



# GRADWRITE '24

## PACK 5

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## 5-Part Blitz

1. When adjusted for inflation, what's the highest grossing film of all time?

A: **Gone With the Wind**

2. Johnson Wax Headquarters, Taliesin West, and Fallingwater were all works by which architect?

A: Frank Lloyd **Wright**

3. Which philosopher developed historical materialism and, with Friedrich Engels, wrote the *Communist Manifesto*?

A: Karl **Marx**

4. What poetic form, used by Matsuo Bashō [MAT-soo-oh BA-sho], is this question in?

A: **haiku**

5. Which Hindu preserver god with 10 avatars makes up the Trimurti with Brahma and Shiva?

A: **Vishnu** (do not accept specific avatars)

## Set of 4: Number Bases

6. How would you represent 63 in hexadecimal?

A: **3F**

7. Cross-linguistically rare bases like 23 and 27 are found in languages spoken in what country, the most linguistically diverse in the world?

A: **Papua New Guinea**

8. How many digits are needed to represent 53 in binary?

A: **6**

9. The Sumerians and Babylonians used what number as a base in their sexagesimal number systems?

A: **60**

## Pyramid – Who am I?

10. **Clue A:** Although I'm better known for my literary works, I also wrote about socialism, and was a coeditor of *Fabian Essays in Socialism*. Who am I?

**Clue B:** I provided the funds used in the creation of an alternate alphabet for the English language, and I am often said to have suggested that the five-letter sequence "G-H-O-T-I" might be used to spell "fish" in English. Who am I?

**Clue C:** Some of my plays include *Man and Superman*, *Major Barbara*, and a work about Henry Higgins and Eliza Doolittle. Who am I?

**Clue D:** That last play was my work *Pygmalion*, which inspired the musical *My Fair Lady*. Who am I?

A: George Bernard **Shaw**

#### **Set of 4: The Book of Mormon**

11. Who first published the religious text *The Book of Mormon*?

A: Joseph **Smith**

12. The writers of the musical *The Book of Mormon*, Trey Parker and Matt Stone, are more well known for writing what animated adult comedy series?

A: **South Park**

13. According to the religious text *The Book of Mormon*, in what country is the Garden of Eden located?

A: the **United States** of **America** (accept either part or **USA**)

14. In the musical *The Book of Mormon*, what sexually transmitted disease affects nearly all the Ugandan natives?

A: **HIV/AIDS** (accept either)

#### **Double Jump**

15. In what country would you find the Joan Miró Foundation, the Prado Museum, and the Sagrada Familia?

A: **Spain**

16. The collection of Madrid's Prado Museum includes works like *Saturn Devouring His Son* and *The Third of May, 1808*, by which Spanish painter?

A: Francisco **Goya**

## Double Jump

17. Which East African country was the only country in Africa to successfully defend itself against European colonialism, defeating the Italians in 1895?

A: Federal Democratic Republic of **Ethiopia** (accept: **Abyssinia**)

18. At which battle of the first Italo-Ethiopian War did the Ethiopians decisively defeat the Italians, an event now celebrated every March 2nd in Ethiopia on a namesake Victory Day?

A: Battle of **Adwa**

## Mystery Link

19. How many hydrogen atoms are found in a molecule of ethene, the same as in a molecule of methane?

A: **4**

20. In Greek mythology, how many muses were there?

A: **9**

21. How many items are in a gross?

A: **144**

22. Containing "Hello" and "Water Under the Bridge," which Adele album was released in 2015?

A: **25**

23. What is the first 4 digit number to fit this category?

A: **1024**

All are perfect squares.

**END OF FIRST QUARTER**

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**SECOND QUARTER**

## Splits: Stoichiometry and The Holy Roman Empire

### Stoichiometry

24. What quantity's actual value divided by theoretical value gives its percent value, a measure of the efficiency of a chemical reaction?

A: percent **yield**

25. To three significant figures, what is the number of atoms in 12 grams of carbon-12, a value formerly defined as Avogadro's number?

A:  **$6.02 \times 10^{23}$**  (prompt on: **6.02**)

26. Conveniently numerically equal to an element's atomic mass, what quantity gives the ratio between the mass and amount of a substance?

A: **molar mass**

27. What name is given to a reactant that is fully consumed in a chemical reaction, and is thus not in excess?

A: **limiting** reactant (accept: **limiting** reagent)

### The Holy Roman Empire

28. Which leader of the Franks was crowned as Emperor of the Romans on Christmas Day, 800 AD?

A: **Charlemagne** (accept: **Charles I**, **Charles the Great**)

29. What weapon, used by Medieval German Landsknecht [lond-ski-NEKT] mercenaries in the Holy Roman Empire's army, partially names their most common formation?

A: **pike**

30. Which treaty officialized Swiss independence from the Holy Roman Empire, and ended the Thirty Years War?

A: Treaty of **Westphalia** (prompt on: the Treaty of **Münster** [moon-STER], the Treaty of **Osnabrück** [OZNA-brewk])

31. An Austrian emperor with what regnal name was the last Holy Roman Emperor before its dissolution in 1806, a name shared with the current Pope?

A: **Francis II**

#### Set of 4: Beetlejuice

32. Who portrays the title character in the 1988 Tim Burton film *Beetlejuice*?

A: Michael **Keaton**

33. How would you spell the name of the red supergiant star, Betelgeuse [BEE-tel-jooss]?

A: **B-E-T-E-L-G-E-U-S-E**

34. In what book do scientists travel to an Earth-like planet orbiting Betelgeuse [BEE-tel-jooss], which would later inspire a series of movies including one named for the "Dawn of" the title planet?

A: *the **Planet of the Apes*** (accept: *La **Planète des Singes***)

35. What song, first recorded by Harry Belafonte [bella-FON-tay], do Delia and Charles Deetz sing while possessed in an iconic scene from the *Beetlejuice* film?

A: **Day-O** or **Banana Boat** Song (accept either or both)

#### Set of 3: K-Pop Fandom Names

36. The fandom name of 13-member boy group SEVENTEEN also names what 200mg unit of mass used to measure gemstones?

A: **CARAT**

37. TXT's fandom name is also the name for what extinct, flightless birds endemic to New Zealand?

A: **MOA**

38. The fandom name of (G)I-DLE [EYE-dull] is also the name for what fictional island, home to Captain Hook, Tinker Bell, and Peter Pan?

A: **Neverland**

#### Double Jump

39. Which collection of folktales includes the stories of the seven voyages of Sinbad, Ali Baba stealing thieves' treasure, and the original Aladdin story?

A: **One Thousand and One Nights** (accept: **Arabian Nights**, **One Thousand and One Arabian Nights**)

40. In *One Thousand and One Nights*, which wife of Shahryār [SHAH-ree-ya] tells him stories in order to stay alive as a frame story for the collection's folktales?

A: **Scheherazade** [shah-heh-ruh-ZAWD]

### Double Jump

41. Which country's two most recent presidents, known colloquially by their initials, are EPN and AMLO?

A: **Mexico**

42. Although he has more recently been a member of MORENA and the PRD, AMLO once belonged to what party which held the presidency in Mexico from 1929 until 2000?

A: **PRI** (accept: **Partido Revolucionario Institucional** [par-TI-do RE-vo-lu-sio-nal IN-sti-tu-sio-nal], **Institutional Revolutionary Party**)

### Linked Set of 6

43. Foot and end precede what four-letter word in the names of in-text citations allowed by the Chicago Manual of Style?

A: **note**

44. Named after an Ivy League university, which notetaking system is characterized by 3 sections, including a summary at the bottom?

A: **Cornell** method

45. Citizens are encouraged to count what general class of animals in a Cornell-run citizen science project?

A: **bird**

46. Which English film director, who never won Best Director despite five nominations, directed the 1963 movie *The Birds*?

A: Alfred **Hitchcock**

47. What number appears in the title of a police sitcom that features detectives and best friends Scully and Hitchcock?

A: **99**

48. Upon which player's retirement did the NHL retire the jersey number 99?

A: Wayne **Gretsky**

END OF FIRST HALF

## THIRD QUARTER

### Splits: Musical Clefs and Big Lakes

#### Musical Clefs

49. What note nicknames the treble clef due to its shape and location within the centre of the treble clef's spiral?

A: **G**

50. What clef identifies middle C as the 3rd line of the staff, and is generally the clef used for viola music?

A: **alto** clef

51. Which largely unstandardized clef is used to write music for unpitched instruments?

A: **neutral** clef (accept: **percussion** clef) (do not accept: **drumming** clef)

52. What clef typically used to write music for timpani has its two dots positioned around the note F?

A: **bass** clef

#### Big Lakes

53. What country's largest lake by volume, Lake Biwa, is located in Shiga Prefecture?

A: **Japan** (accept: **Nippon**, **Nihon**)

54. The city of Irkutsk [EER-koo-tsk] is near what lake, the deepest in the world?

A: Lake **Baikal**

55. What is the largest lake by area that is contained entirely within one country?

A: Lake **Michigan**

56. Puno is the most populous city on what largest lake by volume of South America?

A: Lake **Titicaca**

#### Set of 4: Sports of the Americas

57. What sport, in its original form played by hundreds of players, is now played by ten players a side, and is the oldest team sport in North America?

A: **lacrosse**

58. The Peruvian sport of paleta fronton developed from pelota vasca, a sport that originated among what ethnic group, who live mainly in a namesake region of Spain and France?

A: **Basque**

59. What country was the birthplace of xikunahati [shi-ku-na-ha-chi] and capoeira [kaa-puh-WEH-ruh]?

A: Federative Republic of **Brazil**

60. What material was used for the ball in the Mesoamerican ballgame, a material whose production by the Olmecs gave them their name?

A: **rubber**

## **Jailbreak**

61. The sea of Okhotsk [aa-COATS-uhk], Gulf of Tonkin, Solomon Sea, and Yellow Sea are all marginal seas of which ocean?

A: **Pacific** Ocean

62. Which American constitutional amendment granted women the right to vote?

A: **nineteenth** amendment

63. Hanks and Kanamori developed what measure of earthquake size, which has largely replaced the Richter scale?

A: **moment magnitude** scale

64. It is joked that theorems are named after the second person to discover them, as the first was which Swiss mathematician who names a characteristic for graphs and the number  $e$ ?

A: Leonhard **Euler** [OIL-er]

65. In physics, impulse is the change in what quantity, the product of mass and velocity?

A: linear **momentum** (do not accept: **angular momentum**)

66. What American commodore and Father of the Steam Navy is famous for a show of force that compelled the Japanese shogunate to open Japan to trade?

A: Commodore Matthew **Perry**

67. Which female District 12 tribute was featured alongside a young President Snow in the 2020 addition to the Hunger Games, The Ballad of Songbirds and Snakes?

A: **Lucy Gray Baird** (accept either underlined portion)

68. Who, on behalf of the people, is the sole total owner of the Bank of Canada?

A: **Minister of Finance** (accept: **Finance Minister**, Chrystia **Freeland**)

69. What baked good made of dark chocolate, custard frosting, and coconut shavings is named for a city off the coast of Vancouver?

A: **nanaimo** [nun-EYE-mow] bar

70. Who is the only Canadian Formula One driver to have won the Canadian Grand Prix?

A: **Gilles Villeneuve** (prompt on: **Villeneuve**)

71. What African city, ahead of Paris, has the most French speakers in the world?

A: **Kinshasa**

72. Despite politically risky moves like giving Catalanian independence activists amnesty, who has remained Prime Minister of Spain?

A: Pedro **Sánchez** (accept: The Most Excellent Pedro **Sánchez** Pérez-Castejón)

73. Which flash game character created by Flipline Studios is known for owning a diverse variety of takeout restaurants, including a pizzeria and a freezeria?

A: **Papa** Louie

## END OF THIRD QUARTER

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## FOURTH QUARTER

### Pyramid – What liquid am I?

74. **Clue A:** A rare genetic disorder in which the body is unable to break down leucine, isoleucine and valine is named for urine and me. What liquid am I?

**Clue B:** Over 3000 tons of me were slowly replaced with water in one of the largest heists in one country's history. What liquid am I?

**Clue C:** The final step in my production can occur in a sugarhouse, while the first step in my production can occur in a sugarbush. What liquid am I?

**Clue D:** I am produced almost entirely in Quebec and commonly accompany French toast, pancakes, and waffles. What liquid am I?

A: **maple syrup**

## Set of 4: Word Puzzles

75. Combining a 3-letter word meaning a long period of time in history with a 5-letter word for black in heraldry gives what adjective, which you might apply to pencil, but not pen?

A: **erasable** (era and sable)

76. Combining a 4-letter word for a value proportional to energy in a famous Einstein equation with a 4-letter unit of area equal to 4840 square yards gives what verb or noun, synonymous with slaughter?

A: **massacre** (mass and acre)

77. Combining a 3-letter word for a small jump with a 4-letter word that often refers to the free version of a game gives what kind of foot soldier?

A: **hoplite** (hop and lite)

78. Combining the first 2-digit number with a 3-letter honorific used in Spanish for an authority figure gives what muscle-to-bone connector?

A: **tendon** (ten and Don)

## Streak

79. After the broadest two, domain and kingdom, name up to all 6 of the remaining taxonomic ranks in the most common ranking scale.

A: **phylum** (accept: **phyla**)  
**class**  
**order**  
**family** (accept: **familiae**)  
**genus** (accept: **genera**)  
**species**

## Streak

80. Name up to all four x8 Platinum or higher certified original UK studio Beatles albums according to Music Canada.

A: *Sgt. Pepper's Lonely Hearts Club Band*  
*Abbey Road*  
*The Beatles* (accept: *The White Album*)  
*Rubber Soul*

## 13-Part Blitz

81. *Beauty and the Beast's* Gaston, due to the daily consumption of five dozen eggs, is roughly the size of what type of flat-bottomed boat?

A: barge

82. Which Russian scientist tested classical conditioning by measuring salivation in dogs?

A: Ivan Pavlov

83. In which decade was the Vatican City made an independent country?

A: 1920s (prompt on: 20s)

84. What name is shared by the part of a syllable following the nucleus, a section that may follow the recapitulation in sonata form, and the 2021 winner of the Academy Award for Best Picture?

A: coda

85. How do you spell the name of Slovenia's capital, Ljubljana [luub-lee-ah-nah]?

A: L-I-U-B-L-I-A-N-A

86. Rene Laennec invented what medical tool used in auscultation [aw-skul-tay-shun], the procedure of listening to the body's sounds?

A: stethoscope

87. How many time zones are there in Russia?

A: eleven

88. Vertex, Spelling Bee, and Connections are all games produced by what newspaper?

A: *The New York Times*

89. Lac-Mégantic [lac may-gan-teek] and Mississauga have both experienced what disaster, when a train falls off its tracks?

A: train derailment

90. Palestine's West Bank is named for being on the west bank of what river?

A: **Jordan** River

91. In English, suffixing -ness to an adjective gives a word from what word class?

A: **noun**

92. The Higgs boson was found by CERN using what largest particle accelerator in the world?

A: **Large Hadron Collider** (accept: **LHC**)

93. Who coined the term "hot girl summer"?

A: **Megan Thee Stallion** (accept: Megan Jovon Ruth **Pete**)

**END OF GAME**