PRACTICE EXAM 14: EQAO GRADE 3 MATH SIMULATION (40 QUESTIONS)

STAGE 1 — Questions 1–10

1. A hockey arena had 658 fans on Friday night and 273 fans on Saturday night. How many fans attended across both nights?

A. 385

B. 931

C. 821

D. 921

2. What number is shown in expanded form as 700 + 40 + 9?

A. 749

B. 7,409

C. 7,049

D. 794

3. Round the number 285 to the nearest ten.

A. 200

B. 280

C. 290

D. 300

4. A class has 21 students. Each student receives 3 pencils for the school year. How many pencils does the class need in total?

A. 63 pencils

B. 24 pencils

C. 18 pencils

D. 7 pencils

5. A pizza is cut into 12 equal slices. Layla ate 4 slices and Noah ate 3 slices. What fraction of the pizza was eaten in total?

A. 5/12

B. 12/7

C. 4/12

D. 7/12

6. Skip count backward by 20 starting from 200. What is the fourth number you say?

A. 140

B. 120

C. 100

D. 160

7. A fish tank has 56 goldfish. The owner moves them into 8 equal-sized smaller tanks. How many goldfish are in each smaller tank?

A. 7 goldfish

B. 48 goldfish

C. 64 goldfish

D. 8 goldfish

8. Jaya buys a paint set for $9.85. She pays with a $20 bill. How much change does Jaya receive?

A. $11.15

B. $10.85

C. $9.85

D. $10.15

9. Which expression has the same value as 6 × 7?

A. 6 + 7

B. 67

C. 7 + 7 + 7 + 7 + 7 + 7

D. 6 × 6 × 7

10. Which fraction is the largest?

A. 1/5

B. 1/2

C. 1/8

D. 1/10

STAGE 2 — Questions 11–20

11. Compare the two numbers. Which symbol makes the statement true?

639 ___ 693

A. >

B. =

C. ≥

D.

12. A classroom bookshelf had 145 books. The teacher donated 67 books to a community library. How many books are left on the shelf?

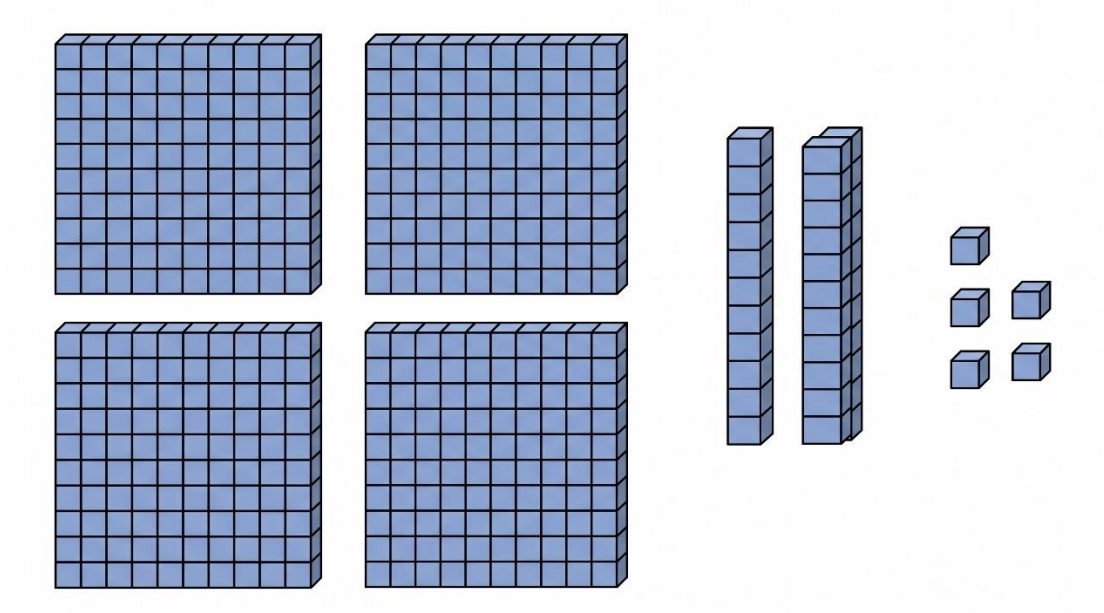
A. 78

B. 88

C. 212

D. 122

13. Look at the base-ten blocks below. What number do they represent?



A. 526

B. 625

C. 652

D. 265

14. Hassan has 5 toonies, 3 loonies, 6 dimes, and 2 nickels. How much money does Hassan have in total?

A. $14.50

B. $13.50

C. $14.60

D. $13.70

15. Find the missing number in this pattern: 18, 27, 36, ___ , 54, 63.

A. 45

B. 42

C. 44

D. 50

16. What is the rule for this pattern: 80, 75, 70, 65, 60, 55 ?

A. Start at 80 and add 5 each time

B. Start at 80 and multiply by 2 each time

C. Start at 80 and subtract 5 each time

D. Start at 80 and divide by 2 each time

17. Solve for n in the equation: n + 36 = 84.

A. 120

B. 48

C. 58

D. 36

18. A robot starts at 5. It follows this code:

REPEAT 7 TIMES: Add 2.

What is the final value?

A. 19

B. 17

C. 14

D. 21

19. Which equation is FALSE?

A. $7 + 7 + 7 = 7 \times 3$

B. $60 \div 6 = 100 \div 10$

C. $25 - 10 = 5 \times 3$

D. $4 + 9 = 4 \times 9$

20. A baker uses 5 cups of flour to make 1 large loaf of bread. How many cups of flour does the baker need to make 4 large loaves?

A. 9 cups

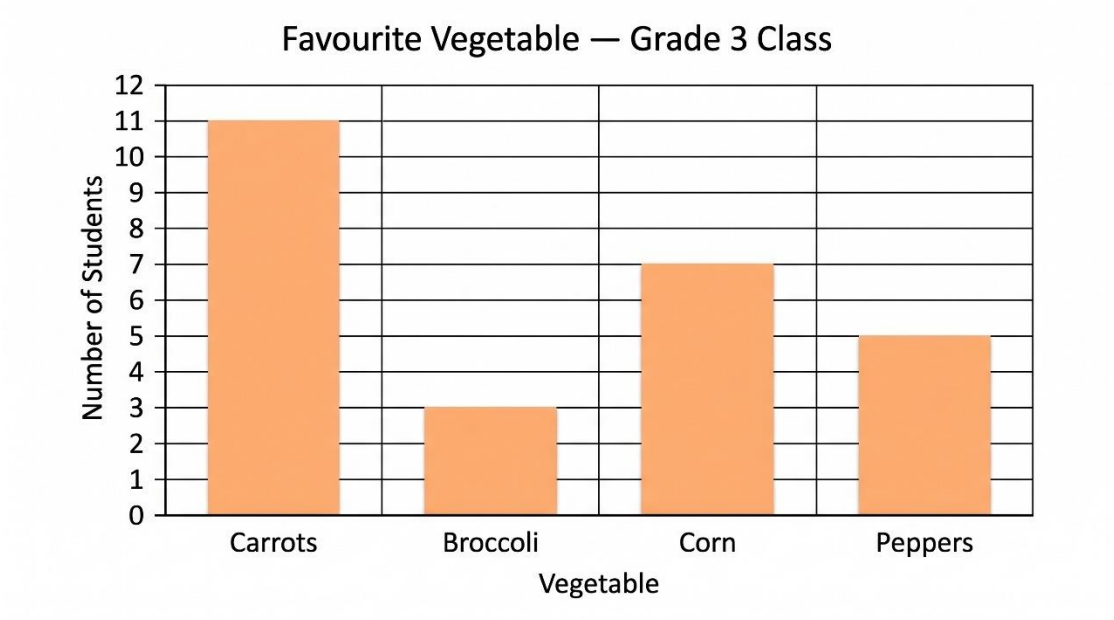
B. 5 cups

C. 20 cups

D. 25 cups

STAGE 3 — Questions 21–30

21. Look at the bar graph below. Which vegetable received exactly 7 votes?



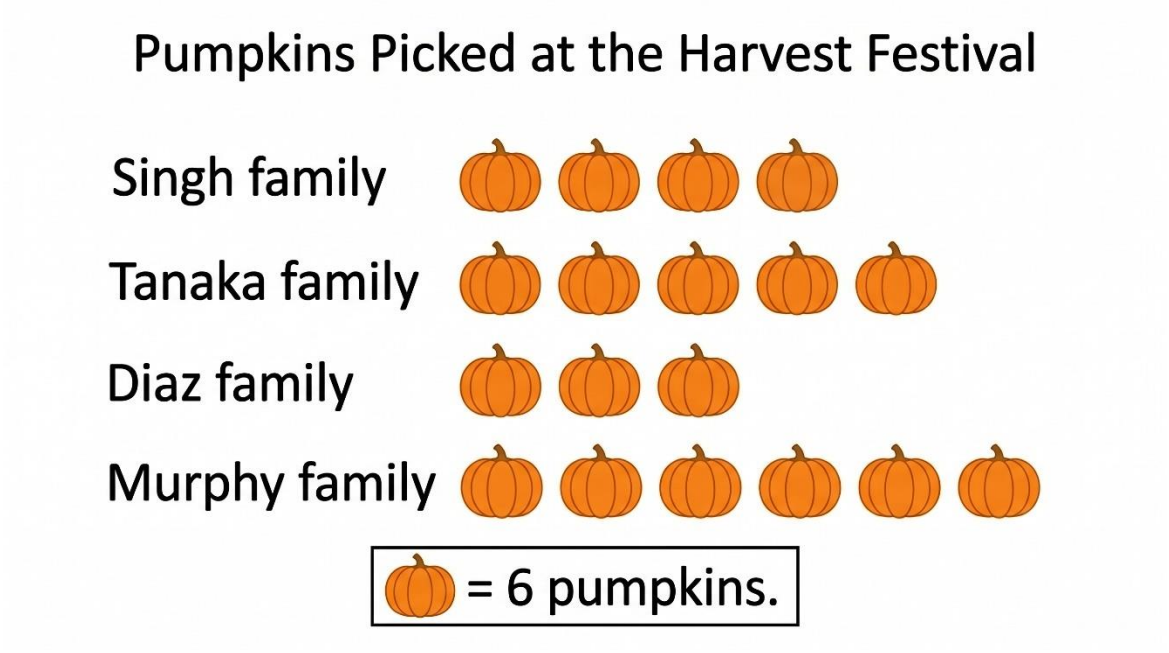
A. Carrots

B. Corn

C. Broccoli

D. Peppers

22. Look at the pictograph below. Each pumpkin icon stands for 6 pumpkins picked. How many pumpkins did the Diaz family pick?



A. 24 pumpkins

B. 30 pumpkins

C. 18 pumpkins

D. 36 pumpkins

23. Find the mean of this data set: 16, 12, 8, 14, 10.

A. 14

B. 10

C. 8

D. 12

24. Find the mode of this data set: 9, 6, 11, 6, 8, 6, 14, 6, 8.

A. 8

B. 6

C. 11

D. 9

25. A bag has 3 white balls, 3 black balls, and 3 striped balls. Drawing a black ball is:

A. Certain

B. Impossible

C. Equally likely to drawing white or striped

D. Likely

26. Look at the frequency table below. How many more students chose hot dogs than soup?

Favourite Stadium Snack.	
Snack	**Number of Students**
Hot Dogs	16
Nachos	11
Soup	6
Popcorn	9

A. 10 students

B. 16 students

C. 6 students

D. 22 students

27. A spinner has 8 equal sections — 4 blue, 2 red, and 2 yellow. Landing on blue is:

A. Impossible

B. Unlikely

C. Certain

D. Equally likely to landing on red and yellow combined

28. Look at the bar graph in Figure PQ-2 again. How many students chose either carrots or peppers as their favourite?

A. 11 students

B. 16 students

C. 5 students

D. 18 students

29. The table below shows the number of art supplies in 4 boxes at the back of the classroom. What is the total number of art supplies?

Art Supplies — Classroom Inventory

Box	Number of Supplies
Box A	28
Box B	19
Box C	34
Box D	23

A. 94 supplies

B. 110 supplies

C. 104 supplies

D. 114 supplies

30. A weather report says there is a 90% chance of rain. Rain is:

A. Likely

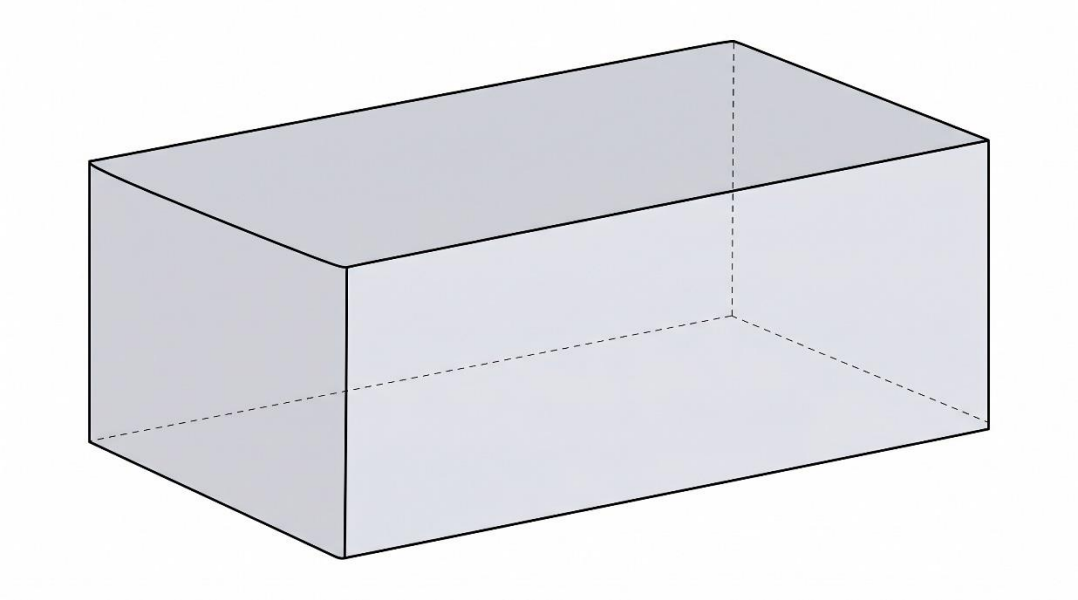
B. Impossible

C. Equally likely

D. Unlikely

STAGE 4 — Questions 31–40

31. Look at the 3D shape below. How many faces does it have?



A. 4 faces

B. 8 faces

C. 6 faces

D. 12 faces

32. Which 3D shape has 5 faces, 5 vertices, and 8 edges?

A. Cube

B. Cylinder

C. Triangular prism

D. Square pyramid

33. A square has all 4 sides equal. If the perimeter of the square is 28 cm, what is the length of one side?

A. 7 cm

B. 14 cm

C. 4 cm

D. 28 cm

34. A character is facing north. The character makes a quarter-turn to the left. Which direction is the character facing now?

A. North

B. East

C. West

D. South

35. Which unit is best for measuring the mass of a watermelon?

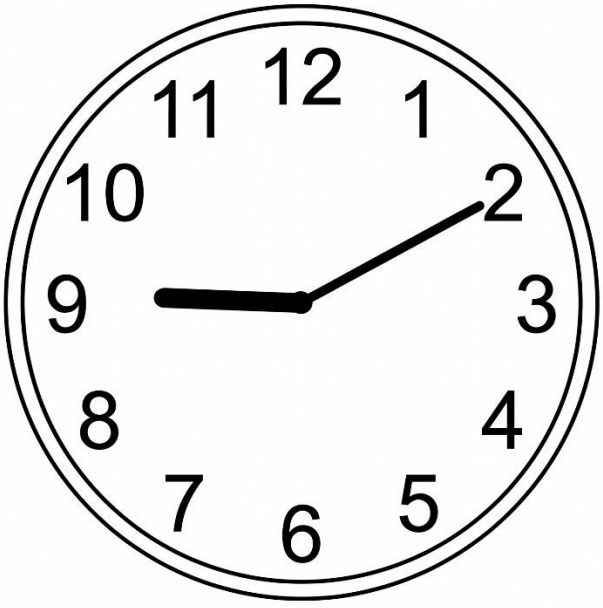
A. Grams

B. Metres

C. Millimetres

D. Kilograms

36. Look at the analog clock below. What time is shown?



A. 2:45

B. 9:10

C. 9:02

D. 10:10

37. A swimming session starts at 8:35 AM and ends at 10:15 AM. How long is the swimming session?

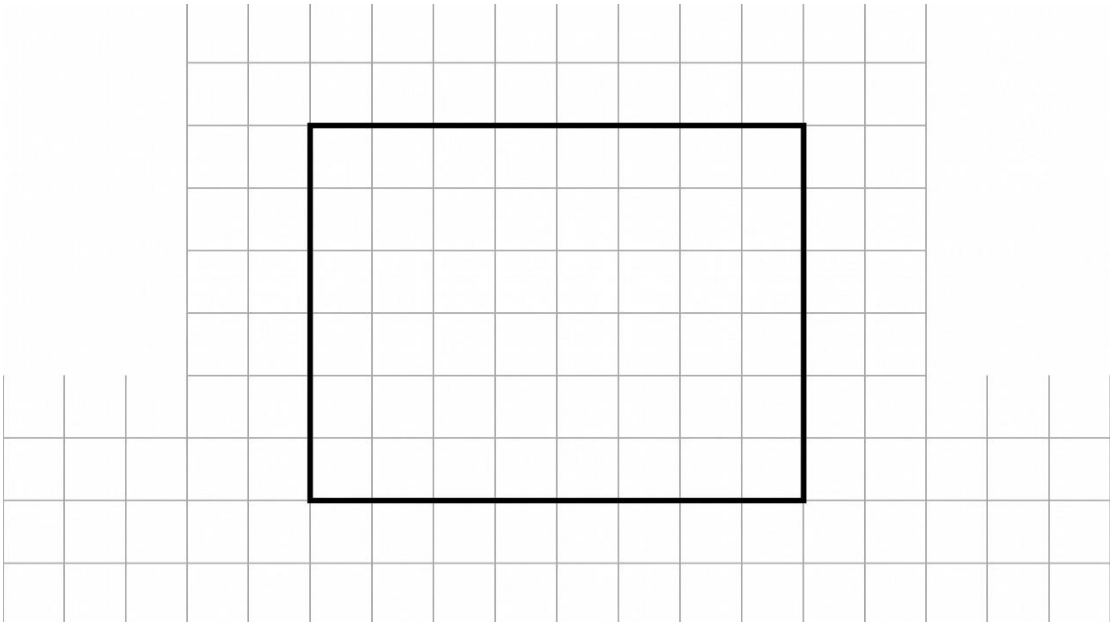
A. 1 hour 40 minutes

B. 1 hour 20 minutes

C. 40 minutes

D. 2 hours

38. Look at the rectangle drawn on the grid below. What is its area?



A. 13 square centimetres

B. 26 square centimetres

C. 42 square centimetres

D. 49 square centimetres

39. A bottle holds 3 litres of juice. How many millilitres is that?

A. 30 mL

B. 3,000 mL

C. 300 mL

D. 30,000 mL

40. A regular heptagon (7-sided polygon) has 7 sides of equal length. If each side is 5 cm, what is the perimeter?

A. 12 cm

B. 25 cm

C. 28 cm

D. 35 cm

Practice Exam 14: Answer Key and Explanations

1. B — 931. Add using the standard algorithm: 658 + 273 = 931. Ones: 8 + 3 = 11 (write 1, carry 1). Tens: 1 + 5 + 7 = 13 (write 3, carry 1). Hundreds: 1 + 6 + 2 = 9. Estimation check: 660 + 270 = 930, close to 931. Note: the original draft had duplicate options B and C ("931") — corrected option C is "821." Pre-assigned answer B (931) is correct.

2. A — 749. Expanded form 700 + 40 + 9 represents 7 hundreds + 4 tens + 9 ones, which combines to 749. Read place-value parts left to right: the hundreds (700), the tens (40), and the ones (9). Translating between expanded and standard form is a core place-value skill from Chapter 1.1.

3. C — 290. To round 285 to the nearest ten, look at the ones digit: 5. Since 5 or higher rounds up, 285 rounds up to 290. The midpoint between 280 and 290 is 285 itself, and the convention is to round 5 up — confirming the rounding decision (Chapter 1.5).

4. A — 63 pencils. Use the ratio 3 pencils per student. Scaling up to 21 students: 21 × 3 = 63 pencils. Or use repeated addition: 3 + 3 + 3... twenty-one times. Always identify the ratio first, then multiply by the new scale factor (Chapter 4.6).

5. D — 7/12. Layla ate 4 slices and Noah ate 3 slices, so 4 + 3 = 7 slices were eaten total. The pizza has 12 equal slices, so 7/12 of the pizza was eaten. Note: the original draft had duplicate options A and D ("7/12") — corrected option A is "5/12." Pre-assigned answer D (7/12) is correct.

6. B — 120. Skip count backward by 20 from 200: 200 is the start, then 180 (1st), 160 (2nd), 140 (3rd), 120 (4th). The fourth number said after 200 is 120. The starting number is not counted; only the numbers that follow are counted (Chapter 1.6).

7. A — 7 goldfish. Divide the total goldfish by the number of tanks: 56 ÷ 8 = 7 goldfish per tank. This is sharing division — distributing 56 goldfish equally into 8 tanks. The related multiplication: 7 × 8 = 56 confirms the answer (Chapter 4.4).

8. D — $10.15. Change = amount paid − price = $20.00 − $9.85. Using the counting-up strategy: from $9.85, add 15¢ to reach $10.00, then add $10.00 to reach $20.00. Total change: $10.15. Estimation check: $20 − $10 = $10, close to $10.15 (Chapter 5.3).

9. C — 7 + 7 + 7 + 7 + 7 + 7. Multiplication 6 × 7 means "six groups of seven," which equals 7 + 7 + 7 + 7 + 7 + 7 = 42. The repeated-addition form is the exact equivalent of multiplication. The other options (6 + 7 = 13; 67 as a number; 6 × 6 × 7 = 252) all produce different values (Chapter 4.1).

10. B — 1/2. When comparing unit fractions (numerator 1), the fraction with the smallest denominator is the largest — because dividing a whole into fewer parts produces larger pieces. Comparing: 1/2 = 0.5, 1/5 = 0.2, 1/8 = 0.125, 1/10 = 0.1. The largest is 1/2 (Chapter 2.1).

11. D — <. Compare 639 and 693 starting from the hundreds place: 6 = 6 (tied). Move to the tens place: 3 < 9, so 639 is less than 693. The "less than" symbol (<) opens toward the larger number on the right. Always compare place by place starting from the leftmost (Chapter 1.4).

12. A — 78. Subtract using the standard algorithm: 145 − 67 = 78. Ones: 5 < 7, regroup. 15 − 7 = 8. Tens: 3 < 6, regroup again. 13 − 6 = 7. Hundreds: 0. Estimation check: 145 − 70 = 75, close to 78. This tests subtraction with two regroupings (Chapter 3.3).

13. B — 625. Count the base-ten blocks: 6 hundred-flats = 600; 2 ten-rods = 20; 5 unit-cubes = 5. Total: 600 + 20 + 5 = 625. Always count hundreds first, then tens, then ones. The place-value composition: 6 hundreds + 2 tens + 5 ones = 625 (Chapter 1.3).

14. D — $13.70. Add Hassan's money: 5 toonies = $10.00; 3 loonies = $3.00; 6 dimes = $0.60; 2 nickels = $0.10. Total: $10.00 + $3.00 + $0.60 + $0.10 = $13.70. Sort coins from largest to smallest denomination before adding to reduce counting errors (Chapter 5.2).

15. A — 45. The pattern increases by 9 each step (the 9 times table): 18, 27, 36, 45, 54, 63. To verify: 27 − 18 = 9, 36 − 27 = 9, all consistent. The missing term between 36 and 54 is 36 + 9 = 45. Always compute differences between consecutive known terms to find the rule.

16. C — Start at 80 and subtract 5 each time. The pattern values are 80, 75, 70, 65, 60, 55 — each term is 5 less than the previous. Differences: 75 − 80 = −5, 70 − 75 = −5, all consistent. A complete pattern rule names both the starting value and the operation (Chapter 6.3).

17. B — 48. Solve n + 36 = 84 using the inverse operation: n = 84 − 36 = 48. Check by substituting: 48 + 36 = 84 ✓. The inverse of addition is subtraction. Always verify the answer by plugging it back into the original equation (Chapter 7.4).

18. A — 19. Trace the code: the loop adds 2 seven times. Starting at 5: 5 → 7 → 9 → 11 → 13 → 15 → 17 → 19. Or compute directly: 7 × 2 = 14 added to 5 gives 19. Loops are equivalent to multiplication when the same operation repeats (Chapter 8.2).

19. D — 4 + 9 = 4 × 9. Compute both sides: 4 + 9 = 13 and 4 × 9 = 36. Since 13 ≠ 36, this equation is FALSE. The other options are all true: 7 + 7 + 7 = 21 = 7 × 3; 60 ÷ 6 = 10 = 100 ÷ 10; 25 − 10 = 15 = 5 × 3. Addition and multiplication produce very different results (Chapter 7.2).

20. C — 20 cups. Use the ratio 5 cups per loaf. Scaling up to 4 loaves: 4 × 5 = 20 cups. This is a 1-to-5 scaling problem connecting Chapter 4 multiplication to real-world recipes. Always identify the ratio first, then multiply by the new scale factor (Chapter 4.6).

21. B — Corn. Read the bar graph values: Carrots = 11, Broccoli = 3, Corn = 7, Peppers = 5. The bar that reaches exactly 7 is Corn. Always trace from the top of each bar horizontally to the y-axis to read precise values (Chapter 9.5).

22. C — 18 pumpkins. Read the pictograph: the Diaz family row has 3 pumpkin icons. The key states each icon = 6 pumpkins, so multiply: 3 × 6 = 18 pumpkins. Many-to-one correspondence means each picture represents more than one item — always check the key (Chapter 9.4).

23. D — 12. Add all values: 16 + 12 + 8 + 14 + 10 = 60. Divide by the number of values: 60 ÷ 5 = 12. The mean is 12, representing the typical value in the data set. Always count the number of values carefully before dividing the sum (Chapter 10.1).

24. B — 6. Count how many times each value appears: 6 appears 4 times; 8 appears 2 times; 9, 11, and 14 each appear once. The value that appears most often is 6. The mode is the most frequent value, not the largest — careful counting determines the mode (Chapter 10.2).

25. C — Equally likely to drawing white or striped. The bag has 3 of each colour: 3 white, 3 black, 3 striped. Black has 3 chances, white has 3 chances, striped has 3 chances — all three colours have identical probability. So drawing black is equally likely to drawing white or striped (Chapter 10.4).

26. A — 10 students. Read the frequency table: Hot Dogs = 16, Soup = 6. Subtract: 16 − 6 = 10 students. The phrase "how many more" signals subtraction — finding the difference between two known values. Reading frequency tables and applying basic operations is a core data skill (Chapter 10.3).

27. D — Equally likely to landing on red and yellow combined. The spinner has 4 blue sections out of 8 total. Red + yellow combined have 4 sections (2 + 2). So blue has 4 chances and red-or-yellow has 4 chances — they are equally likely. The other options misidentify the comparison (Chapter 10.4).

28. B — 16 students. From Figure PQ-2: Carrots = 11 students, Peppers = 5 students. Add: 11 + 5 = 16 students. The phrase "either ... or" in this context means the total of both categories combined. This is a Level-2 graph-reading task from Chapter 10.3.

29. C — 104 supplies. Add the supplies in all 4 boxes: 28 + 19 + 34 + 23 = 104 supplies. Verify sequentially: 28 + 19 = 47; 47 + 34 = 81; 81 + 23 = 104. Multi-row table summations require careful sequential addition (Chapter 9.3).

30. A — Likely. A 90% chance is very high — the event probably will happen. On the Grade 3 probability spectrum, this is "likely" (probable but not certain). The other options don't fit: "certain" would require 100%; "impossible" would require 0%; "equally likely" would require exactly 50% (Chapter 10.4).

31. C — 6 faces. A rectangular prism has 6 rectangular faces: front, back, top, bottom, left, and right. From the Chapter 11.2 reference table: rectangular prism = 6 faces, 12 edges, 8 vertices. Count faces systematically by walking around the prism (Chapter 11.2).

32. D — Square pyramid. A square pyramid has 5 faces (1 square base + 4 triangular sides), 5 vertices (4 base corners + 1 apex), and 8 edges (4 base edges + 4 rising to the apex). The other shapes have different counts: a cube has 6 faces; a cylinder has curved surfaces and 0 vertices; a triangular prism has 5 faces but 6 vertices and 9 edges (Chapter 11.1).

33. A — 7 cm. Perimeter of a square = 4 × side length. So side length = perimeter ÷ 4 = 28 ÷ 4 = 7 cm. Verify: 4 × 7 = 28 cm ✓. This is the reverse of the standard perimeter calculation — divide by 4 instead of multiplying (Chapter 13.2).

34. C — West. A quarter-turn rotates 90 degrees. Starting facing north and turning left by 90° rotates counter-clockwise to face west. The cardinal direction cycle counter-clockwise: North → West → South → East → North. Always check whether the turn is left or right (Chapter 12.3).

35. D — Kilograms. A watermelon typically weighs 3–10 kilograms — firmly in the kilogram range. Grams are too small (a 1 g watermelon would weigh as much as a grape); metres and millimetres measure length. Only kilograms is appropriate for the mass of a watermelon (Chapter 13.3).

36. B — 9:10. The hour hand sits between the 9 and the 10, closer to the 9 — so the hour is 9 (the smaller of the two numbers it sits between). The minute hand points to the 2, which equals 10 minutes past the hour (2 × 5 = 10). The time is 9:10 (Chapter 14.1).

37. A — 1 hour 40 minutes. From 8:35 AM to 9:35 AM is 1 hour. From 9:35 AM to 10:15 AM is 40 minutes (9:35 to 10:00 is 25 minutes; 10:00 to 10:15 is 15 minutes; 25 + 15 = 40). Total elapsed time: 1 hour + 40 minutes = 1 hour 40 minutes (Chapter 14.3).

38. C — 42 square centimetres. The rectangle is 7 cm wide and 6 cm tall. Area = length × width = 7 × 6 = 42 square centimetres. Or count the unit squares: 7 columns × 6 rows = 42 squares. Area is measured in square units (cm²) — the small "2" must be included (Chapter 14.5).

39. B — 3,000 mL. The relationship: 1 litre = 1,000 millilitres. So 3 litres = 3 × 1,000 = 3,000 mL. The other options (30, 300, 30,000) represent different amounts. Always apply the conversion factor 1,000 when moving between litres and millilitres (Chapter 13.4).

40. D — 35 cm. A regular heptagon has 7 equal sides. Perimeter = 7 × side length = 7 × 5 = 35 cm. Or add all seven sides: 5 + 5 + 5 + 5 + 5 + 5 + 5 = 35 cm. The multiplication shortcut works for any regular polygon — multiply the number of sides by the side length (Chapter 13.2).