



## 2024-25 High School Championship (T3) – Pack 3

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# PACK 3

## 5-Part Blitz

1. What is Mexico's main port city, located in a namesake state on the Gulf of Mexico?  
A: **Veracruz**
2. In what algorithm is a sorted list repeatedly cut in half in an attempt to find a specific value?  
A: **binary search**
3. What mnemonic can be used to remember the French verbs that use être for the passé composé?  
A: DR **MRS VAN DER TRAMP** (accept: **DR AND MRS VAN DER TRAMP**)
4. The Battle of Kadesh is notable for the thousands of what kind of vehicles used by both armies?  
A: **chariots**
5. What company, owned by Sleep Country since 2018, rose to prominence through e-commerce sales of made-in-Canada mattresses?  
A: **Endy** sleep

## Double Jump

6. What leader was succeeded by Ogedei, Guyuk, Mongke, and Kublai after founding the Mongol Empire?  
A: **Genghis** Khan ["CHING-iss HHON"] (accept: **Temujin**)
7. Who was Genghis and Ogedei's leading military general, renowned for his ability to coordinate complex troop movements over a grand scale, often together with fellow general Jebe ["zev"]?  
A: **Subutai**

## Double Jump

8. What is the y-intercept of the factored quadratic equation  $y = x^2 - 2x - 16$ ?  
A: y equals **16** (accept: **(0,16)**)
9. What is the y-value of the vertex of that equation,  $y = x^2 - 2x - 16$ ?  
A: y equals **-9**

## Set of 4

10. Buildings taller than 150 metres are generally referred to by what term?  
A: **skyscrapers**
11. What city's Home Insurance Building is often considered the first modern skyscraper?  
A: **Chicago**
12. The Chicago-based firm Skidmore, Owings & Merrill designed what building, currently the tallest in the world?  
A: **Burj Khalifa**
13. After a 7-year pause, construction re-started this January on what building in Saudi Arabia, planned to pass the Burj Khalifa and become the world's first kilometre-tall building?  
A: **Jeddah Tower** (accept: **Burj Jeddah**)

## Jackpot

14. Part 1: What phrase gave its name to Nicolas Poussin's set of four paintings of Old Testament figures against different landscapes?
15. Part 2: A band named for its frontman and for this phrase had hits like "Who Loves You?", "Walk Like a Man", and "Sherry".
16. Part 3: This phrase gives its name to a company at which Rudy Giuliani accidentally held a press conference in November 2020.
17. Part 4: This phrase titles one of the most popular pieces of Baroque music, a set of four violin concertos by Antonio Vivaldi.  
A: the **four seasons** (prompt on: the seasons) (reject: the four season)

## Set of 3

18. What event was held in Montreal to celebrate the centenary of Confederation?  
A: **Expo 67** (prompt on: world's fair, world exposition)
19. What mayor brought the Expo to Montreal and now gives his name to a park on the former Expo grounds?  
A: Jean **Drapeau**
20. Moshe Safdie used interconnected concrete cuboids to build what housing complex for the Expo?  
A: **Habitat 67**

## 5-Part Blitz

21. The Mackenzie River flows into what marginal sea of the Arctic Ocean?  
A: **Beaufort** Sea
22. Whose cruel rejection of Sibyl Vane creates the first sinister mark on a painting of him that magically reflects his vices?  
A: **Dorian Gray** (accept either bolded part)
23. Tally-ho, Bee, and Bicycle are common brands of what recreational items?  
A: playing **cards** (accept: decks/packs of **cards**)
24. What webcomic spawned a spinoff game called *Hiveswap* in which a human girl gets stranded on Alternia?  
A: **Homestuck**
25. Perfluoroalkyls are also referred to as what kind of chemicals, due to their long-lasting presence in clothing, cookware, and packaging items?  
A: **forever** chemicals

## END OF FIRST QUARTER

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## SECOND QUARTER

### Splits: Poisons & Competitive Swimming

#### Poisons

26. It is dangerous to idle a car in a garage while the door is closed due to the production of what poisonous gas?  
A: **carbon monoxide** (accept: **CO**)
27. Dangerous compounds containing what halogen are produced when bleach and ammonia are mixed?  
A: **chlorine** (accept: **Cl**)

28. Aside from ethanol, bootlegged liquor can contain noticeable amounts of what other alcohol, which can cause blindness when ingested?  
A: **methanol** (accept: **methyl alcohol**, **wood alcohol**)
29. The radioactive decay of uranium ores can cause what poisonous gas to accumulate in the basements of homes?  
A: **radon** gas (accept: **Rn**)

### Competitive Swimming

30. A long-course swimming pool, used at the Olympic Games, is how many metres in length?  
A: **50** metres
31. The all-time record for Olympic gold medals is held by what American swimmer?  
A: Michael **Phelps**
32. Formerly known as FINA, what international governing body oversees international events in swimming, as well as diving, synchronized swimming, and water polo?  
A: **World Aquatics**
33. The 2024 Northern Star Award for Canada's athlete of the year was won by what swimmer?  
A: Summer **McIntosh**

### Double Jump

34. PDVSA is the state-owned oil company of what country, the only original member state of OPEC not in the Middle East and to this day the only member in South America?  
A: **Venezuela**
35. In 2024, President Chan Santokhi of which other South American country announced that each of its citizens would receive a \$750 dividend from revenues from a new oil development in the country?  
A: **Suriname**

### Double Jump

36. Squamates are the largest order of what class, which also includes testudines ["tes-TOOD-in-eez"] and crocodilia?  
A: **reptiles** (accept: **reptilia**)
37. Reptiles, birds, and mammals belong to what clade of animals named for the membrane that surrounds the developing embryo?  
A: **amniotes** (accept: **amniota**)

### Set of 4

38. What director provided a series of 10 cryptic clues such as "Where is Aunt Ruth?" and "Did talent alone help Camilla?" to help viewers understand his film *Mulholland Drive*?  
A: David **Lynch**
39. In his final acting role, in *The Fabelmans*, Lynch portrayed what other real-life director, whose Westerns inspired Steven Spielberg?  
A: John **Ford**
40. An infamous box office bomb, what 1984 Lynch film was the first adaptation of a Frank Herbert novel?  
A: **Dune**
41. In a 1980 Lynch film, John Hurt portrays what Victorian-era man from London who was ostracized due to his physical deformities?  
A: Joseph **Merrick** (accept: John **Merrick**, the **Elephant Man**)

#### 4-Part Mystery

42. Potassium chloride and what other substance are formed when potassium hydroxide reacts with hydrochloric acid?  
A: **water**
43. What kind of drink is produced in the Niagara region, as well as other viticultural areas such as Bordeaux?  
A: **wine**
44. Nerve damage, paralysis, leathery skin, and physical deformities are all symptoms of what slightly-contagious disease, also known as Hansen's disease?  
A: **leprosy** (prompt on: Hansen's disease)
45. Which Deathly Hallow did the second of the Three Brothers receive from Death?  
A: **Resurrection Stone** (prompt on: the Stone)

#### 5-Part Blitz

46. What country pursued a foreign policy of "splendid isolation" from 1822 until allying with Japan in 1902?  
A: **United Kingdom** of Great **Britain** and Ireland (accept either bolded part) (accept: the **UK**, the **British Empire**)
47. What does light bend towards when it enters a medium with a higher index of refraction?  
A: **normal**
48. In Egyptian mythology, what underworld do people enter upon death?  
A: **Duat**
49. What two-word term refers to the process wherein sediment on a beach is transported parallel to the shore?  
A: **longshore drift** (accept: **littoral drift**)
50. Whom does Emily Dickinson claim to be in a poem that exclaims "Then there's a pair of us!"?  
A: **nobody**

#### END OF FIRST HALF

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#### THIRD QUARTER

#### Splits: Cooking Terms & Philosophical Thought Experiments

##### Cooking Terms

51. Alternatively named allumette, what cutting technique results in food shaped into long, thin strips?  
A: **julienning** (accept word forms) (accept: **French cutting**)
52. Often performed using stock or wine, what cooking technique removes browned food residue at the bottom of a pan by dissolving it with liquid?  
A: **deglaizing** (accept other verb tenses)
53. Considered to be the ideal consistency, what term describes pasta that is tender but still firm?  
A: **al dente**
54. What process occurs when fresh food is boiled, removed after a short period, and placed into cold water?  
A: **blanching** (accept word forms)

## Philosophical Thought Experiments

55. Introduced by Phillipa Foot, what thought experiment asks someone to choose whether to divert a train car to save many lives at the cost of fewer?  
A: **trolley problem**
56. Saint Anselm used an ontological argument to argue for what position, which Thomas Aquinas presented five arguments for?  
A: the **existence of God** (accept clear equivalents) (prompt on: God)
57. Who proposed a thought experiment in which people are asked to design a just society without knowing what their lot in life will be, or from behind a "veil of ignorance", in his book *A Theory of Justice*?  
A: John **Rawls**
58. What kind of creature can Achilles never catch up to no matter how quickly he runs, in a thought experiment by Zeno?  
A: **tortoise** (accept: turtle)

## Set of 3: Bang!

All answers begin with "Bang".

59. Sirah raps "Shout out to all my lost boys, we rowdy" to open what Skrillex song?  
A: **"Bangarang"**
60. The so-called Silicon Valley of India is found in what capital of Karnataka?  
A: **Bangalore**
61. "Permission to Dance" and "Dynamite" are hits by what boy band?  
A: the **Bangtan Boys** (accept: **Bangtan Sonyeondan**)

## Jailbreak

62. Who signed a record-setting \$765 million-dollar contract this offseason to leave the Yankees for the Mets?  
A: Juan **Soto**
63. Spell the name of the Greek muse of memory, Mnemosyne ["nem-AW-sin-ee"].  
A: **M-N-E-M-O-S-Y-N-E**
64. What contronym can mean close scrutiny or an accidental omission?  
A: **oversight**
65. "No Church in the Wild" is the opening track of what collaborative album by Jay-Z and Kanye West?  
A: **Watch the Throne**
66. Who wrote the operas *Agrippina*, *Almira*, and *Rinaldo*, as well as oratorios like *Judas Maccabeus* and *Messiah*?  
A: George Frideric **Handel**
67. The only legitimate child of Lord Byron, what woman is generally considered the first ever computer programmer?  
A: Ada **Lovelace**
68. In 1830-31 and 1863, what modern-day country unsuccessfully rose up against rule by Russia, one of the countries that had partitioned it?  
A: **Poland**
69. Aside from Gukesh, who is the only other Indian player to have been the World Chess Champion?  
A: Viswanathan **Anand** (accept: Vishy **Anand**)
70. What peninsula makes up the Asian part of Egypt?  
A: **Sinai** Peninsula
71. What cynical teenager aimlessly wanders New York after being kicked out of boarding school in J. D. Salinger's novel *The Catcher in the Rye*?  
A: **Holden** Caulfield (prompt on: Caulfield)

72. The cities of Ulan-Ude and Irkutsk lie near what deepest lake in the world?  
A: Lake **Baikal**
73. What was the last animal to reach the Jade Emperor in the Great Race due to its laziness, thus becoming the last animal in the Chinese zodiac?  
A: **pig** (accept: **boar**)
74. Secret agent Rico Rodriguez is the protagonist of what series of video games, in which he overthrows corrupt dictatorships?  
A: **Just Cause**
75. A pair of centrioles form what organelle, used to anchor spindle fibers in cell division?  
A: **centrosome**

## END OF THIRD QUARTER

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## FOURTH QUARTER

### Jackpot

76. Part 1: Who wrote the play *A Passing Fancy* as well as the books *Faster Than the Speed of Love* and *Wish It, Want It, Do It*?
77. Part 2: This fictional character's love interests have included the transgender war veteran Ida Davis and the excessively dim-witted Gillian.
78. Part 3: After being hit by a car while playing road hockey, this character was controversially killed off for several episodes in 2013 before his life was saved by a family member travelling back in time in a Christmas episode.
79. Part 4: The pet of Meg, Chris, Lois, Peter, and Stewie, this is the dog on *Family Guy*.  
A: **Brian** Griffin (prompt on: **Griffin**)

### Streak

80. Name up to every feature-length movie in the Marvel Cinematic Universe that features Paul Rudd.
- A: **Ant-Man**
- A: *Captain America: **Civil War***
- A: **Ant-Man and the Wasp**
- A: *Avengers: **Endgame***
- A: *Ant-Man and the Wasp: **Quantumania***

### Streak

83. Name up to all of the five most populous members of the European Union.
- A: **Germany**
- A: **France**
- A: **Italy**
- A: **Spain**
- A: **Poland**

#### Set of 4: Winter

85. What city hosts the Western Hemisphere's largest annual winter festival?  
A: **Quebec** City
86. What three-letter acronym refers to the condition in which the dark and cold of winter cause temporary depression?  
A: **SAD**
87. What Shakespearean play opens with the line "Now is the winter of our discontent"?  
A: **Richard III**
88. The USSR and what other country fought the Winter War?  
A: **Finland**

#### 12-Part Blitz

89. A narrow harbour between the "mainland" and "island" sections provides access from what megacity's namesake lagoon into the Gulf of Guinea?  
A: **Lagos**
90. "Blinky" and Trevor Rainbolt are two of the top-ranked players of what online game?  
A: **GeoGuessr**
91. Who wrote the novel *Go Set a Watchman*, only released shortly before her death in 2015?  
A: Harper **Lee**
92. What digit can be turned sideways to form a lemniscate, representing infinity?  
A: **8**
93. What term refers to sound with frequency lower than what is audible by humans?  
A: **infrasound** (accept: **infrasonic**)
94. If a clarinetist playing a low G presses the register key, what note is played?  
A: **D** natural
95. What political system did Solon help establish in ancient Athens?  
A: **democracy**
96. What does the Greek root "brady-" mean in English, contrasted with its opposite, "tachy-" ["tacky"]?  
A: **slow** (accept word forms)
97. What kind of objects were represented using round, yellow swirls in a painting made in an asylum in Saint-Rémy in 1889?  
A: **stars**
98. Who wrote the novel *The Vegetarian* and won the 2024 Nobel Prize in Literature?  
A: **Han** Kang
99. A white cube with a stylized black outline is the logo for what free video game-making engine?  
A: **Unity**
100. Prussia became a great power under the rule of what enlightened despot?  
A: **Frederick the Great** (accept: **Frederick II**) (prompt on: **Frederick**)

**END OF GAME**