

2022-23 Post-Secondary Winter Tournament (T2) - Pack 9

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PACK 9

FIRST QUARTER

6-Part Blitz

- 1. Cosecant is the inverse of what trigonometric ratio?
 - A: sine
- 2. Many Christians in ancient Rome were buried in what kind of underground tombs?
 - A: **catacomb**s
- 3. Aside from the gastrocnemius ["gas-trok-NEE-mee-us"], what is the other main muscle of the calf?
 - A: soleus
- 4. What federal government agency is responsible for tax collection in Canada?
 - A: <u>Canada Revenue</u> Agency (accept: <u>CRA</u>)
- 5. On what ship did Charles Darwin sail to the Galapagos?
 - A: HMS **Beagle**
- 6. What recreational activity involves using a GPS to search for objects and prizes that other people have hidden?
 - A: **geocaching** (accept word forms)

Set of 5

- 7. The song "Breaking Free" is sung during the climax of what 2006 movie by Troy and Gabriella, played by Zac Efron and Vanessa Hudgens?
 - A: High School Musical
- 8. Who played Sharpay in the High School Musical film series?
 - A: Ashley <u>Tisdale</u>
- 9. Give the full title of the Disney Plus show whose first season focuses on students putting on a production of *High School Musical*.
 - A: <u>High School Musical: The Musical: The Series</u>
- 10. Name either of the two productions that the second and third seasons of the show focus on, both of which are based on Disney films.
 - A: **Beauty and the Beast** OR **Frozen**
- 11. Who starred as Nini in the show before leaving in season 3 to pursue her music career?
 - A: Olivia **Rodrigo**

Jackpot

12.

Part 1: What leader had their bedroom broken into in 1982 by a man who was later only charged with stealing a bottle of wine?

Part 2: While attending a G7 summit, Pierre Trudeau was caught performing a pirouette behind this leader's back.

Part 3: Due to a series of scandals and separations in her family, this woman described 1992 as her "annus horribilis".

Part 4: This monarch died shortly after the celebration of her Platinum Jubilee in 2022.

A: Queen **Elizabeth II** (prompt on: Queen <u>Elizabeth</u>)

Set of 4: Organic Chemistry

16. Refluxing an alcohol with a carboxylic acid creates what class of organic compounds?

A: <u>ester</u>

17. What symbol is drawn between contributing resonance structures of a compound?

A: <u>double-headed arrow</u> (accept clear equivalents) (prompt on: <u>arrow</u>)

18. A triangle is used to represent what thermodynamic quantity that is often added to catalyze reactions?

A: heat

19. What functional group is characterized by a carbon-carbon double bond?

A: <u>alkene</u> ["al-KEEN"] (reject: <u>alkyne</u>)

Linked Set of 6

20. What book begins with its protagonist drinking the contents of a bottle labeled "Drink Me" and shrinking to be able to fit through a very small door?

A: Alice's Adventures in Wonderland (accept: Alice in Wonderland)

21. What is the tallest and fastest rollercoaster at Canada's Wonderland?

A: the **Leviathan**

22. Who argued that rule by an absolute monarch was needed to prevent a war of all against all in *Leviathan*?

A: Thomas **Hobbes**

23. What kind of animal is Hobbes in a comic strip by Bill Watterson?

A: stuffed **tiger**

24. Who asked "What immortal hand or eye/could frame thy fearful symmetry" in his poem "The Tyger"?

A: William Blake

25. Since 2012, what Canadian actor has been married to Blake Lively?

A: Ryan **Reynolds**

SECOND QUARTER

Splits: Hockey Actions & Fictional Felines

Hockey Actions

Given the description of an action in hockey, give the word for that action.

- 26. Standing in front of a goalie to block their view of the puck.
 - A: <u>screen</u>ing
- 27. Swinging your stick at an opponent to strike them with it, below shoulder level.
 - A: **slash**ing
- 28. Illegally shooting the puck behind your opposition's goal line from your half of the rink.
 - A: <u>icing</u> (accept: to <u>ice</u> the puck)
- 29. A defenceman advancing aggressively in the offensive zone, often towards the puck.
 - A: **pinch**ing

Fictional Felines

- 30. Name the pink, gap-toothed stray who is the primary love interest of Garfield.
 - A: **Arlene**
- 31. What Bengal tiger is the primary antagonist of *The Jungle Book*?
 - A: Shere Khan
- 32. A. A. Milne created what fictional feline with a springy tail?
 - A: <u>Tigger</u>
- 33. Whose father is the Emperor-Over-the-Sea?
 - A: **Aslan**

Set of 3: Jumping

- 34. What scientist's investigation of corn plants led to the discovery of jumping genes?
 - A: Barbara **McClintock**
- 35. In addition to the final jump, what other two jumps are included in the triple jump?
 - A: **hop** AND **step** (accept: **skip**)

- 36. Who composed the jazz standard "One O'Clock Jump"?
 - A: Count **Basie** (accept: William James **Basie**)

Double Jumps

- 37. Which book of the Bible includes the account of Jesus turning water to wine, and is the only one of the four gospels not considered a synoptic gospel?
 - A: the Book of **John** (accept: the Gospel of **John**)
- 38. Which book of the Bible is named for the successor of Moses as leader of the Israelites and details the conquest of Canaan?
 - A: the Book of **Joshua**
- 39. What Greek letter appears alongside epsilon in the definition of a function's limit?
 - A: delta
- 40. What physicist's namesake delta function has a value of infinity at zero and a value of zero everywhere else?
 - A: Paul **Dirac**

Set of 4: Leagues

- 41. Headquartered in Lübeck, what medieval organization dominated trade in the Baltic and North Seas?
 - A: <u>Hanseatic League</u>
- 42. What French science fiction author wrote *Twenty Thousand Leagues Under the Sea*?
 - A: Jules Gabriel **Verne**
- 43. What Netflix original series about the sisters Vi and Jinx is based on the video game League of Legends?
 - A: <u>Arcane</u>: League of Legends
- 44. What country's separatist Northern League has rebranded as the far-right League party?
 - A: **Italy**

6-Part Blitz

- 45. What common model organism has the scientific name *Drosophila melanogaster*?
 - A: fruit fly
- 46. People who perceive their ability to complete a task to be much higher than it actually is exhibit what cognitive bias?
 - A: **<u>Dunning-Kruger</u>** effect

- 47. Montreal and New York each name styles of what popular baked good of Jewish origin?
 - A: **bagel**
- 48. What peasant rose to command the Red Turban rebels who overthrew the Yuan Dynasty, becoming the first emperor of the Ming Dynasty?
 - A: **Hongwu** emperor (accept: **Zhu** Yuanzhang, Yuanzhang **Zhu**)
- 49. Plugs, spinners, spoons, and jigs are types of what, which can be used instead of live bait such as worms?
 - A: fishing <u>lure</u>s
- 50. What chain of chicken restaurants popular in Quebec has a yellow logo with a drawing of a chicken?
 - A: **St-Hubert** BBQ Ltd.

THIRD QUARTER

Splits: Asian Mountains & American Short Story Authors

Asian Mountains

- 51. Which Himalayan country is home to Gangkhar Puensum, the highest mountain in the world that has never been climbed?
 - A: **Bhutan**
- 52. The highest volcano in Asia, Mount Damavand, is part of the Alborz range in what country?
 - A: <u>Iran</u>
- 53. Mount Godwin-Austin is another name for what notoriously hard-to-climb mountain?
 - A: **K2**
- 54. What is the highest mountain in Japan?
 - A: Mount <u>Fuji</u> (accept: <u>Fujisan</u>)

American Short Story Authors

- 55. Known for his "Iceberg Theory," what American writer wrote "The Snows of Kilimanjaro" and "Hills Like White Elephants"?
 - A: Ernest **Hemingway**

- 56. Who wrote about an America where all are forced to be equal in "Harrison Bergeron", a short story from his collection *Welcome to the Monkey House*?
 - A: Kurt **Vonnegut**
- 57. Who wrote about a couple who sell their most prized possessions to buy each other Christmas gifts in "The Gift of the Magi"?
 - A: O. **Henry** (accept: William Sydney **Porter**)
- 58. Who wrote about a sadistic AI that reduces the protagonist to a living blob in "I Have No Mouth, and I Must Scream"?
 - A: Harlan Ellison

Jackpot

59.

Part 1: What is the English name of the best-known painting by Francesco Hayez? Part 2: This is the title of a largely rectangular Constantin Brancusi ["brin-COOSH"] sculpture that depicts two eyes with a singular oval.

Part 3: A man with vines in his hair wearing clothing decorated with rectangles stands at the edge of a meadow with another figure in a Gustav Klimt painting with this title. Part 4: This is the title of an Auguste Rodin sculpture depicting Paolo and Francesca, two lovers engaging in the titular action.

A: The **Kiss**

Streaks

- 63. Besides the United Kingdom, six countries have formal territorial claims in Antarctica. Name up to all of them.
 - A: Argentina, Australia, Chile, France, New Zealand, Norway

Set of 4: Wordplay

- 66. Named after a British minister, what form of wordplay involves switching corresponding sounds between different words in a phrase, such as "fighting a liar" instead of "lighting a fire"?
 - A: **Spoonerism**
- 67. The phrase "moon starer" is an anagram for what profession, which it also describes literally?
 - A: astronomer

- 68. What letter must be inserted into a word meaning a transaction to get a word meaning an image printed on specially prepared paper that can be transferred to another surface?
 - A: <u>**C**</u> (deal -> decal)
- 69. The phrase "Can I slam a bad man?" contains the name of what world capital city?
 - A: Islamabad

6-Part Blitz

- 70. What philosopher wrote *Thus Spoke Zarathustra*, which expands on his ideas of the Ubermensch and the death of God?
 - A: Friedrich **Nietzsche** ["NEE-chuh"]
- 71. Which lobe of the human brain contains the majority of the visual cortex?
 - A: **occipital** lobe
- 72. Name both landlocked Canadian provinces.
 - A: **Alberta** AND **Saskatchewan**
- 73. Who overthrew the Tarquins ["TAR-kwins"], ending the Roman Kingdom and beginning the Roman Republic?
 - A: Lucius Junius **Brutus**
- 74. What kind of fur cap with large flaps covering the ears was popularized in Russia?
 - A: ushanka
- 75. What biblical name is given to the 3-dimensional shape with infinite surface area but finite volume, formed by revolving the graph of 1/x around the x-axis?
 - A: **Horn of Gabriel** (accept: **Gabriel's Horn**)

FOURTH QUARTER

Set of 3: Musical Theory

- 76. It's known as a quaver in the UK. What is it called in Canada?
 - A: **eighth note**
- 77. Six eight, nine eight and twelve eight are examples of what kind of metre, where beats are subdivided into groups of three?
 - A: **compound** metre/time
- 78. The key signature of A-flat major has how many flats?
 - A: four

Double Jumps

79. Brothers Sam and Dean Winchester travel through the United States hunting monsters on what show?

A: **Supernatural**

80. On the show, God is often referred to by what first name, the name of his cover identity on Earth?

A: Chuck

81. What is the largest Mexican state by area?

A: **Chihuahua**

82. What Mexican state lies immediately west of Chihuahua and contains almost all of Arizona's border with Mexico?

A: Sonora

83. Cactus Jack Records was founded by what rapper, whose albums include *Rodeo*, *Birds in the Trap Sing McKnight*, and *Astroworld*?

A: Travis **Scott**

84. "The Scotts" is a song by Travis Scott and what other rapper whose debut album is *Man on the Moon: The End of Day?*

A: Kid Cudi

Set of 4: The Sun

85. What nuclear reaction converts hydrogen to helium inside the Sun?

A: **proton-proton** chain (accept: **p-p** chain)

86. Rounded to the nearest minute, how many minutes does it take sunlight to reach the Earth?

A: **eight** minutes

87. What phenomena follow an 11-year cycle and appear as dark regions of the Sun's photosphere?

A: **sunspot**s

88. In a Hertzsprung-Russell diagram, the Sun falls into what region stretching from the bottom right to the top left, which contains most stars in the universe?

A: <u>main sequence</u>

12-Part Blitz

89. The Egyptian god Thoth is typically depicted with the head of what bird?

A: ibis

90. Since 2013, Jennifer Aniston has been a spokesperson for what skincare brand?

A: **Aveeno**

91. Gregg and Pitman are two kinds of what writing system once commonly used by secretaries?

A: **shorthand**

92. Which numbered amendment to the American constitution was adopted in response to the Quartering Act previously imposed by the British Parliament?

A: **Third** Amendment

93. "China Before Communism" is a promotional tagline for shows presented by what dance company?

A: Shen Yun

94. What term in linguistics describes the grammatical rules that govern how sentences are formed?

A: **syntax**

95. What military strategy consists of intentionally destroying the territory you retreat from to deny its use to your enemy?

A: <u>scorched earth</u>

96. What is 15 percent of 40?

A: **6**

97. What common product was invented by Swiss engineer George de Mestral?

A: **Velcro** (accept: **hook-and-loop fasteners**)

98. What was the two-word codename for the Allied operation that used paratroopers to capture bridges in an attempt to cross the Rhine in 1944?

A: Market Garden

99. What Italian word refers to a dessert consisting of ice cream with hot espresso poured over it?

A: <u>affogato</u>

100. What nut is produced by oak trees?

A: acorns