



# GRADWRITE

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## PACK 3

### 6-Part Blitz

1. Only outside of the overworld, what *Minecraft* items create a more powerful explosion than TNT when the player attempts to use them?

A: **bed**

2. What synonym of "perpendicular" is used to describe a force exerted on an object from its contact surface?

A: **normal**

3. Milk, crushed ice, sweet fruits, and a scoop of ube ice cream make up what dessert originating from the Philippines?

A: **halo-halo**

4. The song "The Girl From Ipanema" is considered representative of what genre, which literally translates to "new wave"?

A: **bossa nova**

5. The Law of the Splintered Paddle was established in 1797 by what first ruler of a unified Hawaii?

A: **Kamehameha I** (accept: **Kamehameha the Great**) (prompt on: Kamehameha)

6. A creole sign language emerged naturally among deaf schoolchildren in what country following the Sandinista Revolution?

A: **Nicaragua**

### Set of 4: Bees

7. What term is used to describe a collection of artificial beehives maintained by a beekeeper?

A: **apiary**

8. What substance is fed to drones and worker bee larvae ["LAHR-vuh"] temporarily after hatching, but is continually fed to developing queen larvae ["LAHR-vuh"]?

A: **royal jelly**

9. Allowing more precise focus on moving bodies, what large many-sectioned eyes do bees have?

A: **compound** eyes

10. After spotting jars of honey on supermarket shelves, who successfully sues the entire human race for theft in the climax of *The Bee Movie*?

A: **Barry B. Benson** (accept either underlined part)

### Pyramid

11.

**Part 1:** A French-Canadian immigrant from what country detailed their time as a "boat person" in the memoir *Ru*?

**Part 2:** In an American story set in this country, Jimmy Cross obsesses over trinkets that remind him of his unrequited love Martha.

**Part 3:** An author from this country wrote a novel consisting of unsent letters from Little Dog to his illiterate mother, *On Earth We're Briefly Gorgeous*.

**Part 4:** *The Things They Carried* centers around a platoon of American soldiers stationed in this country, the birthplace of authors Kim Thúy ["TWEE"] and Ocean Vuong ["VONG"].

A: **Vietnam**

### Set of 3: Underwater Agriculture

14. What Japanese word refers to sheets of dried edible seaweed?

A: **nori**

15. Players can cultivate plants like bloodroot and creepvine in what video game set on an ocean planet?

A: **Subnautica**

16. What fish's eggs are traditionally harvested by submerging kelp fronds in spawning areas during the springtime in Indigenous Pacific Northwest communities?

A: **herring**

### Double Jump

17. What Moroccan-born video game streamer studied at McMaster University before pursuing streaming, becoming the most followed female streamer on Twitch?

A: **Pokimane** (accept: Imane **Anys**)

18. Pokimane co-founded what content group, featuring streamers like QuarterJade and LilyPichu, before "graduating" and leaving the organization in 2023?

A: **OfflineTV**

### Double Jump

19. The Third Servile War was led by what gladiator, who gives the war its more commonly used name?

A: **Spartacus**

20. What Ancient Greek historian is believed to have originated the term "War of Spartacus" in his *Life of Crassus*, one of his *Parallel Lives*?

A: **Plutarch**

### 5-Part Mystery Link

21. What objects' absolute magnitudes are plotted against their effective temperatures in a Hertzsprung-Russell diagram?

A: **star**

22. In Shinto mythology, what type of weapon is the Kusanagi-no-Tsurugi, whose name partially translates to "grass-cutting"?

A: **sword**

23. What kind of supernatural being is Clarence Odbody in *It's A Wonderful Life*?

A: **angel**

24. A gilet is a sleeveless kind of what jacket, which is characterised by the warm air pockets created by its insulating down feathers?

A: **puffer** jacket

25. What type of performer do Frank Sinatra and Judy Collins both want to "send in" in popular covers of a standard from *A Little Night Music*?

A: **clown**

All answers are words that can precede "fish" in the names of animals.

## END OF FIRST QUARTER

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## SECOND QUARTER

### Splits: *Doctor Who* & Thermal Physics

#### *Doctor Who*

26. Who is the only actor to have played multiple main iterations of the Doctor, first from 2005 to 2010 and then again in 2023?

A: David **Tennant**

27. Often noted to be "bigger on the inside," what vehicle used by the Doctor takes the form of a blue police box?

A: **TARDIS**

28. What antagonists introduced in the episode "Blink" take on their namesake form when observed, and move when they are not in view?

A: **Weeping Angels**

29. Mostly aimed at older audiences, what spin-off series stars John Barrowman as Captain Jack Harkness and has a title that anagrams to "doctor who"?

A: **Torchwood**

#### Thermal Physics

30. Hermann von Helmholtz names what kind of thermodynamic quantity, which also comes in a variety measuring thermodynamic potential and named after Josiah Willard Gibbs?

A: thermodynamic **free energy**

31. Defined by Boltzmann as the natural logarithm of the number of microstates of a system, what thermodynamic quantity is a measure of the disorder of a system?

A: **entropy**

32. What heat transfer process involves temperature-induced changes in density driving the circulation of a gas or liquid?

A: **convection** (accept: **convective** heat transfer)

33. What quantity is held constant in an isobaric process, and might be measured in units of torrs, bars, or atmospheres?

A: **pressure**

### Set of 3: Women of Opera

34. Who commits suicide after learning that her husband, Lieutenant Pinkerton, left her and their child to marry an American wife in a Giacomo Puccini opera?

A: **Cio-Cio-San** (accept: Madama **Butterfly**, Madame **Butterfly**) (reject: M. Butterfly)

35. The "Love is a rebellious bird" aria, or Habanera, appears in what opera by George Bizet?

A: **Carmen**

36. The nicknames "The Tigress" and "The Divine" were given to what Greek-American prima donna?

A: Maria **Callas**

### Set of 4: Spelling Ancient Greek Figures

All answers must be spelled.

37. He coined the concept of ataraxia and has a school of philosophy named after him. Spell "Epicurus" ["epp-ih-KYUR-us"].

A: **E-P-I-C-U-R-U-S**

38. She is the subject of one of Sophocles' "Theban plays" and is the eldest daughter of Oedipus. Spell "Antigone" ["an-TIH-guh-nee"].

A: **A-N-T-I-G-O-N-E**

39. He was the general that took control of Egypt following Alexander the Great's death. Spell "Ptolemy" ["TAWL-ah-me"].

A: **P-T-O-L-E-M-Y**

40. In the *Oresteia*, she is depicted as the murderer of her husband, Agamemnon. Spell "Clytemnestra" ["KLY-tem-NES-tra"].

A: **C-L-Y-T-E-M-N-E-S-T-R-A**

### Double Jump

41. What country owns the largest island in the Caribbean Sea?

A: **Cuba**

42. Cuba, Jamaica, Hispaniola, and Puerto Rico are collectively given what name, contrasted with a "Lesser" group of islands to their southeast?

A: **Greater Antilles**

### Double Jump

43. What name is given to the behaviour of animals like ground squirrels and bears in which they enter a dormant, metabolically depressed state to conserve energy during the winter?

A: **hibernation**

44. Animals like the desert turtle instead enter a period of dormancy during the summer, a behaviour given what name?

A: **estivation**

### 6-Part Linked Set

45. What occupation is held by the central character in a Hugh Lofting children's series, John Dolittle?

A: **doctor** (accept: **veterinarian**, but reveal: **doctor**)

46. Princeton–Plainsboro is the primary setting of what drama starring Hugh Laurie as the title doctor?

A: **House MD**

47. In Monopoly, what structure can be bought once each property in a colour group has four houses?

A: **hotel**

48. How many rooms are there in Hilbert's paradox of the Grand Hotel?

A: **infinity** (accept: **infinitely** many, but reveal: **infinity**)

49. In the Toy Story series, what character's catchphrase is "to infinity and beyond"?

A: Buzz **Lightyear** (accept **Buzz**; but reveal: **lightyear**)

50. Used by astronomers to measure distances to objects outside of the Solar System, what unit of distance is approximately equal to 3.26 lightyears?

A: **parsec**

## END OF FIRST HALF

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## THIRD QUARTER

### Splits: Canadian Medalists at the 2024 Olympics & U.S. Supreme Court Cases

#### Canadian Medalists at the 2024 Olympics

51. After her clean and jerk was topped by Luo Shifang ["SHI-fahng"], what Canadian athlete won silver in the women's 59 kilogram weightlifting event?

A: Maude **Charron**

52. Christa Deguchi became the first Canadian to win gold in what martial art at the 2024 Olympics?

A: **judo**

53. In what event did both Ethan Katzberg and Camryn Rogers earn gold medals for Canada?

A: **hammer throw**

54. What Canadian athlete, despite his injured hamstring, earned his seventh gold medal at the 2024 Paris Olympics as part of Canada's 100-metre relay team?

A: Andre **De Grasse**

#### 20th-Century U.S. Supreme Court Cases

55. The doctrine of separate but equal was instituted by what Supreme Court case, which argued that racial segregation was permissible if the separate facilities were of

equal quality?

A: ***Plessy v. Ferguson***

56. In a hypothetical situation from Oliver Wendell Holmes Jr.'s opinion on *Schenck v. United States*, what word can one shout in a crowded theater to purposefully induce panic?

A: **fire**

57. Hawaii sued what president after he placed restrictions on travel to the United States from 7 different countries as part of his "Muslim ban"?

A: Donald John **Trump**, senior

58. What pseudonym was used by Norma McCorvey in a landmark 1973 US Supreme Court decision, which was overturned almost 50 years later in *Dobbs v. Jackson*?

A: Jane **Roe**

#### Set of 4: Fictional Explorers

59. In what country did Montgomery Clyde find Lucy and Pastuzo, the parents of Paddington Bear?

A: **Peru**

60. In what novel is a black flag featuring a golden N planted on the South Pole by Captain Nemo?

A: ***Twenty Thousand Leagues Under the Sea***

61. Genly Ai ["GEN-lee EYE"] attempts to draw the ambisexual Gethenians into a galactic empire in what novel by Ursula K. Le Guin ["gwin"]?

A: ***The Left Hand of Darkness***

62. In his last published appearance, what character says "Let's go exploring!" as he rides a sled down the snow with his pet tiger Hobbes?

A: **Calvin**

#### Jailbreak

63. What is the maximum number of players on one team that are allowed on the court at a time in volleyball?

A: **6**

64. Three Roman brothers are shown receiving swords from their father before a battle with the Curiatii in what painting by Jacques-Louis David?

A: ***Oath of the Horatii***

65. Who names an expression defined as the derivative of coordinate time with respect to proper time?

A: Hendrik **Lorentz**

66. The largest port in Sub-Saharan Africa is what capital of KwaZulu-Natal province in South Africa?

A: **Durban**

67. The first posthumous pardon in Canadian history was given to what activist, who was fined for sitting in the whites-only section of a movie theatre?

A: Viola **Desmond**

68. Stanley Yelnats is sent to Camp Green Lake and made to create the title features in what novel by Louis Sachar ["SACK-er"]?

A: **Holes**

69. What mountain range forms the central spine of the Italian peninsula?

A: **Apennine** mountains

70. What oxymoronic brand sold by the Loblaw Corporation is known for their characteristic generic font and plain yellow packaging?

A: **no name**

71. The region of Kimberley is located in the north of what state, Australia's largest?

A: **Western Australia**

72. In C++ and Java, what character ends a line of code?

A: **semicolon**

73. Almost five centuries after burning at the stake, who was made a patron saint of France due to her role in lifting the siege of Orléans?

A: **Joan of Arc** (accept: **Jeanne d'Arc**)

74. What syllable ends any word starting with a vowel when translated into Pig Latin?

A: **way**

75. Djibouti, Eritrea, Somalia, and Ethiopia make up what geographic area?

A: **Horn of Africa**

## END OF THIRD QUARTER

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## FOURTH QUARTER

### Pyramid

76.

**Part 1:** What mathematician introduced their namesake "pattern", which describes how stripes and spots in nature can arise from systems undergoing diffusion?

**Part 2:** Systems like Microsoft Excel, Conway's Game of Life, and untyped lambda calculus can all be used to compute any general recursive function, a consequence of possessing a property named for this mathematician.

**Part 3:** A hypothetical machine that can manipulate symbols on an infinitely long tape according to a set of rules is named for this person, and has his namesake "completeness".

**Part 4:** This British mathematician, who was prosecuted for homosexual acts in 1952, designed a namesake "test" to determine how "intelligent" a machine is.

A: Alan **Turing**

### Set of 3: Geography of the South Pacific

79. What island is home to Papeete, the capital of French Polynesia?

A: **Tahiti**

80. Straying from the 180th meridian to wrap around all of Kiribati ["KEE-ruh-bass"], what cartographic convention most often demarcates a 24 hour time change?

A: **International Date Line**

81. What kind of ring-shaped feature most common in the South Pacific consists of one or several low lying coral islands surrounding a central lagoon?

A: **atoll**

#### **Set of 4: Biblical Renaissance Art**

82. "Of the pomegranate," "on the rocks," and "with the long neck" all follow what word in the names of depictions of the Virgin Mary?

A: **Madonna**

83. The largest painting in the Louvre is what Paolo Veronese painting depicting the event at which Jesus miraculously turned water into wine?

A: *The **Wedding at Cana*** (accept: *The **Wedding Feast at Cana***)

84. Pieter Bruegel the Elder created a "great" and "little" painting of what man-made structure, which was left unfinished in the Book of Genesis parable?

A: *The **Tower of Babel***

85. What Italian artist painted a mural in the Convent of Santa Maria delle Grazie of Jesus flanked by all twelve apostles sitting on one side of a table, his depiction of *The Last Supper*?

A: Leonardo **da Vinci**

#### **15-Part Blitz**

86. What brand's mascot wears ear tags of its own packaging, a round box containing spreadable cheese wedges with a red cow on the lid?

A: The **Laughing Cow** (accept: La **vache qui rit**)

87. An adaptation of a graphic novel series by Alice Oseman, what teen dramedy ["DRAW-med-EE"] show stars Joe Locke and Kit Connor as Charlie and Nick?

A: **Heartstopper**

88. What punctuation mark is a combination of the question and exclamation marks?

A: **interrobang**

89. What need can only be met after esteem needs have been met, as it is at the top of Maslow's hierarchy of needs?

A: **self-actualization**

90. First imaged by the Event Horizon Telescope in 2022, what is the name of the supermassive black hole at the Galactic Center of the Milky Way?

A: **Sagittarius A\*** ["A-star"] (accept: **Sgr A\*** ["SADGE A-star"])

91. *So Close to What* is the third studio album by what Calgarian pop singer?

A: Tate **McRae**

92. What neurological condition's anterograde form prevents its sufferers from forming new memories?

A: **amnesia**

93. What single word is used to refer to a member of a Protestant sect founded by George Fox, the Religious Society of Friends?

A: **Quaker**

94. The colony of French West Africa had its capital located in what largest Senegalese

city?

A: **Dakar**

95. According to a leaked PDF, which product's 2008 logo allegedly created its own energy field, gravitational pull, and universe?

A: **Pepsi**

96. Critics such as W.V.O. Quine equated a posteriori ["AY poss-TIER-ee-ORE-iye"] knowledge with what other category of knowledge proposed by Immanuel Kant that describes knowledge derived from experience?

A: **synthetic** knowledge

97. What artist was responsible for *Nu Bleu* and *Woman With A Hat*, early works of Fauvism?

A: Henri **Matisse**

98. What river runs through Aranjuez ["uh-RAHN-wezz"] and Toledo in Spain, and later empties into the Atlantic at its mouth in Lisbon?

A: **Tagus** river

99. What kind of water-based paint, unlike traditional watercolours, is designed to be opaque?

A: **gouache** ["GWAHSH"]

100. What touring entertainment group run by the Falun Gong ["FAH-luhn GONG"] advertises itself as "China Before Communism"?

A: **Shen Yun** Performing Arts

**END OF GAME**