72. In what series does Lady Whistledown expose the secrets of a multiracial British upper class?
A: **Bridgerton**
73. What country makes up most of the landmass that is sometimes known as "the subcontinent"?
A: **India**

74. What American singer and songwriter was called "The Queen of Soul"?
A: Aretha **Franklin**
75. What colour gives its name to an event that occurs during the last week of February in Canada, and internationally during the second week of April, with the goal of eliminating bullying and homophobia?
A: **pink**

END OF THIRD QUARTER

FOURTH QUARTER

Jackpot

76. Part 1: What is the outermost of the four main bodies that moved outwards according to the Nice ["neess"] model?
77. Part 2: About a quarter of known Kuiper Belt Objects have a mean-motion resonance of 2 to 3 with this object.
78. Part 3: In ordered lists of planets in the Solar System, this is the only one to rank higher in mass than in size, as it is the fifth-most dense.
79. Part 4: Triton is the largest moon of this outermost ice giant, the eighth planet from the Sun.
A: **Neptune**

Streak

80. Name up to all of the states that Donald Trump flipped in the 2024 American presidential election after they were carried by Joe Biden in 2020.
- A: **Arizona**
- A: **Georgia**
- A: **Michigan**
- A: **Nevada**
- A: **Pennsylvania**
- A: **Wisconsin**

Set of 3: Canadian Painters

83. Paintings like *North Shore, Lake Superior* were created by what leader of the Group of Seven?
A: Lawren **Harris**
84. *Klee Wyck* was a memoir by what artist who painted various landscapes and Indigenous villages in British Columbia?
A: Emily **Carr**
85. What artist also known as Copper Thunderbird pioneered the "Woodland School" style of art?
A: Norval **Morrisseau**

Set of 3

86. What collective name is given to the County of Edessa, County of Tripoli, Principality of Antioch, and Kingdom of Jerusalem?
A: **Crusader states** (accept: **Crusader Kingdoms**, **Outremer**)

87. Who won the Battle of Hattin against the Crusader States in 1187, leading to the Muslim reconquest of Jerusalem?
A: **Saladin**
88. Saladin was then defeated at Acre and Arsuf by what king, who signed the Treaty of Jaffa with him before trying to return to England, though he was captured on the way back?
A: **Richard the Lionheart** (accept: **Richard I** of England) (prompt on: Richard)

12-Part Blitz

89. What portmanteau describes individuals who actively participate in online communities and is often used to describe Chinese internet users?
A: **netizen**
90. What event did civil engineer Joseph Bazalgette help resolve by creating a sewer system that drained waste away from the River Thames?
A: the **Great Stink**
91. What hormone is produced in the hypothalamus and triggers the release of FSH and LH from the anterior pituitary?
A: **GnRH** (accept: **Gonadotropin-releasing hormone**)
92. Chickens are sacrificed at ceremonies honoring gods called orishas in what syncretic religion popular in Cuba?
A: **Santeria**
93. Arising in Mesopotamia in the sixth millennium BC, what was the first known civilization in world history?
A: **Sumer** (accept: **Sumerian** people/civilization)
94. The films *The Blind Side*, *Moneyball*, and *The Big Short* are all based on books by what American writer?
A: Michael **Lewis**
95. What word is the French translation of "toothpaste"?
A: **dentifrice**
96. An ideal transformer has 100 primary coils and 200 secondary coils. If the primary power is 12 watts, what is the secondary power?
A: **12** watts
97. In what war were the Transvaal Republic and the Orange Free State conquered by Britain?
A: Second Anglo-**Boer** War
98. How many litres of pure water must be added to 5 litres of a 3 molar solution to get a 1 molar solution?
A: **10** litres
99. Voiced by Owen Wilson, who is the protagonist of the *Cars* movies?
A: **Lightning McQueen** (accept either bolded part)
100. What island is divided along the 141st meridian east?
A: **New Guinea**

END OF GAME