



2023-24 High School Championship (T4) – Pack 4

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PACK 4

5-Part Blitz

1. What rule states that electrons fill orbitals in order from lowest energy to highest, named after the German word for "building up"?
A: **aufbau** principle/rule
2. What is the only country that has an emperor as head of state?
A: **Japan**
3. What two countries joined together at the Union of Lublin in 1569 to create the largest country in Europe?
A: **Poland AND Lithuania**
4. What two-word French phrase can refer to a firmly held irrational state of mind, or a musical motif such as that of Hector Berlioz's *Symphonie Fantastique*?
A: **idée fixe**
5. What calendar date is observed as the International Day of Mathematics, chosen as it coincides with Pi Day?
A: **March 14th** (accept: **14th of March**)

Double Jump

6. Who was referred to as a "pathetic master manipulator" and a "certified pedophile" on recent diss tracks by Kendrick Lamar?
A: **Drake** (accept: Aubrey **Graham**)
7. On "Euphoria", Kendrick imitates Drake's Toronto accent and name-drops what Chinatown establishment, where he is "eating fried rice with a dip sauce and a blammy, crodie"?
A: **New Ho King**

Double Jump

8. A notable shower scene at the Bates Motel takes place in what classic Alfred Hitchcock horror movie?
A: **Psycho**
9. In what Hitchcock film do the two title figures agree to "exchange" murders, so that they each carry out a murder for the other, and both avoid suspicion?
A: **Strangers on a Train**

Set of 4: City Streets

10. What city's East Hastings Street is known for issues with homelessness and drug addiction?
A: **Vancouver**
11. What large street runs from the Place de la Concorde to the Arc de Triomphe in Paris?
A: Avenue des **Champs-Élysées**
12. What city contains Beale Street, notable for its importance in the history of blues music?
A: **Memphis**
13. The original portion of Toronto's subway was constructed under what major street, under which much of the yellow line still runs?
A: **Yonge** Street

Jackpot

14. Part 1: The role of the missi dominicus, a court official responsible for administering far off regions of one state, was greatly expanded under what ruler?
15. Part 2: On one campaign, this leader destroyed the sacred pillar of Irminsul. Later in that campaign he forced the followers of Widukind to convert to Christianity, after massacring nearly 5,000 of Widukind's men. The elephant Abul-Abbas was one of many lavish gifts sent to this ruler's court by Harun Al-Rashid.
16. Part 3: According to this ruler's chronicler Einhard, he halted a campaign against the Saxons to meet with the pope in Paderborn.
17. Part 4: This ruler greatly expanded Frankish territory and was crowned Emperor in Rome by Pope Leo the Third in AD 800.
A: **Charlemagne**

Set of 3: Logos

18. What shape is found in orange underneath the black text on the Amazon logo?
A: curved **arrow**
19. What two colors appear in exactly one letter of the Google logo?
A: **yellow** AND **green**
20. A red and white bullseye is the logo for what retail chain?
A: **Target**

5-Part Blitz

21. What city was targeted by Operation Meetinghouse in March 1945, the most destructive bombing raid in history?
A: **Tokyo**
22. What musical instrument is being played by an old man in a blue period painting by Pablo Picasso?
A: acoustic **guitar**
23. Velocity multiplied by what quantity gives an object's linear momentum?
A: **mass**
24. The raven, the fly, the vulture, and the titular "sly fox" are all translated names for characters in what play by Ben Jonson?
A: **Volpone**
25. The poet John Suckling invented what card game in which players race to be the first to score 121 points, often marked with pegs on a board?
A: **cribbage**

END OF FIRST QUARTER

SECOND QUARTER

Splits: African Geography & Norse Mythology

African Geography

26. What large sink lake is split between Cameroon, Nigeria, Niger, and its namesake country?
A: Lake **Chad**
27. What river's two main tributaries converge at Khartoum?
A: **Nile** river

28. Named for the many shipwrecks that used to occur there, what region can be found in the northern part of Namibia's Atlantic coast?
A: **Skeleton Coast**
29. What kind of natural disaster involves the sudden expulsion of CO2 from deep lake waters, and most notably occurred in the Cameroonian lakes Monoun and Nyos?
A: **limnic eruption** (accept: **lake overturn**)

Norse Mythology

30. Gulltopr is the horse of what Norse god, who blows the Gjallarhorn at the start of Ragnarok?
A: **Heimdall**
31. Warriors slain in battle are said to go to what great hall in Asgard?
A: **Valhalla**
32. What kind of creature is Brokkr, who is repeatedly bitten by Loki in the form of a gadfly while working in his forge?
A: **dwarf**
33. After traveling to the castle of Utgard-Loki, Thialfi is tricked into running a footrace against a physical embodiment of what concept?
A: **thought**

Double Jump

34. What instrument was played by jazz musicians Sonny Rollins and John Coltrane?
A: soprano/alto/tenor **saxophone**
35. "Acknowledgement", "Resolution", "Pursuance", and "Psalm" are the four sections of what mainly instrumental album by John Coltrane, widely considered his masterpiece?
A: A **Love Supreme**

Double Jump

36. In computer programming, what type of function progresses towards a base case through repeated calls to itself?
A: **recursive** function
37. What divide-and-conquer recursive algorithm picks an element as a pivot and separates the other elements based on whether they are greater or less than the pivot?
A: **quicksort**

Set of 4: Homophones

Given the definitions of two words pronounced the same way, give either of the words.

38. A device that raises and lowers ships between different water levels in a canal, and the Scots word for "lake".
A: **lock** OR **loch**
39. A person who leads religious songs in synagogue, and the second-fastest gait of a horse.
A: **cantor** OR **canter**
40. To forcefully remove something from someone's grasp, and to take a break.
A: **wrest** OR **rest**
41. The amount that someone has bet on something, and a thick cut of beef.
A: **stake** OR **steak**

Set of 4: Reality Television

42. Who, since its premiere in 2000 with a season set in Borneo, has hosted the show *Survivor*?
A: Jeff **Probst** (prompt on: Jeff)
43. What city's Real Housewives included Jen Shah, who was arrested live on the show for conspiracy to commit wire fraud?
A: **Salt Lake City** (accept: **SLC**)
44. Reba McEntire, Chance the Rapper, Dan and Shay, and John Legend will all be appearing on the upcoming 25th season of what show?
A: *The* **Voice**
45. Which of the "fab five" is leaving *Queer Eye* after serving as the show's interior design expert for the first eight seasons?
A: **Bobby Berk** (accept either bolded part)

5-Part Blitz

46. What author created Logan Killicks, Jody Starks, and "Tea Cake", the three husbands of Jaine Crawford, in her novel *Their Eyes Were Watching God*?
A: Zora Neale **Hurston**
47. What southeast Asian country was never colonized by a European power?
A: **Thailand** (accept: **Siam**)
48. What is the federal name for the holiday known in various jurisdictions as Natal Day, New Brunswick Day, Colonel By Day, or Simcoe Day, among other names?
A: the **Civic** Holiday
49. What "B"-word refers to the material used for the middle, insulating layer of a quilt?
A: **batting**
50. What name is shared by the fictional captain of the Nautilus and the titular clownfish of a Pixar movie?
A: **Nemo**

END OF FIRST HALF

THIRD QUARTER

Splits: Video Games & Trees

Video Games

51. What company started producing hanafuda playing cards in 1889, though they are better known today for video game consoles like the SNES and the Switch?
A: **Nintendo**
52. In a series originally developed in the late 1990s by Naughty Dog, the diabolical plans of Doctor Neo Cortex are foiled by what bandicoot?
A: **Crash** Bandicoot
53. What sixth-generation console is the best-selling video game console of all time?
A: **PlayStation 2** (accept: **PS2**)
54. What other sixth-generation console, a commercial flop, was Sega's last attempt at making a video game console?
A: Sega **Dreamcast**

Trees

55. What is the term for trees that shed their leaves annually?
A: **deciduous**
56. What kind of trees are affected by a namesake "Dutch disease"?
A: **elms** (accept: **Ulmus**, **Zelkova**)
57. The tree *Hevea brasiliensis* is often named for its use in the production of what good?
A: **rubber**
58. What species of tree is the General Sherman Tree, the largest tree by volume in the world?
A: **giant sequoia** (accept: **giant redwood**, **Sierra redwood**, **Sequoiadendron giganteum**)
(prompt on: sequoia, redwood)

Set of 3: Game Theory

59. A key assumption to game theory is that players have what trait, the intent to perform optimal actions given their premises and information?
A: **rationality**
60. After being arrested for a crime, two suspects are given the option to rat on each other for a reduced sentence in what classic problem of game theory?
A: **prisoner's dilemma**
61. While working at Princeton university, what American mathematician created the field of game theory?
A: John **Nash**

Jailbreak

62. What quantity can be calculated by finding the area under a force-time graph?
A: **impulse**
63. A sequel to *In the Skin of a Lion*, what novel sees four characters meet in an Italian villa during World War II and was written by Michael Ondaatje?
A: *The **English Patient***
64. Following the murder of Sergei Kirov, what leader began a series of purges in the Soviet Union?
A: Joseph **Stalin** (accept: Joseph **Jugashvili**)
65. What country star wrote "I Will Always Love You" and sang "9 to 5"?
A: Dolly **Parton**
66. America's annual national spelling bee is organized by and named for what broadcasting company?
A: The E.W. **Scripps** Company
67. Who was the director of the American National Institute of Allergy and Infectious Diseases from 1984 to 2022?
A: Anthony **Fauci**
68. Most of John Grisham's books follow characters in what profession?
A: **lawyers** (accept: **solicitors**, **barristers**, **attorneys**, **legal** profession)
69. Either the sarsaparilla vine or the sassafras tree were historically used in the creation of what sweet drink?
A: **root beer**
70. What halogen is liquid at standard ambient temperature and pressure?
A: **bromine** (accept: **Br**)
71. At the 1895 Battle of Adwa, what country defeated an Italian attempt at colonizing it, but would eventually be conquered by Mussolini's fascist Italy four decades later?
A: **Abyssinia** (accept: **Ethiopia**)
72. North of the nearby Nicobar Islands, what Indian island chain lies in the eastern Bay of Bengal?
A: **Andaman** Islands
73. Translating as light-dark in Italian, what term refers to the balance of light and shade in painting?
A: **chiaroscuro**

74. Who is the protagonist of *Tangled*?
A: **Rapunzel**
75. What name is given to the small metal cap worn on one's finger while sewing?
A: **thimble**

END OF THIRD QUARTER

FOURTH QUARTER

Jackpot

76. Part 1: Who was only the second player to use the posting system before age 25, forcing him to sign a league-minimum contract?
77. Part 2: Upon joining a new team, this player gifted the wife of his teammate Joe Kelly a Porsche, as thanks for Kelly giving up his jersey number.
78. Part 3: This player once ended a World Baseball Classic by striking out a then-teammate from the Major Leagues. This player won unanimous MVP Awards in 2021 and '23.
79. Part 4: After declining the Blue Jays' offer, this player signed a record 700 million dollar contract to pitch and play designated hitter for the Los Angeles Dodgers.
A: Shohei **Ohtani**

Streak

80. Name up to all six successful Mars rovers, five operated by NASA and one by the CNSA.
- A: **Perseverance**
- A: **Curiosity**
- A: **Opportunity**
- A: **Spirit**
- A: **Sojourner**
- A: **Zhurong**

Set of 3: Written from Jail

83. Who claimed that "injustice anywhere is a threat to justice everywhere" in his "Letter from Birmingham Jail"?
A: Martin Luther **King** Jr. (accept: **MLK**)
84. While imprisoned by Theodoric the Great, who wrote about a wheel belonging to the goddess Fortuna in his *Consolation of Philosophy*?
A: **Boethius**
85. What location partially titles a poem that warns "each man kills the thing he loves" and was written by Oscar Wilde while he was imprisoned there?
A: **Reading gaol** ["REDD-ing jail"] (prompt on: gaol)

Set of 3: Infamous Quotations

Given a quotation, identify the person who spoke it.

86. "I don't know who created Pokemon Go, but I want to figure out how to get them to have Pokemon Go to the Polls!"
A: **Hillary Clinton** (accept: Hillary **Rodham** Clinton) (prompt on: Hillary, Clinton)

87. "Today, I feel... gay. Today, I feel... disabled. Today, I feel... a migrant worker."
A: Giovanni "Gianni" **Infantino**
88. "Fool me once, shame on... shame on you... If you fool me I can't get fooled again!"
A: **George W. Bush** (accept: George **Bush Junior, Bush 43**) (prompt on: George **Bush**)

12-Part Blitz

89. What genre of composition typically features one solo instrumentalist accompanied by an orchestra?
A: **concerto**
90. Known for its iconic "501" model, what brand is credited with bringing jeans to worldwide popularity?
A: **Levi's** (accept: **Levi Strauss & Co.**)
91. What period comes between the first and second intermediate periods in the study of Ancient Egyptian history?
A: **Middle Kingdom**
92. Aphrodite of Knidos was created by what sculptor?
A: **Praxiteles** ["prak-SIT-uh-leez"]
93. What country is home to the companies CJ Group, LG, and Hyundai?
A: **South Korea** (accept: **Republic of Korea, ROK**) (reject: Democratic People's Republic of **Korea**)
94. In the late 20th century, what country was convulsed by fighting between paramilitary groups, the FARC rebels, and drug cartels such as the one led by Pablo Escobar?
A: **Colombia**
95. What word refers to a heterogenous mixture of solid particles in a liquid, which settle out over time?
A: **suspension**
96. The "Ode to Aphrodite" was written by what poet from the island of Lesbos?
A: **Sappho**
97. The ring finger's valve on a trumpet lowers the pitch by how many semitones?
A: **3**
98. In what children's book does Elizabeth chase down the dragon who burned all of her clothes while wearing the titular garment?
A: *The **Paper Bag Princess***
99. What mathematical objects are subject to the inclusion-exclusion principle, and can be represented using Venn diagrams?
A: **sets**
100. Whose short story "The Open Window" ends with the line "Romance at short notice was her specialty"?
A: **Saki** (accept: Hector Hugh **Munro**)

END OF GAME