PRACTICE EXAM 9: EQAO GRADE 3 MATH SIMULATION (40 QUESTIONS)

STAGE 1 — Questions 1–10

1. An aquarium had 463 fish in its main tank. The staff added 285 more fish from a new shipment. How many fish are in the main tank now?

A. 178

B. 748

C. 648

D. 758

2. What is the value of the digit 9 in the number 195?

A. 90

B. 9

C. 900

D. 9,000

3. Round the number 638 to the nearest hundred.

A. 700

B. 630

C. 640

D. 600

4. A candy store had 800 lollipops. The store sold 437 lollipops during a weekend sale. How many lollipops are left?

A. 1,237

B. 437

C. 363

D. 473

5. A pizza is cut into 8 equal slices. Tomas ate 5 slices. What fraction of the pizza did Tomas eat?

A. 5/8

B. 8/5

C. 3/8

D. 5/3

6. Lily buys a hot chocolate for $2.65 and a cookie for $1.45. She pays with a $5 bill. How much change should Lily receive?

A. $1.10

B. $4.10

C. $1.45

D. $0.90

7. Skip count by 4s starting from 12. What is the fifth number you say?

A. 24

B. 28

C. 32

D. 20

8. Which expression has the same value as 5 × 7?

A. 5 + 7

B. 7 + 7 + 7 + 7 + 7

C. 57

D. 5 × 5 + 2

9. A bakery makes 36 muffins and packages them into boxes of 6. How many boxes does the bakery make?

A. 6 boxes

B. 30 boxes

C. 42 boxes

D. 36 boxes

10. Which fraction is equivalent to 1/2?

A. 1/4

B. 2/3

C. 5/10

D. 1/10

STAGE 2 — Questions 11–20

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

905 ___ 950

A. >

B. =

C.

D. ≠ and >

12. Yusuf has 3 toonies, 2 loonies, 1 quarter, and 4 nickels. How much money does Yusuf have in total?

A. $8.20

B. $8.45

C. $8.65

D. $9.45

13. What is 100 ÷ 10?

A. 90

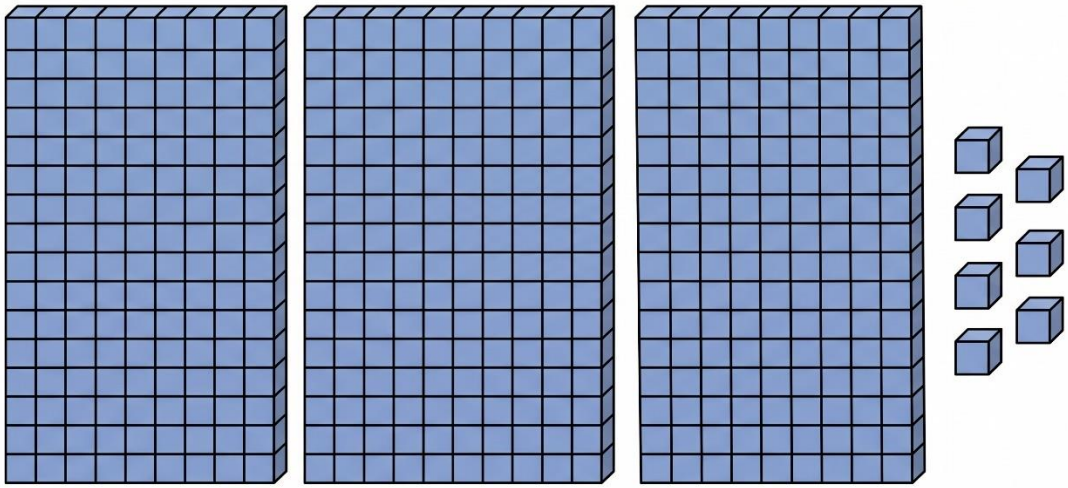
B. 1,000

C. 110

D. 10

14. What number is shown by the base-ten blocks below?

Figure PQ-1



A. 307

B. 370

C. 730

D. 37

15. Find the missing number in this pattern: 90, 81, ___ , 63, 54, 45.

A. 70

B. 72

C. 75

D. 78

16. What is the rule for this pattern: 5, 10, 20, 40, 80 ?

A. Start at 5 and add 5 each time

B. Start at 5 and add 10 each time

C. Start at 5 and double each time

D. Start at 5 and subtract 5 each time

17. Solve for n in the equation: $n - 14 = 36$.

A. 22

B. 36

C. 14

D. 50

18. A robot starts at 30. It follows this code:

REPEAT 5 TIMES: Add 4.

What is the final value?

A. 50

B. 34

C. 20

D. 60

19. Which equation is TRUE?

A. $6 + 6 = 6 \times 6$

B. $18 \div 3 = 18 - 3$

C. $7 \times 3 = 14 + 7$

D. $25 - 10 = 5 \times 5$

20. A swimming pool needs 600 litres of water to fill. So far, 425 litres have been added. How many more litres are needed to fill the pool?

A. 1,025 litres

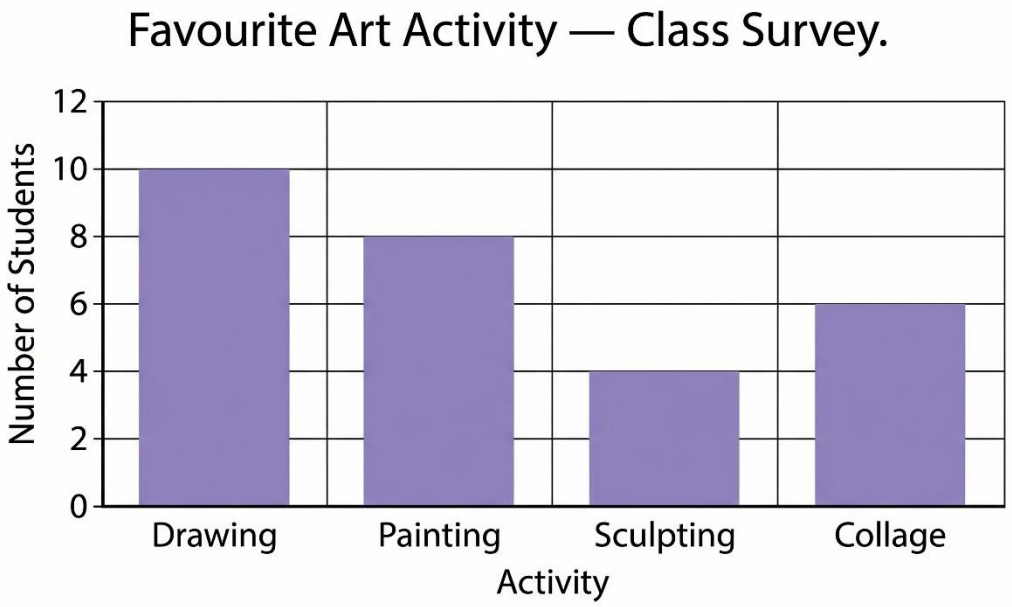
B. 175 litres

C. 275 litres

D. 75 litres

STAGE 3 — Questions 21–30

21. Look at the bar graph below. How many students chose drawing as their favourite art activity?



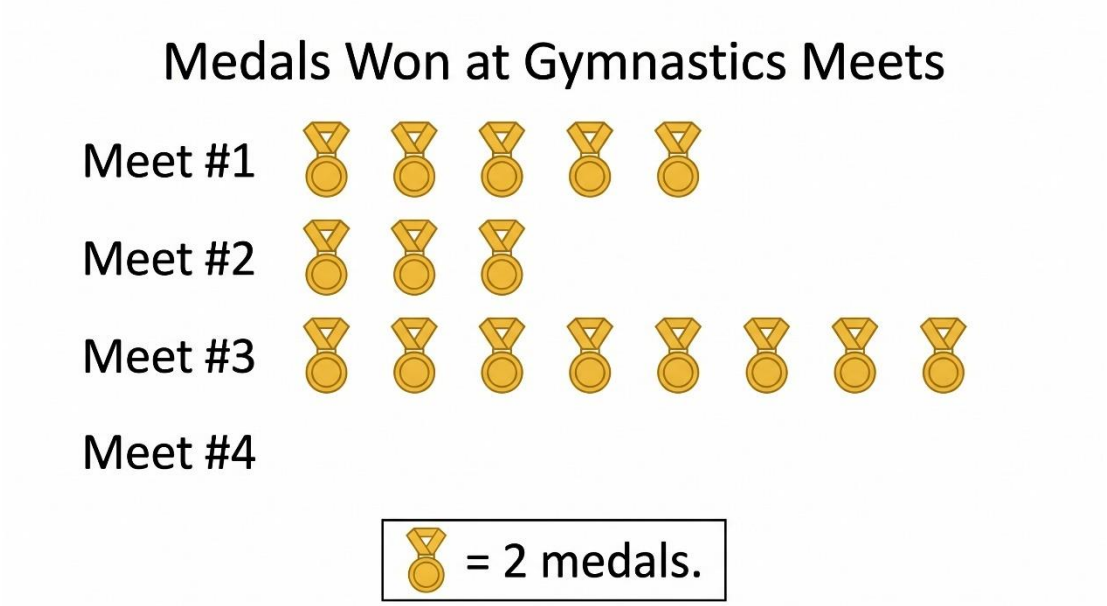
A. 8 students

B. 6 students

C. 4 students

D. 10 students

22. Look at the pictograph below. Each medal icon stands for 2 medals won. How many medals did the gymnastics team win at Meet #3?



A. 14 medals

B. 7 medals

C. 10 medals

D. 18 medals

23. Find the mean of this data set: 14, 10, 8, 12, 6.

A. 12

B. 8

C. 10

D. 14

24. Find the mode of this data set: 4, 9, 4, 12, 9, 4, 7, 4.

A. 9

B. 4

C. 7

D. 12

25. A spinner has 4 equal sections — all 4 sections are blue. Landing on a colour other than blue is:

A. Likely

B. Certain

C. Equally likely

D. Impossible

26. Look at the frequency table below. How many students were surveyed in total?

Favourite Colour — Class Survey

Colour	Number of Students
Blue	9
Red	11
Green	7
Yellow	4
Purple	6

A. 37 students

B. 40 students

C. 30 students

D. 35 students

27. A bag contains 8 black marbles and 12 white marbles. Drawing a white marble is:

A. Unlikely

B. Equally likely to drawing black

C. Likely

D. Certain

28. Look at the bar graph in Figure PQ-2 again. How many students chose either drawing or painting as their favourite art activity?

A. 10 students

B. 14 students

C. 22 students

D. 18 students

29. The table below shows the daily high temperature (in °C) for one week in May. Which day had the highest temperature?

Daily High Temperature — Week of May 12.

Day,	Temperature (°C)
Monday	18
Tuesday	21
Wednesday	24
Thursday	19
Friday	23

A. Tuesday

B. Wednesday

C. Friday

D. Monday

30. A meteorologist predicts a 50% chance of rain tomorrow. Rain tomorrow is:

A. Equally likely as no rain

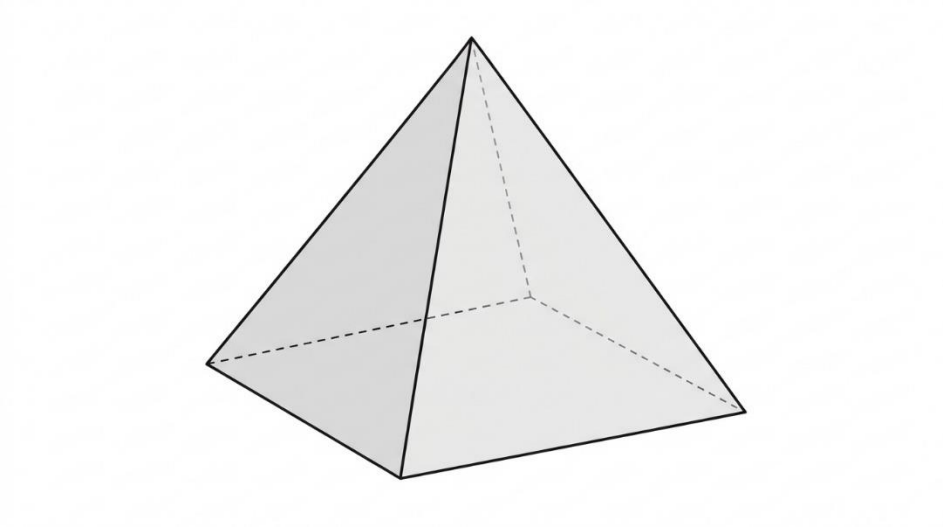
B. Certain

C. Unlikely

D. Impossible

STAGE 4 — Questions 31–40

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



A. 5 edges

B. 8 edges

C. 12 edges

D. 6 edges

32. Which 3D shape has 6 faces, all of which are rectangles, but not all the same size?

A. Cube

B. Triangular prism

C. Square pyramid

D. Rectangular prism

33. A rectangle has a length of 15 cm and a width of 8 cm. What is its perimeter?

A. 46 cm

B. 23 cm

C. 120 cm

D. 30 cm

34. A character is facing east. The character makes one quarter-turn to the left, then a half-turn. Which direction is the character facing now?

A. East

B. North

C. South

D. West

35. Which unit is best for measuring the capacity of a bathtub?

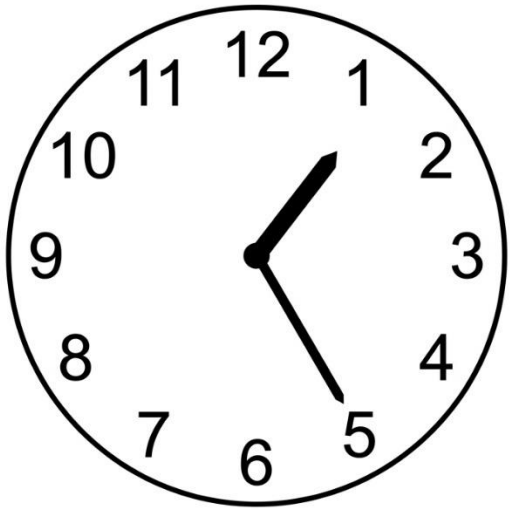
A. Millilitres

B. Litres

C. Grams

D. Kilometres

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



A. 5:05

B. 1:30

C. 2:25

D. 1:25

37. A piano lesson starts at 3:45 PM and ends at 4:30 PM. How long is the piano lesson?

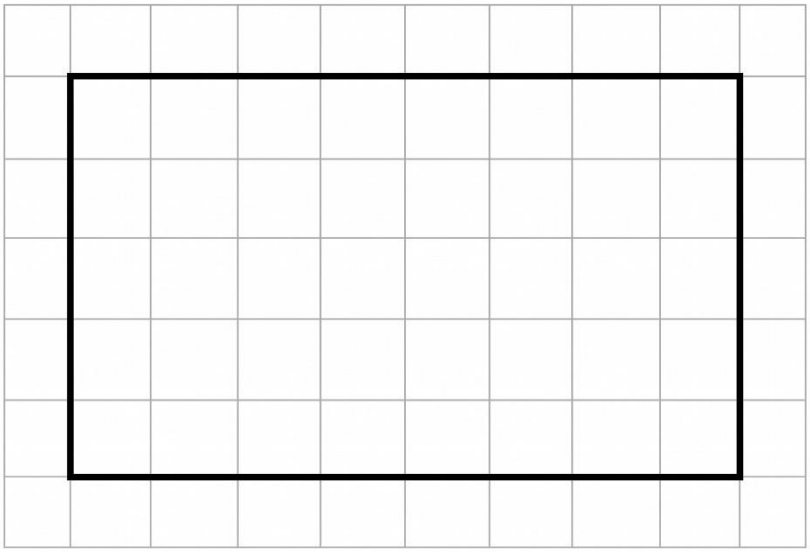
A. 45 minutes

B. 1 hour 15 minutes

C. 30 minutes

D. 1 hour

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



A. 13 square centimetres

B. 26 square centimetres

C. 40 square centimetres

D. 45 square centimetres

39. A garden hose can fill a 5-litre bucket in one minute. How many millilitres is 5 litres?

A. 50 mL

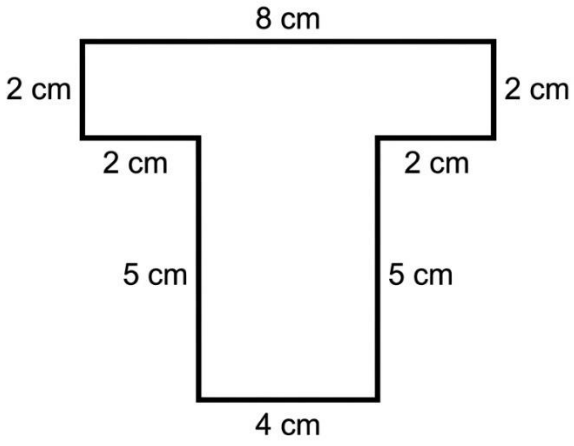
B. 500 mL

C. 50,000 mL

D. 5,000 mL

40. Look at the irregular shape below. What is its perimeter?

Figure PQ-9: Clean educational illustration



A. 24 cm

B. 30 cm

C. 26 cm

D. 36 cm

Practice Exam 9: Answer Key and Explanations

1. B — 748. Add using the standard algorithm: 463 + 285 = 748. Ones: 3 + 5 = 8. Tens: 6 + 8 = 14 (write 4, carry 1). Hundreds: 1 + 4 + 2 = 7. Estimation check: 460 + 290 = 750, close to 748. This tests addition with regrouping in the tens place (curriculum expectation B2.5).

2. A — 90. The digit 9 sits in the tens place of the number 195. Its value is 9 × 10 = 90. Always distinguish between the digit (9) and the digit's value (90) — same digit, different amount depending on position. This is a core place-value concept from Chapter 1.2.

3. D — 600. To round 638 to the nearest hundred, look at the digit in the tens place: 3. Since 3 is less than 5, round down. The number 638 rounds down to 600. The midpoint between 600 and 700 is 650, and 638 is before that midpoint — confirming the rounding decision (Chapter 1.5).

4. C — 363. Subtract using the standard algorithm: 800 − 437 = 363. Ones: 0 < 7, regroup. Tens is also 0, so first regroup from hundreds. 8 becomes 7 hundreds, 0 becomes 10 tens, then 10 tens becomes 9 tens

and ones becomes 10. Now: 10 − 7 = 3, 9 − 3 = 6, 7 − 4 = 3. Regrouping across zeros is critical (Chapter 3.3).

5. A — 5/8. The pizza has 8 equal slices (denominator = 8) and Tomas ate 5 of them (numerator = 5). The fraction representing what he ate is 5/8. Always identify the total parts (denominator) and the counted parts (numerator) carefully (Chapter 2.1).

6. D — $0.90. First find the total cost: $2.65 + $1.45 = $4.10. Then find the change: $5.00 − $4.10 = $0.90 (90 cents). Multi-item transactions always require adding the prices first, then subtracting from the payment (Chapter 5.4). Estimation check: $5 − $4 = $1, close to $0.90.

7. C — 32. Skip count by 4s starting from 12: 12 is the start, then 16 (1st), 20 (2nd), 24 (3rd), 28 (4th), 32 (5th). The fifth number said after 12 is 32. The starting number is not counted; only the numbers that follow (Chapter 1.6).

8. B — 7 + 7 + 7 + 7 + 7. Multiplication 5 × 7 means "five groups of seven," which equals 7 + 7 + 7 + 7 + 7 = 35. The repeated-addition form is the exact equivalent of multiplication. The other options (5 + 7 = 12; 57 as a number; 5 × 5 + 2 = 27) all produce different values (Chapter 4.1).

9. A — 6 boxes. Divide the total muffins by the box size: 36 ÷ 6 = 6 boxes. This is grouping division — separating 36 muffins into boxes of 6 produces 6 boxes. The related multiplication: 6 × 6 = 36 confirms the answer (Chapter 4.4).

10. C — 5/10. The halves-and-tenths relationship: 1/2 = 5/10. Splitting one half into 5 smaller equal pieces produces tenths, and 5 of those tenths equal one half. Verify: 5 ÷ 10 = 0.5 = 1/2. The other options (1/4, 2/3, 1/10) all represent different amounts (Chapter 2.3).

11. C — <. Compare 905 and 950 starting from the hundreds place: 9 = 9 (tied). Move to the tens place: 0 < 5, so 905 is less than 950. 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. B — $8.45. Add Yusuf's money: 3 toonies = $6.00; 2 loonies = $2.00; 1 quarter = $0.25; 4 nickels = $0.20. Total: $6.00 + $2.00 + $0.25 + $0.20 = $8.45. Sort coins from largest to smallest denomination before adding to reduce counting errors (Chapter 5.2).

13. D — 10. Division 100 ÷ 10 asks "10 times what equals 100?" From the 10 times table: 10 × 10 = 100, so 100 ÷ 10 = 10. The 10 times table shortcut works in reverse for division — removing a trailing zero from the dividend gives the quotient (Chapter 4.2).

14. A — 307. Count the base-ten blocks: 3 hundred-flats = 300; 0 ten-rods = 0; 7 unit-cubes = 7. Total: 300 + 0 + 7 = 307. The zero in the tens place is essential — it acts as a placeholder showing there are no tens. Without it, the number would incorrectly read as 37 (Chapter 1.2).

15. B — 72. The pattern decreases by 9 each step: 90, 81, 72, 63, 54, 45. To verify: 81 − 72 = 9, 72 − 63 = 9, all consistent. The missing term between 81 and 63 is 81 − 9 = 72. This is a shrinking pattern with constant negative growth (Chapter 6.2).

16. C — Start at 5 and double each time. The pattern values are 5, 10, 20, 40, 80 — each term is twice the previous (5 × 2 = 10, 10 × 2 = 20, etc.). This is a multiplicative pattern, not an additive one. The differences grow (5, 10, 20, 40), so the rule is "double" rather than "add a fixed amount" (Chapter 6.3).

17. D — 50. Solve n − 14 = 36 using the inverse operation: n = 36 + 14 = 50. Check by substituting: 50 − 14 = 36 ✓. The inverse of subtraction is addition. Always verify the answer by plugging it back into the original equation (Chapter 7.4).

18. A — 50. Trace the code: the loop adds 4 five times. Step 1: 30 + 4 = 34. Step 2: 34 + 4 = 38. Step 3: 38 + 4 = 42. Step 4: 42 + 4 = 46. Step 5: 46 + 4 = 50. Or compute directly: 5 × 4 = 20 added to 30 gives 50 (Chapter 8.2).

19. C — 7 × 3 = 14 + 7. Compute both sides: 7 × 3 = 21 and 14 + 7 = 21. Both sides equal 21, so the equation is TRUE. The other options are false: 6 + 6 = 12 ≠ 36; 18 ÷ 3 = 6 ≠ 15; 25 − 10 = 15 ≠ 25. The equals sign requires both sides to have the same value (Chapter 7.2).

20. B — 175 litres. Subtract the litres already added from the total: 600 − 425 = 175 litres. Ones: 0 < 5, regroup. 10 − 5 = 5. Tens: 9 − 2 = 7. Hundreds: 5 − 4 = 1. The pool needs 175 more litres of water. Estimation check: 600 − 425 ≈ 175 ✓ (Chapter 3.3).

21. D — 10 students. Read the bar graph: the bar above "Drawing" reaches the value 10 on the y-axis scale. Always trace from the top of the bar horizontally to the y-axis to read precise values rather than estimating by eye (Chapter 9.5).

22. A — 14 medals. Read the pictograph: Meet #3 has 7 medal icons. The key states each icon = 2 medals, so multiply: 7 × 2 = 14 medals. Many-to-one correspondence means each picture represents more than one item — always check the key (Chapter 9.4).

23. C — 10. Add all values: 14 + 10 + 8 + 12 + 6 = 50. Divide by the number of values: 50 ÷ 5 = 10. The mean is 10, representing the typical value in the data set. Always count the number of values carefully before dividing the sum (Chapter 10.1).

24. B — 4. Count how many times each value appears: 4 appears 4 times; 9 appears 2 times; 12 and 7 each appear once. The value that appears most often is 4. The mode is the most frequent value, not the largest — careful counting determines the mode (Chapter 10.2).

25. D — Impossible. The spinner has 4 equal sections, and all 4 are blue. There are no other colours on the spinner, so landing on a non-blue colour cannot happen — it is impossible. "Impossible" describes events with zero chance of occurring (Chapter 10.4).

26. A — 37 students. Add the frequencies for all four sports: 13 + 8 + 11 + 5 = 37 students. The total represents every student surveyed. Always verify by adding all rows in the frequency column carefully (Chapter 9.3).

27. C — Likely. The bag contains 12 white marbles out of 20 total (8 black + 12 white). More than half the marbles are white, so drawing white is likely (probable but not certain). The other options don't fit:

"certain" would require all white; "impossible" would require zero white; "equally likely" would require 10 of each (Chapter 10.4).

28. D — 18 students. Read the bar graph: Drawing = 10 students, Painting = 8 students. Add: 10 + 8 = 18 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. B — Wednesday. Read the temperature column values: Monday = 18, Tuesday = 21, Wednesday = 24, Thursday = 19, Friday = 23. The highest value is 24, which is Wednesday. The day with the warmest temperature is the one with the largest reading (Chapter 9.3).

30. A — Equally likely as no rain. A 50% chance means rain has the same probability as no rain — both outcomes have an equal chance of occurring. On the Grade 3 probability spectrum, 50% is described as "equally likely." The other options describe different probability levels (Chapter 10.4).

31. B — 8 edges. A square pyramid has 8 edges total: 4 around the square base + 4 edges that rise from each base corner to the apex. From the Chapter 11.2 reference table: square pyramid = 5 faces, 8 edges, 5 vertices.

32. D — Rectangular prism. A rectangular prism has 6 rectangular faces — typically 3 pairs of identical rectangles (front-back, top-bottom, left-right) of three different sizes. A cube also has 6 faces but they are all squares of the same size. A triangular prism has triangular and rectangular faces (Chapter 11.1).

33. A — 46 cm. Perimeter of a rectangle = 2 × (length + width) = 2 × (15 + 8) = 2 × 23 = 46 cm. Or add all four sides: 15 + 8 + 15 + 8 = 46 cm. The shortcut formula is faster than adding all sides individually (Chapter 13.2).

34. C — South. A quarter-turn left from east goes to north (east → north counter-clockwise). Then a half-turn from north reverses to south. Final direction: south. Two-step turn sequences require tracking the facing direction after each individual turn (Chapter 12.3).

35. B — Litres. A bathtub holds roughly 150–200 litres of water — firmly in the litre range. Millilitres would produce unwieldy numbers (150,000 mL); grams measure mass, not capacity; kilometres measure long distances. Only litres is appropriate for the capacity of a bathtub (Chapter 13.4).

36. D — 1:25. The hour hand sits between the 1 and the 2, closer to the 1 — so the hour is 1 (the smaller of the two numbers it sits between). The minute hand points to the 5, which equals 25 minutes past the hour (5 × 5 = 25). The time is 1:25 (Chapter 14.1).

37. A — 45 minutes. From 3:45 PM to 4:00 PM is 15 minutes. From 4:00 PM to 4:30 PM is 30 minutes. Total elapsed time: 15 + 30 = 45 minutes. Break elapsed-time calculations into the portion before the hour boundary plus the portion after (Chapter 14.3).

38. C — 40 square centimetres. The rectangle is 8 cm wide and 5 cm tall. Area = length × width = 8 × 5 = 40 square centimetres. Or count the unit squares: 8 columns × 5 rows = 40 squares. Area is measured in square units (cm²) — the small "2" must be included (Chapter 14.5).

39. D — 5,000 mL. The relationship: 1 litre = 1,000 millilitres. So 5 litres = 5 × 1,000 = 5,000 mL. The other options (50, 500, 50,000) represent different amounts. Always apply the conversion factor 1,000 when moving between litres and millilitres (Chapter 13.4).

40. B — 30 cm. Add all eight side lengths of the T-shape: 8 + 2 + 2 + 5 + 4 + 5 + 2 + 2 = 30 cm. Perimeter is the total distance around the outside of a shape, found by adding every side. For irregular shapes, no shortcut formula applies — always add side by side (Chapter 13.2).