



2024-25 High School Qualifier (T2) – Pack 10

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 10

5-Part Blitz

1. Where is life better, according to SZA ["SIZZ-uh"] on a song that asks "If there's another universe, please make some noise"?
A: on **Saturn**
2. What is the only element named exclusively after a woman?
A: **meitnerium** (accept: **Mt**)
3. Name either sea that borders Novaya Zemlya.
A: **Barents** Sea OR **Kara** Sea
4. What 2024 show follows the personal lives of a group known as "MomTok", eight Utah-based influencers?
A: *The **Secret Lives of Mormon Wives***
5. During the 2024 season, fans of what team waved green flags with the word "sell" on them to protest a planned move to Las Vegas?
A: Oakland **Athletics** (accept: Oakland **A's**) (prompt on: Oakland)

Double Jump

6. In what film do sisters Satsuki and Mei meet the titular character for the first time at a bus stop, where Satsuki offers him her umbrella?
A: ***My Neighbour Totoro*** (accept: ***Tonari no Totoro***)
7. What other fantastical character in *My Neighbour Totoro* helps transport Satsuki to her sister, and has 12 legs and glowing eyes which function as headlights?
A: **Catbus** (accept: **Nekobasu**)

Double Jump

8. What was the most populous British African colony until it gained independence in 1960, whereupon it became the most populous country in Africa?
A: **Nigeria**
9. Soon after independence, what ethnic group broke off from Nigeria as a country called Biafra, followed by a bloody war in which Biafra was brought back into Nigeria?
A: **Igbo** people ["EE-bo" or "IG-bo"]

Set of 4: The Supernatural

10. The term "Jack-o-Lantern" is an alternate name for what ghostly phenomenon often seen over bogs and swamps?
A: **will-o-wisp** (accept: **will-o-the-wisp**, **will-of-the-wisp**)
11. During a banquet, whose ghost provokes Macbeth's guilty conscience?
A: **Banquo**
12. What country's folklore is the source of using the word "zombie" to refer to a reanimated corpse?
A: **Haiti**
13. A poster with a UFO and what four words can be found in Fox Mulder's office in *The X Files*?
A: **I Want To Believe**

Jackpot

14. Part 1: What type of animal is central to a Sherlock Holmes story which featured the curious incident of the dog in the night-time?
15. Part 2: In *Gulliver's Travels*, intelligent versions of these animals are masters of the humanoid Yahoos.
16. Part 3: Animal welfare concerns gained prominence in Victorian society after a fictional autobiography of one of these animals was written by Anna Sewell.
17. Part 4: Examples of this animal in fantasy literature include Bree, who befriends the human boy Shasta in the *Chronicles of Narnia*, and Gandalf's companion Shadowfax.
- A: **horse**

Set of 3: Multiplication

18. The fact that A times B always equals B times A means that multiplication has what property?
- A: **commutative** property (accept: **commutativity**)
19. A third vector perpendicular to each of the first two vectors is the result of what kind of vector multiplication?
- A: **cross product**
20. What is the multiplicative identity?
- A: **1**

5-Part Blitz

21. Starting in October 2024, what country deployed troops in the Kursk region to support Russia's response to a Ukrainian counteroffensive?
- A: **North Korea** (accept: **Democratic People's Republic of Korea, DPRK**)
22. What kind of solution is resistant to pH changes from adding an acid or a base?
- A: **buffer** solution
23. What portmanteau coined by William H. Whyte describes a situation where a desire for interpersonal conformity leads to a dysfunctional decision-making process?
- A: **groupthink**
24. A branch of what royal dynasty developed mandibular prognathism, an excessive protrusion of the lower jaw, due to its inbreeding?
- A: **Hapsburg** dynasty/family (accept: **Habsburg** dynasty/family)
25. Diazotrophs perform what process in the soil, converting N₂ gas into ammonia?
- A: **nitrogen fixation** (accept: **nitrogen fixing**)

END OF FIRST QUARTER

SECOND QUARTER

Splits: History of Vietnam & Sculptures

History of Vietnam

26. In 40 AD, a rebellion against the Eastern Han Dynasty in Vietnam was led by what two sisters?
- A: The **Trung** Sisters (accept: **Trung** Trac AND **Trung** Nhi)
27. What city on Vietnam's northwest border fell in 1954 to the Viet Minh, marking a major victory against France?
- A: **Dien Bien Phu** ["dyen byen foe"]

28. What holiday in 1968 saw the beginning of a surprise offensive, one of the largest of the Vietnam War?
A: **Tet** Nguyen Dan (prompt on: Vietnamese New Year, Lunar New Year)
29. What political party has been the sole legal party of Vietnam since the end of the Vietnam War?
A: **Communist** Party of Vietnam

Sculptures

30. What artist depicted Gattamelata atop a horse in a bronze Renaissance sculpture?
A: **Donatello** (accept: Donato di Betto **Bardi**)
31. What sculptor depicted six burghers of Calais in one work, and also created *The Thinker*?
A: Auguste **Rodin**
32. Michelangelo's sculpture on the tomb of Julius II prominently depicts what figure with horns on his head?
A: **Moses**
33. What is the official title of the sculpture by Anish Kapoor commonly known as "the Bean"?
A: **Cloud Gate**

Double Jump

34. Held in late May and early June, what tennis tournament is the only major to be played on clay?
A: **French Open** (accept: **Roland Garros**) (prompt on: the French)
35. The most of any player in history, how many French Open titles does Rafael Nadal hold?
A: **14**

Double Jump

36. *The Narrow Road to the Deep North* contains what type of Japanese verse with 3 lines?
A: **haiku**
37. *The Narrow Road to the Deep North* is a travel diary by what master of haiku?
A: Matsuo **Basho**

Set of 4

38. What "F"-word refers to the system in which a lord living in a manor held the nearby land and rented it to peasants in return for a portion of their yield, common in medieval Europe?
A: **feudalism**
39. Peasants who were not allowed to leave the land where they worked, and could be sold with the land but not without it, were known by what term?
A: **serfs**
40. What term refers to the system of feudal land management in which the lord's land was divided into unfenced strips farmed by peasants?
A: **open-field** system
41. Who claimed that feudalism was a stage of development in between slave society and capitalism in his historical materialist model of history, which he laid out in the *Communist Manifesto*?
A: Karl **Marx**

5-Part Mystery Link

42. What insulting nickname was given to the second wife of Spain's Philip II, the first undisputed Queen regnant of England?
A: **"Bloody Mary"** (prompt on: bloody)

43. Martin Brodeur played the vast majority of his career with what team?
A: **New Jersey Devils** (accept either bolded part) (reveal: New Jersey Devils)
44. What song contains lyrics like "How you go on Gayle King and can't cry?" that mock the 2020 shooting of Megan Thee Stallion, and was released in 2024 by Nicki Minaj?
A: **"Big Foot"**
45. Senta, the daughter of a Norwegian captain, ascends to heaven alongside the title character of what Richard Wagner opera?
A: *The **Flying Dutchman***
46. Fort Augustus lies on what lake, whose namesake river empties into the Moray Firth?
A: Loch **Ness**

4-Part Blitz

47. What is the kinetic energy, in joules, of a 6-kilogram object travelling at a speed of 4 meters per second?
A: **48** joules
48. Samudaya, nirodha, marga, and dukkha comprise what group of concepts in Buddhism?
A: **Four Noble Truths** (prompt on partial answers)
49. What country was home to transcendentalist philosophers like Henry David Thoreau and Ralph Waldo Emerson?
A: **United States** of **America** (accept either bolded part) (accept: **USA**)
50. Bounded by the Western and Eastern Ghats, what plateau makes up most of the southern part of India?
A: **Deccan** Plateau

END OF FIRST HALF

THIRD QUARTER

Splits: Elements in the Human Body & Post-COVID Broadway

Elements in the Human Body

51. Parathyroid hormone regulates the blood concentration of what metal, by creating and destroying bone?
A: **calcium** (accept: **Ca**)
52. What two elements are exchanged by the cell membrane of a neuron to maintain a resting potential?
A: **sodium** (accept: **Na**) AND **potassium** (accept: **K**)
53. What element is found in DNA but not proteins?
A: **phosphorus** (accept: **P**)
54. What element is found in the centre of a molecule of hemoglobin?
A: **iron** (accept: **Fe**)

Post-COVID Broadway

55. What first and last name are shared by the writer of *A Strange Loop* and the subject of a 2022 jukebox musical that used songs like "Beat It" and "Smooth Criminal"?
A: **Michael Jackson**
56. Brody Grant is the star of what 2024 musical, based on an S.E. Hinton novel?
A: *The **Outsiders***
57. Slated to begin its first Broadway run in 2024, 72 years after premiering on the West End, what longest-running play in the world was written by Agatha Christie?
A: *The **Mousetrap***

58. What 2022 musical follows a teenage girl, played by Victoria Clark, who has a condition that causes her to age four and a half times faster than normal?
A: **Kimberly Akimbo**

Set of 3: Colourful Terms

59. Equal power intensity across all frequencies characterizes random sound known by what name?
A: **white noise**
60. People like plumbers, welders, and other manual labourers can be referred to by what term?
A: **blue-collar** workers/labourers
61. "Her countenance broke into a brilliant grin that lifted his hitherto-morose spirits higher than a pulchritudinous, soaring bird" is an example of what kind of overwrought writing?
A: **purple prose**

Jailbreak

62. Categories like Creative Cat and Star Performer feature in what children's board game?
A: **Cranium**
63. What Babylonian king is best remembered for the principle of lex talionis, or "an eye for an eye", espoused by the law code he promulgated?
A: **Hammurabi**
64. Contrasted with R in a theory of selection, what letter represents the carrying capacity of an environment?
A: **K**
65. To the nearest whole number, how many grams of hydrogen are in 36 grams of water?
A: **4** grams
66. What Arabic word refers to the statement "There is no God but God, and Mohammed is his prophet", the oath that makes up one of the Pillars of Islam?
A: **shahadah**
67. Since independence, what country has lost the territory of Acre ["AK-ray"] to Brazil, part of the Chaco Plain to Paraguay, and its Pacific territories to Chile, leaving it landlocked?
A: **Bolivia**
68. What letter must be added to a word meaning a bleached and hardened cloth fibre to get a word meaning to solicit votes from people?
A: **S** (canvas -> canvass)
69. What is the title of the third movement of the *Suite bergamasque*, the most popular composition of Claude Debussy?
A: **"Clair de Lune"**
70. In what year did Operation Dynamo evacuate over 330,000 Allied soldiers from Dunkirk as the Battle of France was nearing its end?
A: **1940** (prompt on: '40)
71. The morning star and the evening star are both names for what planet?
A: **Venus**
72. What name is shared by a company that makes musical instruments and a company that spun off from it in 1955 and makes motorcycles, both Japanese?
A: **Yamaha**
73. Who was the subject of a Pulitzer Prize-winning biography by Kai Bird and Martin J. Sherwin titled *American Prometheus*?
A: J. Robert **Oppenheimer**
74. What singer remembers "when we used to sit in the government yard at Trenchtown" and urges "little darlin', don't shed no tears" in "No Woman, No Cry"?
A: Bob **Marley**

75. Jacob Marley and Ebenezer Scrooge appear in what Charles Dickens story?

A: A **Christmas Carol**

END OF THIRD QUARTER

FOURTH QUARTER

Jackpot

76. Part 1: Paul Christiano helped develop RLHF while working for what company, before leaving it to found the ARC? This company disbanded one of its divisions after Jan Leike's departure.
77. Part 2: Over 700 employees of this company once wrote a letter threatening to resign unless its CEO was reinstated, including Ilya Sutskever, who had initially helped fire that CEO.
78. Part 3: Earlier, a group of this company's employees left it to form Anthropic. This company has released products known as o1 ["oh one"] and o3, as well as DALL-E ["DAHL-ee"].
79. Part 4: Sam Altman is the CEO of this company behind ChatGPT.

A: **OpenAI**

Streak

80. Name up to all of the Canadian provincial capitals that are not on an ocean.

A: **Edmonton**

A: **Regina**

A: **Winnipeg**

A: **Toronto**

A: **Quebec** City

A: **Fredericton**

Streak

83. Excluding remakes, name up to every game released since 2010 in the *Legend of Zelda* series.

A: *The Legend of Zelda: **Breath of the Wild*** (prompt on: BOTW)

A: *The Legend of Zelda: **Tears of the Kingdom*** (prompt on: TOTK)

A: *The Legend of Zelda: **Skyward Sword***

A: *The Legend of Zelda: **Echoes of Wisdom***

A: *The Legend of Zelda: A **Link Between Worlds***

A: *The Legend of Zelda: **Tri Force Heroes***

Set of 3: Sauces

86. Zesty Buffalo, Honey Mustard, and Polynesian are some of the dipping sauces available at what fast food chain?

A: **Chick-fil-A**

87. Steven Henson is credited with inventing what popular salad dressing, having named it after his property in Hidden Valley, California?

A: **ranch** dressing

88. Eggs Benedict is most commonly topped with which of the five French mother sauces?

A: **hollandaise** sauce

12-Part Blitz

89. Founded by Neek Lurk, what oxymoronic four-word term names a streetwear brand known for its sweatshirts and hoodies?
A: **Anti-Social Social Club**
90. What Canadian author wrote the children's books *The Curse of the Viking Grave* and *Lost in the Barrens*?
A: Farley **Mowat**
91. What contraption named for an American cartoonist consists of many interconnected parts that work together in a chain reaction to perform a simple task?
A: **Rube Goldberg** machine
92. The 2nd Battalion of the US Army's 506th Parachute Infantry Regiment, known as Easy Company, was the subject of what book and its HBO miniseries adaptation?
A: **Band of Brothers**
93. In web design, what is CSS short for?
A: **cascading style sheets** (reject singular form)
94. Based on a novel by Becky Albertalli, what film centres on a closeted gay high school student who must navigate being blackmailed while figuring out the identity of his online love interest?
A: **Love, Simon**
95. Who contrasted modes of the title concept as "ready-at-hand" and "present-at-hand" in his book *Being and Time*?
A: Martin **Heidegger**
96. The World War I naval blockade of Germany led to the coining of what German term for inferior substitute goods?
A: **ersatz** ["AIR-satz" or "ER-satz"]
97. The island nation of Bahrain lies in what body of water?
A: **Persian Gulf**
98. What two-word term refers to the distortion that results from attempting to focus light waves when a circular, rather than a parabolic, mirror or lens is used?
A: **spherical aberration**
99. What name is given to brine shrimp that are sold as novelty pets, packaged as eggs in a colony-making kit?
A: **Sea-Monkeys**
100. What last name is shared by the "hoser" characters Bob and Doug, and Canada's second prime minister?
A: **Mackenzie**

END OF GAME