

EQAO PRACTICE EXAM 3

READING SECTION (Q1–25)

Passage 1: The Library Mystery

Nia loved Saturdays at the public library. She had been visiting the same branch since she was five years old. Every week, she chose a new book and signed it out with her library card.

One Saturday morning, Nia noticed something odd. A purple sticky note was stuck to the back cover of her chosen book. It said, "Read page 47. You will be glad you did."

Nia's heart raced. She flipped quickly to page 47. There, between two paragraphs, was another sticky note. This one read, "Look for the next clue in Aesop's Fables."

For the next hour, Nia rushed from shelf to shelf, finding four more notes hidden in different books. The final note led her to the librarian's desk. Mrs Holloway, the librarian, was waiting with a wide smile.

"Welcome to the Library Detective Club!" Mrs Holloway said, handing Nia a small badge. "We make scavenger hunts for our most loyal readers. You earned this."

Nia walked out of the library that afternoon with a new book in one hand and her detective badge in the other. She could not wait until next Saturday.

1. How did Nia know to follow the clues?

- A. Mrs Holloway told her to look for them.
- B. Her friend left a note on her front door.
- C. A sticky note appeared on her chosen book.

D. The newspaper announced the club's hunt.

2. What did the first sticky note tell Nia to do?

A. take the book home and read it quietly

B. turn to page 47 of her chosen book

C. visit the librarian's desk straight away

D. look behind the Aesop's Fables shelf

3. Where did the final note lead Nia?

A. to the children's reading corner

B. to the books on Aesop's Fables

C. to a friend in the next aisle

D. to the librarian's desk

4. Why was Mrs Holloway smiling?

A. She had created the scavenger hunt herself.

B. Nia had returned her overdue books on time.

C. The library was about to host a school visit.

D. A friend had brought her a special gift.

5. What does the word "loyal" mean in the sentence "We make scavenger hunts for our most loyal readers"?

A. quick and clever at solving problems

B. visiting often and over a long time

C. polite and quiet inside the library

D. willing to share books with others

6. What is the main message of the story?

A. Sticky notes are a good way to mark books.

B. Libraries are quieter than other busy places.

C. Detectives must always work alone to succeed.

D. Reading regularly can lead to fun surprises.

Passage 2: Inside a Honeybee Colony

A honeybee colony works like a small, busy city. Inside one hive, tens of thousands of bees live and work together, each with a special job. The colony cannot survive unless every bee plays its part.

At the centre of the hive is the queen. There is only one queen in each colony. Her main job is to lay eggs — sometimes more than a thousand in a single day. Without the queen, no new bees would be born, and the colony would slowly disappear.

The workers do almost everything else. These female bees gather pollen and nectar from flowers, feed the young bees, build wax cells, and guard the hive entrance. A worker bee may travel up to five kilometres in a single day looking for flowers. The flowers she visits depend on the season, but she can carry pollen on tiny brush-like hairs on her legs.

The drones are the male bees. Drones do not gather food or build cells. Their only job is to mate with new queens from other colonies. In the autumn, when food becomes scarce, the workers push the drones out of the hive to save resources.

A honeybee colony is one of the most organised insect communities in the world. Each bee has a clear role, and together they keep the colony alive year after year.

7. What is the queen bee's main job?

- A. to lay eggs for the colony
- B. to gather pollen from flowers
- C. to guard the entrance to the hive
- D. to mate with drones from other hives

8. How far might a worker bee travel in one day?

- A. up to one kilometre
- B. up to two kilometres
- C. up to three kilometres
- D. up to five kilometres

9. According to the passage, what happens to drones in the autumn?

- A. They leave the hive to find new queens.
- B. The workers push them out of the hive.
- C. They begin to gather pollen for winter.
- D. The queen sends them away to mate.

10. What does the author compare a honeybee colony to?

- A. a small, busy city
- B. a Canadian apple farm
- C. an old wax candle
- D. a flower garden

11. How does a worker bee carry pollen?

- A. inside her mouth using her tongue
- B. inside her stomach as honey
- C. on the wax sacks attached to her back
- D. on tiny brush-like hairs on her legs

12. Why does the author say "the colony cannot survive unless every bee plays its part"?

- A. to show that all bees depend on each other
- B. to warn readers about the danger of bee stings
- C. to explain how honey is made in the hive
- D. to compare bees to other small insects

Passage 3: Devon's Choice

Devon found the wallet on the way home from school. It was lying in the snow on the pavement, half-hidden beside a parked car. Inside were five crisp twenty-dollar bills and a driver's licence.

A hundred dollars. Devon stared at the money. He thought of all the things he could buy — the video game he had wanted since his birthday, the new hockey stick, a bag of his favourite candy.

But Devon also noticed the photograph on the licence. The man looked about his grandfather's age. The name was Mr Tariq Ahmed, and the address was just two streets away from Devon's home.

Devon walked slowly toward Mr Ahmed's house. His feet felt heavy. With every step, he imagined the video game disappearing from his hands. But he also imagined Mr Ahmed searching frantically for his lost wallet, perhaps worried about how to pay his bills.

When Devon knocked, Mr Ahmed opened the door looking pale. His eyes lit up the moment he saw the wallet.

"Young man, you have saved my whole week!" Mr Ahmed said. "I lost this on my walk this morning, and I have been searching for hours."

Mr Ahmed reached into the wallet and tried to give Devon a twenty-dollar bill. But Devon shook his head.

"That is your money, sir. I just brought it back."

As he walked home, Devon thought about the video game. He still wanted it. But the feeling of doing the right thing, he realised, was worth more than any new toy could ever be.

13. Where did Devon find the wallet?

- A. inside his school backpack
- B. on the kitchen table at home
- C. on the snowy pavement
- D. next to the school playground

14. How much money was inside the wallet?

- A. fifty dollars
- B. one hundred dollars
- C. twenty dollars
- D. two hundred dollars

15. How did Mr Ahmed look when he opened the door?

- A. happy and surprised
- B. angry and worried
- C. pale and worried

D. busy and tired

16. Why did Devon's feet "feel heavy" as he walked to Mr Ahmed's house?

- A. He was thinking about giving up the money.
- B. The snow had become deep on the pavement.
- C. The wallet was very heavy in his backpack.
- D. He was tired from the long walk home.

17. Why did Devon refuse the twenty-dollar bill?

- A. He thought Mr Ahmed needed the money more.
- B. He felt the money belonged to Mr Ahmed.
- C. He did not like the look of the bill.
- D. He wanted Mr Ahmed to call his parents.

18. What is the main lesson of the story?

- A. Walking home in the snow can be dangerous.
- B. Children should not handle money found outside.
- C. New video games cost a lot of money these days.
- D. Doing the right thing brings its own reward.

Passage 4: Stars (poem)

Up above the sleepy town,
Stars appear when sun goes down.
Tiny lights that twinkle bright,

Watching o'er us every night.

Some are blue and some are white,
Some shine soft and some shine bright.
Far away they seem to be,
Distant friends to you and me.

When I cannot fall asleep,
Through my window I will peek,
Counting stars across the sky,
Wondering as the hours go by.

19. What does the speaker do when she cannot fall asleep?

- A. peeks through her window at the stars
- B. reads a book under the bedside lamp
- C. walks downstairs to find her parents
- D. listens to soft music from her radio

20. What does the speaker compare the stars to?

- A. small candles on a birthday cake
- B. distant friends in the dark sky
- C. paintings on a quiet wall
- D. soft voices of sleeping children

21. What does the line "Watching o'er us every night" suggest about the stars?

- A. that they feel like protectors above us
- B. that they shine only when people sleep
- C. that they fly across the dark night sky
- D. that they show the way to a new town

22. What is the mood of the poem?

- A. fearful and tense
- B. excited and busy
- C. peaceful and calm
- D. sad and lonely

Vocabulary and Comprehension (Q23–25)

23. Read this sentence: "Although it was raining, the children ran outside to play in the puddles." What does "although" tell you?

- A. when the children went outside
- B. a contrast between two ideas
- C. how the children felt about rain
- D. the size of the puddles outside

24. Which word means almost the SAME as "exhausted"?

- A. excited
- B. embarrassed
- C. enormous
- D. tired

25. In the sentence "The mountain trail was treacherous after the storm," what does "treacherous" mean?

- A. crowded with other hikers
- B. dangerous and risky
- C. beautiful in the sunlight
- D. closed for repairs

WRITING SECTION (Q26–40)

26. Which sentence is a COMPLETE sentence?

- A. The bus arrived at the station early today.
- B. Running quickly down the long, narrow street.
- C. After the heavy rain stopped this morning.
- D. Because the dog barked at the small child.

27. Which sentence uses a SEMICOLON correctly?

- A. We packed sandwiches; juice boxes, and apples.
- B. The sun set quickly; the campers built a fire.
- C. We went hiking; through the dense forest.
- D. She was tired; but she finished the project.

28. Read this sentence: "After the heavy rain, the dog ran quickly through the muddy garden." Which word is an ADJECTIVE?

- A. ran
- B. through

- C. quickly
- D. muddy

29. Which sentence uses the correct PRONOUN?

- A. My brother and me went to the park yesterday.
- B. My brother and I went to the park yesterday.
- C. Me and my brother went to the park yesterday.
- D. My brother and myself went to the park yesterday.

30. Read this sentence: "The students opened their lunches and shared their snacks with each other." What does "their" tell you?

- A. how the students opened the lunches
- B. when the students ate their snacks
- C. that the lunches belong to the students
- D. where the students ate together

31. Which sentence is written in the PAST tense?

- A. The cat sleeps on the warm blanket.
- B. The cat slept on the warm blanket.
- C. The cat will sleep on the warm blanket.
- D. The cat is sleeping on the warm blanket.

32. Which word does NOT belong with the others?

- A. happy
- B. cheerful

- C. joyful
- D. gloomy

33. Which sentence uses a METAPHOR?

- A. The clouds were like big white pillows above us.
- B. The classroom was a beehive of activity.
- C. The wind blew sharply through the bare branches.
- D. The teacher smiled brightly at the new students.

34. Which sentence has correct PUNCTUATION?

- A. Where are you going. asked my older sister.
- B. Where are you going asked my older sister.
- C. "Where are you going?" asked my older sister.
- D. Where are you going, asked my older sister.

35. Read this sentence: "The students completed their projects, presented them to the class, and answered questions." Why are commas used?

- A. to show questions in the sentence
- B. to separate items in a list
- C. to mark the end of the sentence
- D. to add quotations around words

36. Which sentence is a COMPLEX sentence?

- A. The boys laughed and the girls clapped.
- B. We ran quickly to the bus stop.

- C. The rain fell, and the wind blew strongly.
- D. We went home because the storm started.

37. Which group of words is a PREPOSITIONAL PHRASE?

- A. she ran quickly
- B. and the bright sun
- C. behind the wooden fence
- D. that smiled at us

38. Which sentence shows correct SUBJECT-VERB AGREEMENT?

- A. The boys in my class is very kind.
- B. The boys in my class are very kind.
- C. The boys in my class was very kind.
- D. The boys in my class be very kind.

39. Which word should be CAPITALISED in this sentence?

"My family travelled to ottawa last summer to see the old buildings."

- A. family
- B. travelled
- C. ottawa
- D. summer

40. Read this sentence: "Despite the cold weather, the children went sledding all afternoon." What does the word "despite" mean?

- A. in spite of

- B. because of
- C. instead of
- D. on top of

MATHEMATICS SECTION (Q41–80)

41. What is 7×12 ?

- A. 72
- B. 76
- C. 78
- D. 84

42. What is $156 \div 3$?

- A. 42
- B. 52
- C. 62
- D. 48

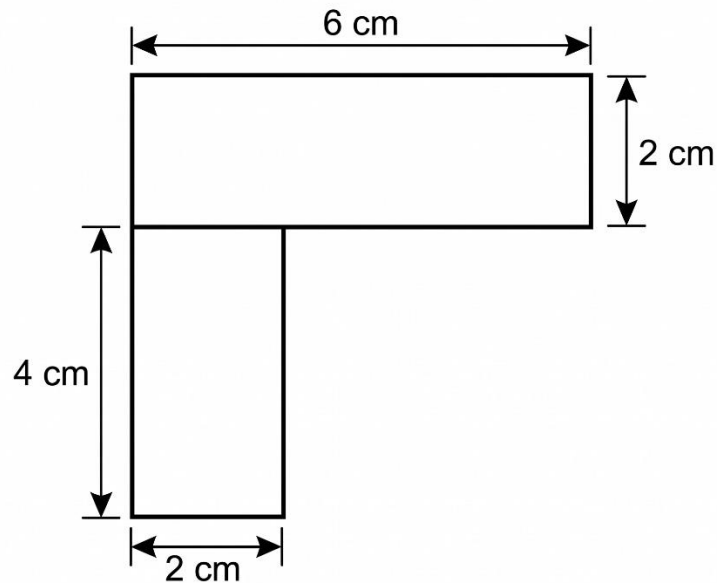
43. Which fraction is GREATER: $\frac{2}{3}$ or $\frac{3}{4}$?

- A. $\frac{3}{4}$ is greater
- B. $\frac{2}{3}$ is greater
- C. They are equal
- D. Cannot be determined

44. A bottle holds 750 mL of juice. How much MORE juice would you need to fill a 1-litre bottle?

- A. 100 mL
- B. 150 mL
- C. 200 mL
- D. 250 mL

45. Look at the L-shaped figure below.



[Figure PQ-1]

What is the AREA of the figure?

- A. 20 cm²
- B. 12 cm²
- C. 18 cm²
- D. 24 cm²

46. In the equation $7 + n = 15$, what is the value of n ?

- A. 6
- B. 7
- C. 8
- D. 9

47. Round 4,567 to the nearest THOUSAND.

- A. 4,000
- B. 4,500
- C. 4,600
- D. 5,000

48. What is 8×11 ?

- A. 88
- B. 81
- C. 80
- D. 84

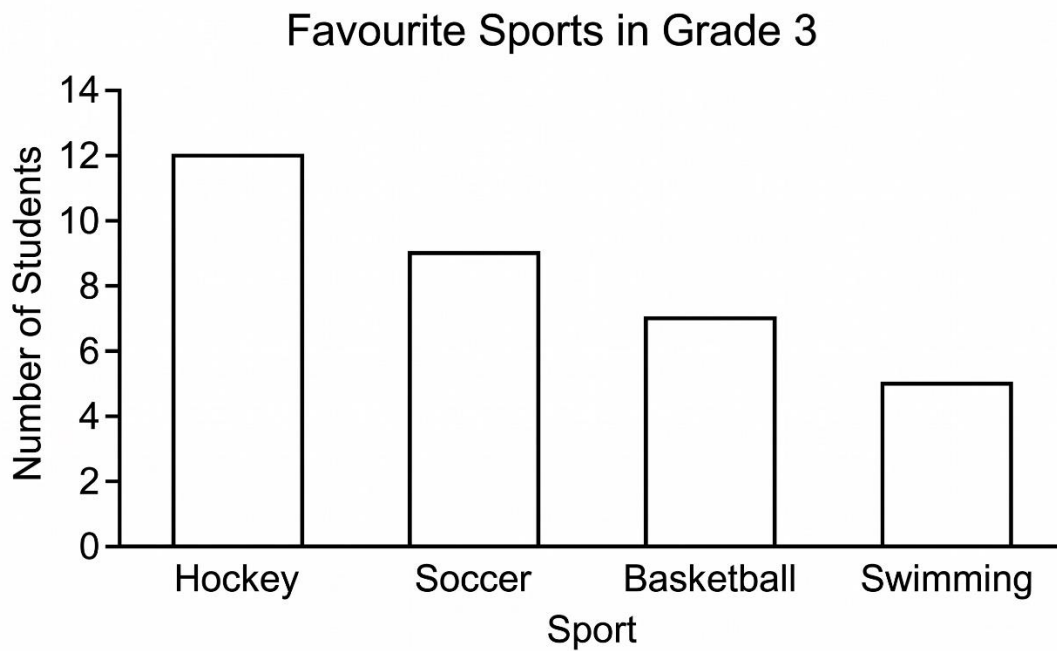
49. Which fraction is LESS than $\frac{1}{2}$?

- A. $\frac{5}{8}$
- B. $\frac{4}{6}$
- C. $\frac{2}{5}$
- D. $\frac{3}{4}$

50. A school has 365 students. Each grade has the same number of students. If there are 5 grades, how many students are in each grade?

- A. 70
- B. 71
- C. 72
- D. 73

51. Look at the bar graph below.



How many MORE students prefer hockey than basketball?

- A. 5
- B. 4
- C. 7
- D. 12

52. Lisa bought a sandwich for \$5.75 and a drink for \$2.50. She paid with a \$10 bill. How much CHANGE did she get?

- A. \$1.25
- B. \$1.50
- C. \$2.00
- D. \$1.75

53. Look at the shapes below.

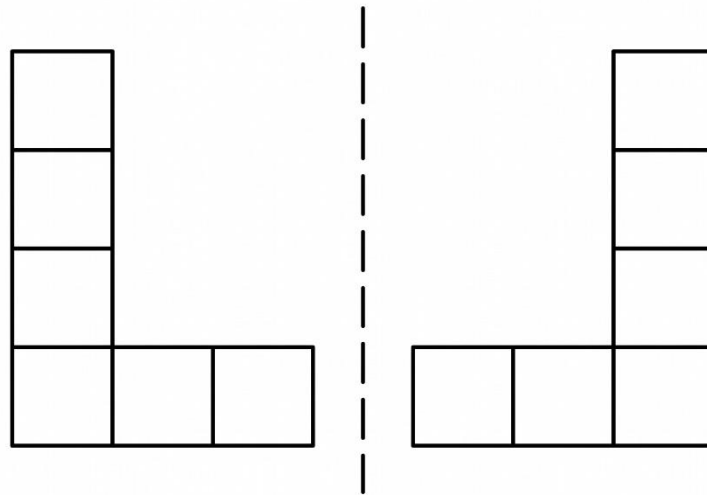


Figure PQ-3

Which transformation has been performed on the original shape?

- A. slide (translation)
- B. flip (reflection)
- C. turn (rotation)
- D. no transformation

54. Which numbers complete the pattern?

3, 8, 13, 18, ____, ____

- A. 22, 26
- B. 21, 24
- C. 24, 30
- D. 23, 28

55. The temperature was -3°C in the morning and rose by 8 degrees by noon. What was the temperature at noon?

- A. 3°C
- B. 11°C
- C. -11°C
- D. 5°C

56. What is 9×8 ?

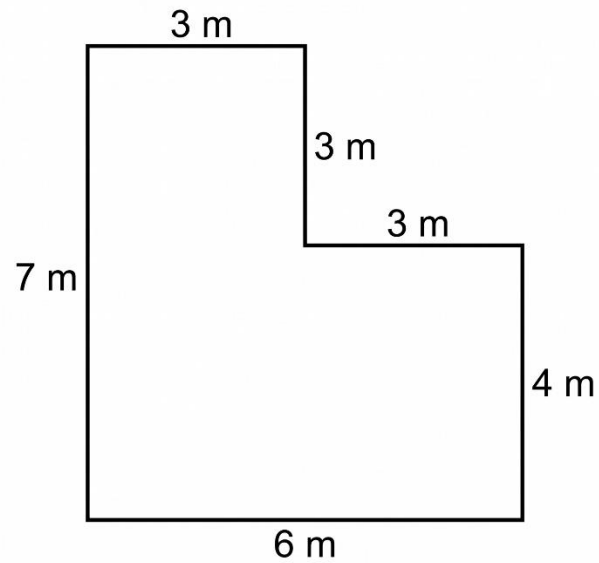
- A. 64
- B. 56
- C. 80
- D. 72

57. A jar contains 15 marbles: 6 red, 4 blue, 3 green, and 2 yellow. If you pick one marble without looking, which colour are you MOST likely to pick?

- A. blue
- B. red
- C. green
- D. yellow

58. Look at the L-shaped garden below.

Figure PQ-4



What is the PERIMETER of the garden?

- A. 23 m
- B. 24 m
- C. 26 m
- D. 28 m

59. A pizza is cut into 8 equal slices. Marcus eats 3 slices, and Aiden eats 2 slices. What fraction of the pizza is LEFT?

- A. $\frac{3}{8}$
- B. $\frac{5}{8}$
- C. $\frac{1}{4}$
- D. $\frac{1}{2}$

60. What is 6×9 ?

- A. 48
- B. 54
- C. 56
- D. 64

61. Which is the BEST estimate for the capacity of a bathtub?

- A. 5 litres
- B. 50 mL
- C. 200 litres
- D. 5,000 litres

62. Maya is making bracelets. She uses 8 beads for each bracelet. If she has 96 beads, how many bracelets can she make?

- A. 12
- B. 11
- C. 10
- D. 13

63. Which expression has a value of 24?

- A. $8 + 3 \times 2$
- B. $8 \times 3 - 2$
- C. 4×6
- D. $12 + 6 + 4$

64. Look at the table showing the heights of four students.

Student	Height (cm)
Asha	132
Ben	128
Carlos	135
Dara	130

Who is the TALLEST?

- A. Asha
- B. Ben
- C. Dara
- D. Carlos

65. Which multiplication fact helps you solve $35 \div 5$?

- A. $5 \times 5 = 25$
- B. $6 \times 6 = 36$
- C. $5 \times 7 = 35$
- D. $7 \times 6 = 42$

66. What is 11×11 ?

- A. 121
- B. 111
- C. 122
- D. 112

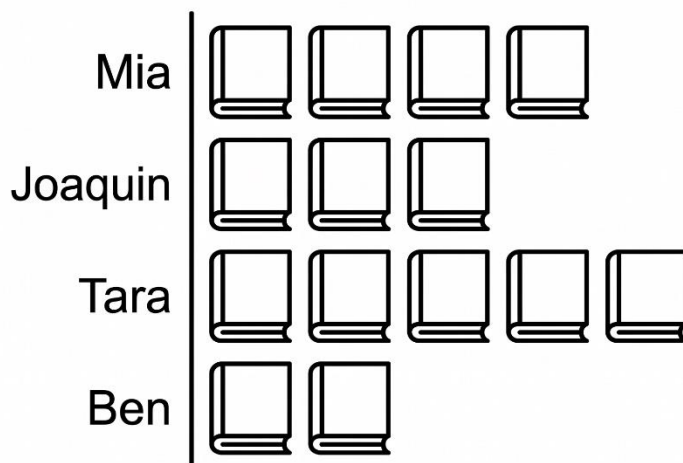
67. Aiden has \$8.45. He buys a sandwich for \$4.95. How much money does he have LEFT?

- A. \$3.40
- B. \$4.50
- C. \$3.50
- D. \$3.55

68. Look at the pictograph showing books read this month.

Books Read This Month

Each book icon = 3 books



How many books did Tara read?

- A. 5
- B. 15
- C. 10
- D. 20

69. Mark is thinking of a number. When he adds 7 to it, the answer is 23. What is Mark's number?

- A. 16
- B. 17
- C. 14
- D. 15

70. Round 2,489 to the nearest HUNDRED.

- A. 2,400
- B. 2,480
- C. 2,500
- D. 2,490

71. Which 3D shape is BEST described by a cereal box?

- A. rectangular prism
- B. triangular prism
- C. cube
- D. cylinder

72. Look at this pattern:

1, 4, 9, 16, ____

What is the next number?

- A. 21
- B. 23
- C. 22
- D. 25

73. Maya has 30 stickers. She gives $\frac{1}{5}$ of them to her sister. How many stickers does she give away?

- A. 5
- B. 6
- C. 10
- D. 15

74. How many FACES does a square-based pyramid have?

- A. 4
- B. 6
- C. 7
- D. 5

75. A bag has 4 red balls, 5 blue balls, and 3 yellow balls. What is the probability of picking a BLUE ball?

- A. 4 out of 12
- B. 1 out of 5
- C. 5 out of 12
- D. 3 out of 12

76. What is $96 \div 4$?

- A. 24
- B. 23
- C. 26
- D. 25

77. Eli runs 1.5 km every morning. How far does he run in ONE WEEK (7 days)?

- A. 9.5 km
- B. 10 km
- C. 10.5 km
- D. 11 km

78. Which expression equals the LARGEST number?

- A. 6×7
- B. 9×4
- C. 5×8
- D. 8×6

79. A rectangular room is 12 m long and 7 m wide. What is the AREA of the room?

- A. 19 m^2
- B. 38 m^2
- C. 84 m^2
- D. 84 m

80. Mei reads 25 pages each day. How many pages does she read in 6 days?

- A. 150
- B. 130
- C. 175
- D. 125

EQAO Practice Exam 3 – Answer Key and Explanations

1. C — Nia noticed "a purple sticky note...stuck to the back cover of her chosen book" telling her to look at page 47. The first clue's presence on her own book began the chain of discovery. The other options are not what triggered the hunt.
2. B — The first note read "Read page 47. You will be glad you did." Turning to that page is the direct instruction. The other options are not what the back-cover note told her to do.
3. D — The story states "The final note led her to the librarian's desk." That is where Mrs Holloway waited with the badge. The other locations are not where the trail ended.
4. A — Mrs Holloway said "We make scavenger hunts for our most loyal readers" — she designed the hunt herself. Her smile reflects the success of her plan. The other choices are not given in the text.
5. B — In context, "loyal readers" refers to those who visit often over a long time, as Nia had done since age five. Loyalty here means faithful, consistent visiting. The other meanings do not fit the context.
6. D — Nia's regular Saturday visits brought her a surprise scavenger hunt and a detective badge. The story shows that consistent reading habits can lead to unexpected rewards. The other choices miss the central message.
7. A — The passage states "Her main job is to lay eggs — sometimes more than a thousand in a single day." Egg-laying is the queen's defining role. The other tasks belong to workers or drones.
8. D — The text states a worker bee "may travel up to five kilometres in a single day looking for flowers." Five kilometres is the exact figure given. The other distances are smaller and not in the passage.
9. B — The passage states "the workers push the drones out of the hive to save resources" in the autumn. The action is performed by the workers. The other choices do not match the text.
10. A — The first sentence states "A honeybee colony works like a small, busy city." The comparison is to a city. The other comparisons are not made in the passage.
11. D — The passage says she "can carry pollen on tiny brush-like hairs on her legs." The hairs trap and hold pollen. The other body parts are not mentioned as pollen carriers.
12. A — The statement emphasises that every bee plays a role and that the colony depends on each one. The author's purpose is to highlight teamwork and mutual dependence. The other purposes do not match the sentence.
13. C — The story states the wallet was "lying in the snow on the pavement, half-hidden beside a parked car." The snowy pavement is the exact location. The other places are not where the wallet was found.
14. B — The passage states the wallet contained "five crisp twenty-dollar bills," which equal \$100. Five times twenty is one hundred dollars. The other amounts do not match the text.
15. C — The story describes Mr Ahmed as "looking pale" when he opened the door, and he had been searching frantically. Worry from the loss shows in his pale appearance. The other descriptions do not match the text.
16. A — Devon's "heavy feet" reflect his struggle with the thought of giving up the money he found. The description is figurative, expressing emotional weight. The other choices interpret the phrase too literally.

17. B — Devon told Mr Ahmed, "That is your money, sir. I just brought it back." He felt the wallet's contents rightfully belonged to its owner. The other choices are not the reason Devon refused the bill.
18. D — The story closes with Devon realising that "doing the right thing...was worth more than any new toy could ever be." The theme is the value of honesty and integrity. The other choices miss the central lesson.
19. A — The poem states "Through my window I will peek, / Counting stars across the sky." Peeking through the window is what the speaker does when sleepless. The other actions are not in the poem.
20. B — The poem calls the stars "Distant friends to you and me." The comparison treats stars as friendly companions. The other comparisons are not in the poem.
21. A — "Watching o'er us every night" suggests the stars are looking after the speaker, like guardians. The line gives the stars a protective quality. The other interpretations do not fit the line.
22. C — The poem uses gentle imagery (twinkle bright, soft shining, distant friends, wondering quietly), creating a restful tone. The mood is peaceful. The other moods do not match the tone.
23. B — "Although" is a subordinating conjunction that introduces a contrast between two ideas. Rain would normally keep children inside, yet they went out anyway. The other options do not describe the word's function.
24. D — Exhausted means very tired, making "tired" its closest synonym. Synonyms share similar meanings. The other words have unrelated meanings.
25. B — "Treacherous" describes something dangerous or risky, fitting a trail made hazardous by a storm. Storms can make mountain trails slippery and unsafe. The other meanings do not fit the context.
26. A — A complete sentence has a subject (The bus) and a verb (arrived) and expresses a full thought. The other choices are sentence fragments missing essential parts.
27. B — A semicolon joins two related independent clauses without a conjunction. "The sun set quickly" and "the campers built a fire" are both complete sentences linked by the semicolon. The other choices misuse the semicolon with lists, fragments, or conjunctions.
28. D — An adjective describes a noun, and "muddy" describes the garden. Words like ran, through, and quickly are not adjectives. Muddy is the adjective among the listed options.
29. B — When the pronoun is part of the subject, use "I" rather than "me." A simple test is to remove the other person: "I went to the park" sounds correct. The other choices use object form or reflexive form incorrectly.
30. C — "Their" is a possessive pronoun that shows ownership; the lunches and snacks belong to the students. Possessives indicate to whom something belongs. The other interpretations miss the possessive meaning.
31. B — "Slept" is the past-tense form of "sleep," showing the action happened before now. Past tense verbs describe completed actions. The other choices show present, future, or present continuous tense.
32. D — "Gloomy" means sad or unhappy, which is the opposite of happy, cheerful, and joyful. Three words share a meaning; one does not. Gloomy is the odd one out.

33. B — A metaphor compares two things directly without using "like" or "as." Calling the classroom "a beehive of activity" equates the classroom with a beehive. The other sentences either use a simile or make no comparison.
34. C — Direct speech requires quotation marks around the spoken words, with the question mark inside the closing quote. "Where are you going?" follows this pattern. The other choices misplace or omit the marks.
35. B — Commas separate three or more items in a list (completed projects, presented them, answered questions). Serial commas keep list items distinct. The other purposes do not match this comma use.
36. D — A complex sentence joins one independent clause with one dependent clause introduced by a word like "because." "We went home" is independent and "because the storm started" is dependent. The other choices are simple or compound sentences.
37. C — A prepositional phrase begins with a preposition (behind) and includes its object (the wooden fence). The phrase tells where. The other groups are subject-verb units or fragments without prepositions.
38. B — A plural subject ("boys") takes a plural verb ("are"). The phrase "in my class" does not change the subject. Plural-plural matching gives correct agreement.
39. C — "Ottawa" is a proper noun (the name of a city) and must always be capitalised. Proper nouns name specific people, places, or things. The other words are common nouns or verbs that do not require capitals.
40. A — "Despite" means "in spite of," signalling that something happened even though conditions were against it. The children went sledding even though it was cold. The other phrases have different meanings.
41. D — $7 \times 12 = 84$. Breaking this down: $7 \times 10 = 70$ and $7 \times 2 = 14$, then $70 + 14 = 84$. The product is 84.
42. B — $156 \div 3 = 52$ because $3 \times 52 = 156$. Division is the inverse of multiplication. Fifty-two groups of three make 156.
43. A — Using a common denominator: $\frac{2}{3} = \frac{8}{12}$ and $\frac{3}{4} = \frac{9}{12}$. Since $\frac{9}{12} > \frac{8}{12}$, $\frac{3}{4}$ is greater than $\frac{2}{3}$. Comparing fractions requires equal denominators.
44. D — 1 litre equals 1,000 mL, so $1,000 - 750 = 250$ mL more is needed. Subtracting the current volume from the target gives the difference. The bottle needs 250 mL more juice.
45. A — Splitting the L-shape into two rectangles: top rectangle $6 \times 2 = 12$ cm², bottom rectangle $2 \times 4 = 8$ cm². Adding $12 + 8 = 20$ cm². The total area is 20 cm².
46. C — Solving $7 + n = 15$ requires subtracting 7 from both sides: $n = 15 - 7 = 8$. The variable n represents the missing number. The answer is 8.
47. D — 4,567 rounds to 5,000 because the hundreds digit (5) is 5 or greater, so the thousands digit rounds up from 4 to 5. Rounding to the nearest thousand looks at the next-smaller place value. 4,567 is closer to 5,000 than to 4,000.
48. A — $8 \times 11 = 88$. A shortcut for $\times 11$ with single-digit numbers is to write the digit twice ($8 \rightarrow 88$). The product is 88.
49. C — $\frac{2}{5}$ is less than $\frac{1}{2}$ because $\frac{2}{5} = 0.4$ and $\frac{1}{2} = 0.5$. Anything less than half the whole is smaller than $\frac{1}{2}$. The other fractions are all greater than $\frac{1}{2}$.
50. D — $365 \div 5 = 73$ because $5 \times 73 = 365$. Dividing the total students by the number of grades gives the size of each grade. Each grade has 73 students.

51. A — Hockey has 12 students and basketball has 7 students, so $12 - 7 = 5$ more students prefer hockey. Subtracting the smaller bar from the larger gives the difference. Five more students chose hockey.
52. D — Lisa spent $\$5.75 + \$2.50 = \$8.25$ in total. Her change is $\$10.00 - \$8.25 = \$1.75$. Subtracting total cost from the bill gives the change.
53. B — The two L-shapes are mirror images on opposite sides of the dashed line, which represents the line of reflection. A flip (reflection) creates a mirror image across a line. The other transformations would shift or rotate the shape rather than mirror it.
54. D — Each term increases by 5: 3, 8, 13, 18, 23, 28. Adding 5 repeatedly produces the next numbers. The next two terms are 23 and 28.
55. D. Starting at -3°C and rising 8 degrees gives $-3 + 8 = 5^{\circ}\text{C}$. Adding a positive change to a negative starting temperature moves the value toward and past zero: $-3 + 8 = 5$. Option A (3°C) reflects only the absolute value of the starting temperature, ignoring the rise. Option B (11°C) incorrectly adds 8 to the absolute value of -3 rather than to -3 itself. Option C (-11°C) subtracts the increase instead of adding it, reversing the direction of change. D — $9 \times 8 = 72$. This is a basic multiplication fact. Remembering it as $10 \times 8 - 8 = 80 - 8 = 72$ can help.
56. B — Red has the most marbles (6) of any colour in the jar, making it the most likely to be picked. Higher counts mean higher probability. The other colours each have fewer marbles than red.
57. C — Adding all six side lengths: $3 + 3 + 3 + 4 + 6 + 7 = 26$ m. Perimeter is the total distance around a shape. The L-shaped garden's perimeter is 26 metres.
58. A — Marcus and Aiden ate $3 + 2 = 5$ slices, leaving $8 - 5 = 3$ slices out of 8. The remaining fraction is $\frac{3}{8}$. Three of the eight equal slices are left.
59. B — $6 \times 9 = 54$. A useful trick for $\times 9$ is that the digits of the product add to 9 ($5 + 4 = 9$). The product is 54.
60. C — A bathtub typically holds about 200 litres of water. Litres are appropriate for large containers, and 200 is the right magnitude. 5 L is too little, 50 mL is far too little, and 5,000 L is far too much.
61. A — $96 \div 8 = 12$ because $8 \times 12 = 96$. Dividing total beads by beads per bracelet gives the number of bracelets. Maya can make 12 bracelets.
62. C — $4 \times 6 = 24$. Checking each option: $8 + 3 \times 2 = 14$, $8 \times 3 - 2 = 22$, $4 \times 6 = 24$, and $12 + 6 + 4 = 22$. Only 4×6 equals 24.
63. D — Carlos at 135 cm is the tallest in the table. Comparing all heights: Asha 132, Ben 128, Carlos 135, Dara 130. Carlos has the largest number.
64. C — $5 \times 7 = 35$ is the related multiplication fact, so $35 \div 5 = 7$. Division and multiplication are inverse operations. Knowing the multiplication fact helps solve the division.
65. A — $11 \times 11 = 121$. This is a perfect square, equal to 11 squared. The product is 121.
66. C — $\$8.45 - \$4.95 = \$3.50$. Subtracting the cost from the starting amount gives the money left. Aiden has $\$3.50$ remaining.
67. B — Tara is shown with 5 book icons, and each icon represents 3 books, so $5 \times 3 = 15$ books. Multiplying the icons by the key value gives the actual count. Tara read 15 books.
68. A — If $n + 7 = 23$, then $n = 23 - 7 = 16$. Subtracting from both sides isolates the unknown number. Mark's number is 16.
69. C — 2,489 rounds to 2,500 because the tens digit (8) is 5 or greater, so the hundreds digit rounds up. Rounding to the nearest hundred looks at the tens place. 2,489 is closer to 2,500 than to 2,400.

70. A — A cereal box has 6 rectangular faces of different sizes, matching a rectangular prism. Opposite faces are equal, but not all faces are the same. A cube would require all six faces to be equal squares.
71. D — The pattern shows perfect squares: $1^2 = 1$, $2^2 = 4$, $3^2 = 9$, $4^2 = 16$, and $5^2 = 25$. Each term is the square of its position. The next number is 25.
72. B — $1/5$ of 30 is $30 \div 5 = 6$ stickers. Finding a fraction of a number means dividing by the denominator. Maya gives away 6 stickers.
73. D — A square-based pyramid has 1 square base and 4 triangular faces, totalling 5 faces. The triangular sides meet at the apex above the base. The total is 5 faces.
74. C — There are $4 + 5 + 3 = 12$ balls in total, and 5 are blue. The probability of picking blue is 5 out of 12, or $5/12$. The denominator equals the total number of balls.
75. A — $96 \div 4 = 24$ because $4 \times 24 = 96$. Dividing by 4 finds one-quarter of the total. The answer is 24.
76. C — $1.5 \text{ km} \times 7 \text{ days} = 10.5 \text{ km}$ in one week. Multiplying the daily distance by the number of days gives the weekly total. Eli runs 10.5 km each week.
77. D — Calculating each: $6 \times 7 = 42$, $9 \times 4 = 36$, $5 \times 8 = 40$, and $8 \times 6 = 48$. The largest product is 48. Option D has the highest value.
78. C — Area = length \times width = $12 \times 7 = 84$ square metres (m^2). The unit for area is squared because two dimensions multiply. Option D (84 m) uses the wrong unit — that would describe a length, not an area.
79. A — $25 \text{ pages} \times 6 \text{ days} = 150 \text{ pages}$. Multiplying daily pages by number of days gives the total. Mei reads 150 pages in 6 days.