



2023 Summer Open (T3) – Pack 9

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PACK 9

FIRST QUARTER

4-Part Blitz

1. What website, whose name originally included the word "rap", allows users as well as verified artists to annotate and interpret song lyrics?

A: **Genius.com**

2. This year, who became the first player to score 150 points in a season since Mario Lemieux in 1995-96?

A: Connor **McDavid**

3. What is the scientific name of the liquid that surrounds a fetus, giving it protection as well as nutrients?

A: **amniotic fluid**

4. Penn Badgley portrays serial killer Joe Goldberg on what TV show?

A: **You**

Jackpot

5.

Part 1: Near its northeastern border, what country contains a mountain climbing route that passes the bottleneck couloir while following the Abruzzi Spur?

Part 2: The etymology of this country's most populous province relates to the five rivers that historically passed through it.

Part 3: The Cholistan Desert and the western portion of the Thar Desert are in this country, which connects to China via the Khunjerab Pass.

Part 4: The Khyber Pass connects this country to Afghanistan, and the Indus River delta contains this country's city of Karachi.

A: **Pakistan**

Set of 4: Optics

9. The first laser used what gemstone as a gain medium?

A: **ruby**

10. Light rays that do not actually meet, but only appear to because of the directions in which they reflect from a mirror, produce what kind of image?

A: **virtual** image

11. In order to accurately reflect all parallel incoming rays to the focus, most concave mirrors are not actually spherical, but rather have what other kind of curved shape?

A: **parabola** (accept: **parabolic**)

12. As light passes from a medium with a lower index of refraction to a medium with a higher one, it bends towards what imaginary line?

A: **normal** line

Set of 4: Riddles

13. What is the real name of the Batman adversary known as the Riddler?

A: **Edward Nygma** (accept either underlined part) (accept: Edward **Nashton, E. Nygma**)

14. A riddle contest between what two characters finishes with the riddle "what have I got in my pocket" and the answer "the ring"?

A: **Bilbo** Baggins (prompt on: **Baggins**)
AND **Gollum** (accept: **Sméagol**)

15. What mythical figure entered Thebes by solving the riddle of the Sphinx?

A: **Oedipus**

16. In what musical does the mysterious man, father of the Baker and Rapunzel, speak in cryptic poems and riddles?

A: **Into the Woods**

Double Jumps

17. What Canadian sang about a freighter sinking in Lake Superior in "The Wreck of the Edmund Fitzgerald"?

A: Gordon **Lightfoot**

18. In the song, Lightfoot refers to Lake Superior by what two-word Ojibwe name, also used by Henry Wadsworth Longfellow in "The Song of Hiawatha"?

A: **Gitche Gumee** ["GITCH-ee GOO-mee"]

19. Name either of the two primitive data types in Java that store decimal values.

A: **float** OR **double**

20. What "M"-word, in contrast with the exponent, refers to the part of a floating point number containing its significant digits, such as 1.2 in the number 1.2 times 10 to the 4?

A: **mantissa**

Set of 5: Colourful Movie Adaptations

21. Sean Connery stars as a submarine captain in what 1990 spy film based on a Tom Clancy thriller?

A: *The **Hunt for Red October***

22. Based on a graphic novel by Jul Maroh, what French film won the 2013 Palme d'Or despite controversy over its explicit sex scenes?

A: ***Blue is the Warmest Colour*** (accept: *La **Vie d'Adèle***)

23. Michael Clarke Duncan plays inmate John Coffey in what adaptation of a Stephen King novel?

A: *The **Green Mile***

24. Steven Spielberg directed what 1985 film based on a Pulitzer Prize-winning book by Alice Walker?

A: *The **Color Purple***

25. What 2022 Netflix film starring Adam Driver and Greta Gerwig is based on a 1985 novel by Don DeLillo?

A: ***White Noise***

SECOND QUARTER

Splits: Evolution & The Golden State Warriors

Evolution

26. Whose principle of “use and disuse” was explained using the example of giraffes who developed longer necks than their ancestors?

A: Jean-Baptiste **Lamarck**

27. What term refers to features with a common evolutionary origin that nevertheless serve different purposes in different species?

A: **homologous** features

28. What type of natural selection occurs when the average phenotype is preferred over more extreme phenotypes?

A: **stabilizing** selection

29. Before ever encountering Darwin’s theory, what scientist independently developed the theory of evolution by natural selection?

A: Alfred Russel **Wallace**

The Golden State Warriors

30. Andre Iguodala, Draymond Green, Klay Thompson, and Steph Curry have each won how many NBA championships?

A: **four**

31. Before they moved to California, what was the original home city of the Warriors?

A: **Philadelphia**

32. What shooting guard-turned-forward with jersey number 17 was the only Warrior to make the 1992 American Dream Team?

A: Chris **Mullin**

33. Before their series against the Celtics ["SEL-tiks"], which team did the Warriors defeat in five games to win the 2022 Western Conference finals?

A: **Dallas Mavericks** (accept either underlined part)

Set of 3: Crowns

34. What kingdom's rulers wore a crown that was a combination of the white and red crowns of the Upper and Lower Kingdoms that had united to create it?

A: Ancient **Egypt**

35. Who invented a method for determining the volume of irregularly-shaped objects when he was ordered to find out if a crown was made of pure gold?

A: **Archimedes**

36. On what day in 800 did Pope Leo III crown Charlemagne "Emperor of the Romans"?

A: **Christmas** Day (accept: **December 25th**)

Set of 4: Airplanes

37. Near what North Carolina town, where they were living, did the Wright Brothers fly the first airplane?

A: **Kitty Hawk**

38. The manufacturer Embraer is headquartered in what country?

A: **Brazil**

39. What name did Charles Lindbergh give to the plane he flew across the Atlantic?

A: **Spirit of St. Louis**

40. The Hughes H-4 Hercules has what rhyming nickname?

A: The **Spruce Goose**

Double Jumps

41. What city's signature pizza is baked in a rectangular pan, topped with block cheese, and is served at Little Caesars restaurants, which first opened in this city?

A: **Detroit**

42. What Canadian city's style of pizza is characterized by canned mushrooms and shredded pepperoni?

A: **Windsor**

43. Words that connect other words or phrases, such as "and" and "but", are what part of speech?

A: **conjunctions**

44. What type of conjunctions link two elements of equal syntactic importance, such as two independent clauses? They are often remembered using the acronym FANBOYS.

A: **coordinating** conjunctions

Linked Set of 6

45. What program had its first unmanned launch in fall 2022, testing the SLS rocket and the Orion spacecraft, and plans to return humans to the Moon this decade?

A: **Artemis** Program (accept: **Artemis** space program)

46. Who was the Roman equivalent of the Greek goddess Artemis?

A: **Diana**

47. From 1981 until their divorce in 1996, who was married to Princess Diana?

A: King **Charles** III (accept: **Charles**, Prince of Wales)

48. What kind of substances have their temperature and volume related by Charles's Law?

A: **gases**

49. To prevent knocking, what element was added to gasoline until the discovery that it is extremely toxic?

A: **lead** (accept: **Pb**)

50. What profession takes its name from the Latin word for lead?

A: **plumbing** (accept: **plumber**)

THIRD QUARTER

Splits: Indian History & Wolfgang Amadeus Mozart

Indian History

51. What great city was the capital of the Mauryan Empire, with a population in the hundreds of thousands?

A: **Pataliputra**

52. What city was ruled by a sultanate that was defeated at the battle of Panipat by the invading Mughals?

A: **Delhi**

53. The major 1857 rebellion in India is sometimes called a "mutiny" of what Indian infantrymen of the British East India Company?

A: **sepoys**

54. The honorific "Bapu" has been given to what leader of the Dandi Salt March who used a policy of nonviolence while agitating for Indian independence?

A: **Mahatma Gandhi** (accept: **Mohandas Gandhi**) (prompt on: Gandhi)

Wolfgang Amadeus Mozart

55. What high priest of the sun sings the aria "O Isis and Osiris" in *The Magic Flute*?

A: **Sarastro**

56. What number is given to the *Jupiter* Symphony, which was Mozart's last?

A: Symphony no. **41** (accept: K. **551**)

57. An ascending Mannheim Rocket theme and a graceful second theme in D major open which of Mozart's serenades?

A: **Eine kleine Nachtmusik** (accept: A **Little Night Music**, Serenade No. **13** for strings in G Major)

58. What Italian composer's alleged bitter feud with Mozart was exaggerated in the 1984 film *Amadeus*?

A: Antonio **Salieri**

Set of 3: Russian Novels

59. What novel in verse, in which the title character kills Vladimir Lensky, was written by Alexander Pushkin?

A: **Eugene Onegin**

60. "Happy families are all alike; every unhappy family is unhappy in its own way" is the opening line of what novel?

A: **Anna Karenina**

61. What novel was smuggled to Italy to be published because it criticized conformity to communist dogma, but won a Nobel Prize for Boris Pasternak?

A: **Doctor Zhivago**

Jailbreak

62. The Nowell Codex contains the only surviving copy of what epic poem about a Geatish hero?

A: **Beowulf**

63. On what island was the Fortress of Louisbourg?

A: **Cape Breton** Island

64. Who played Elaine on *Seinfeld* and Selina Meyer on *Veep*?

A: Julia **Louis-Dreyfus**

65. Who references the chorus of Bruno Mars's "When I Was Your Man" in her 2023 song "Flowers"?

A: Miley **Cyrus**

66. Montes Cordillera and Montes Rook are located on what celestial body?

A: the **Moon** (accept: **Luna**, Earth's **moon**)

67. What vegetable is homophonous with a unit of weight used for gemstones?

A: **carrot**

68. "Jack the Dripper" was a nickname given by *Time* magazine to what painter?

A: Jackson **Pollock**

69. Beauty Insider is the rewards program of what cosmetics retailer?

A: **Sephora**

70. Derived from a treatise by Cicero, what two nonsensical Latin words begin a common placeholder text used in publishing?

A: **lorem ipsum**

71. What are the only two elements that are liquid at room temperature?

A: **mercury** (accept: **Hg**) AND **bromine** (accept: **Br**)

72. Players may draw two coloured train cards or one wild locomotive card in what board game?

A: **Ticket to Ride**

73. What river is crossed by the historic Charles Bridge in Prague?

A: **Vltava** River (accept: **Moldau** River)

74. Along with Nigo ["NEE-go"], what celebrity co-founded the streetwear line Billionaire Boys Club?

A: **Pharrell Williams** (accept either underlined part)

75. What philosopher wrote the *Timaeus* and the *Symposium*?

A: **Plato**

FOURTH QUARTER

Jackpot

76.

Part 1: In chess, what adjective refers to the defence that can lead to the Staunton gambit, or alternatively to the Leningrad variation after black fianchettoes the kingside bishop?

Part 2: In filmmaking and photography, this demonym describes a tilted camera angle in which the horizon is not parallel with the edge of the frame.

Part 3: This demonym refers to a type of auction in which the seller names lower and lower prices until someone bids and accepts it.

Part 4: This demonym can refer to sharing the cost of a meal equally, and it refers to people from the Netherlands.

A: **Dutch**

Streaks

80. Name up to all of the move types that would be super effective against Chikorita, a pure Grass-type Pokemon.

A: **bug**
fire
flying
ice
poison

82. Not counting cusp birthdays, people born in the spring can have one of three zodiac signs. Name up to all three.

A: **Aries**
Taurus
Gemini

Set of 3: Taxes

84. What bodily feature was taxed by Peter the Great in early 1700s Russia?

A: **beards** (accept: **facial hair**) (reject: **hair**)

85. In Ontario, what is the final price of a 6-dollar item subject to a 13-percent harmonized sales tax?

A: **\$6.78**

86. The phrase "taxation without representation" is found on many license plates in what American city?

A: **Washington** DC (accept: **DC, District of Columbia**)

14-Part Blitz

87. What African country's flag consists of a thick black stripe and two thin white stripes on a light blue field?

A: **Botswana**

88. What ethnic group performs haka ceremonial dances?

A: **Maori**

89. What name is shared by the largest lake and largest country in Central America?

A: **Nicaragua**

90. What Norman Rockwell painting depicts Black student Ruby Bridges being escorted to school following desegregation?

A: *The **Problem We All Live With***

91. What is the circumference of the unit circle?

A: **2 pi** (accept: **2 times pi**)

92. Who played Jimmy Brooks, who uses a wheelchair after being paralyzed in a school shooting, on *Degrassi: The Next Generation*?

A: **Drake** (accept: Aubrey **Graham**)

93. What is the capital of the United Arab Emirates?

A: **Abu Dhabi**

94. In December 2022, what former teacher and union leader was impeached from his post as President of Peru?

A: Pedro **Castillo**

95. What was the debut studio album of The Beatles?

A: ***Please Please Me***

96. In Latin, nouns of which declension are almost entirely feminine and end with a long "a"?

A: **first** declension

97. What element is the limiting reagent in incomplete combustion?

A: **oxygen** (accept: **O**)

98. What is the only Ivy League university located in a state capital?

A: **Brown** University

99. What is the colloquial name for the turntable where sharing dishes are placed, commonly found at Chinese restaurants?

A: **Lazy Susan**

100. Who was assassinated at New York City's Audubon Ballroom on February 21, 1965?

A: **Malcolm X** (accept: Malcolm **Little**, Malik **el-Shabazz**)