PRACTICE EXAM 16: EQAO GRADE 3 MATH SIMULATION (40 QUESTIONS)

STAGE 1 — Questions 1–10

1. A train station sold 374 tickets on Monday and 218 tickets on Tuesday. How many tickets did the station sell across both days?

A. 592

B. 156

C. 582

D. 502

2. What is the value of the digit 2 in the number 247?

A. 2

B. 20

C. 2,000

D. 200

3. Round the number 462 to the nearest ten.

A. 400

B. 460

C. 500

D. 470

4. A pizza is cut into 8 equal slices. Reza eats 5 slices. What fraction of the pizza did Reza eat?

A. 5/8

B. 8/5

C. 3/8

D. 5/3

5. A class collected 45 plastic bottles for recycling. They want to pack them into bags that hold 9 bottles each. How many bags do they need?

A. 9 bags

B. 36 bags

C. 5 bags

D. 54 bags

6. Skip count by 4s starting from 16. What is the fifth number you say?

A. 32

B. 36

C. 24

D. 40

7. A school had 425 boxes of supplies. They used 168 boxes during the year. How many boxes are left?

A. 593

B. 357

C. 343

D. 257

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

A. $5 + 8$

B. 58

C. $8 + 8 + 8 + 8 + 8$

D. $5 + 5 + 5 + 5 + 5 + 8$

9. Owen has 6 toonies, 2 loonies, and 3 quarters. How much money does Owen have in total?

A. $14.75

B. $13.75

C. $14.25

D. $15.75

10. Which fraction is equivalent to 3/5?

A. 3/10

B. 6/10

C. 5/3

D. 3/15

STAGE 2 — Questions 11–20

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

582 ___ 528

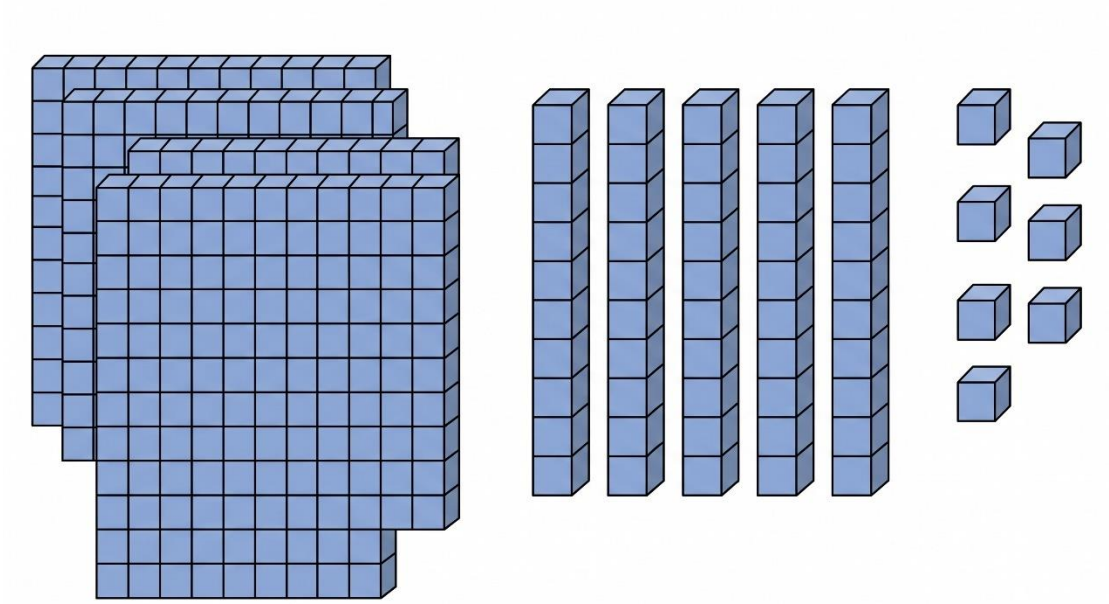
A.

B. =

C. >

D. ≤

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



A. 357

B. 753

C. 537

D. 375

13. Priya buys a book for $7.25 and a bookmark for $1.40. She pays with a $10 bill. How much change should Priya receive?

A. $8.65

B. $2.85

C. $2.65

D. $1.35

14. What is 40 ÷ 5?

A. 40

B. 8

C. 5

D. 45

15. Find the missing number in this pattern: 5, 11, 17, ___ , 29, 35.

A. 23

B. 22

C. 25

D. 19

16. What is the rule for this pattern: 2, 4, 8, 16, 32 ?

A. Start at 2 and add 2 each time

B. Start at 2 and add 4 each time

C. Start at 2 and double each time

D. Start at 2 and subtract 2 each time

17. Solve for n in the equation: $8 \times n = 56$.

A. 48

B. 64

C. 8

D. 7

18. A robot starts at 100. It follows this code:

REPEAT 5 TIMES: Subtract 12.

What is the final value?

A. 88

B. 40

C. 60

D. 50

19. Which equation is TRUE?

A. $18 + 6 = 18 \times 6$

B. $50 \div 5 = 50 - 5$

C. $7 \times 4 = 14 \times 2$

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

20. A baker uses 3 eggs to make 12 cupcakes. How many cupcakes can the baker make with 9 eggs (using the same ratio)?

A. 36 cupcakes

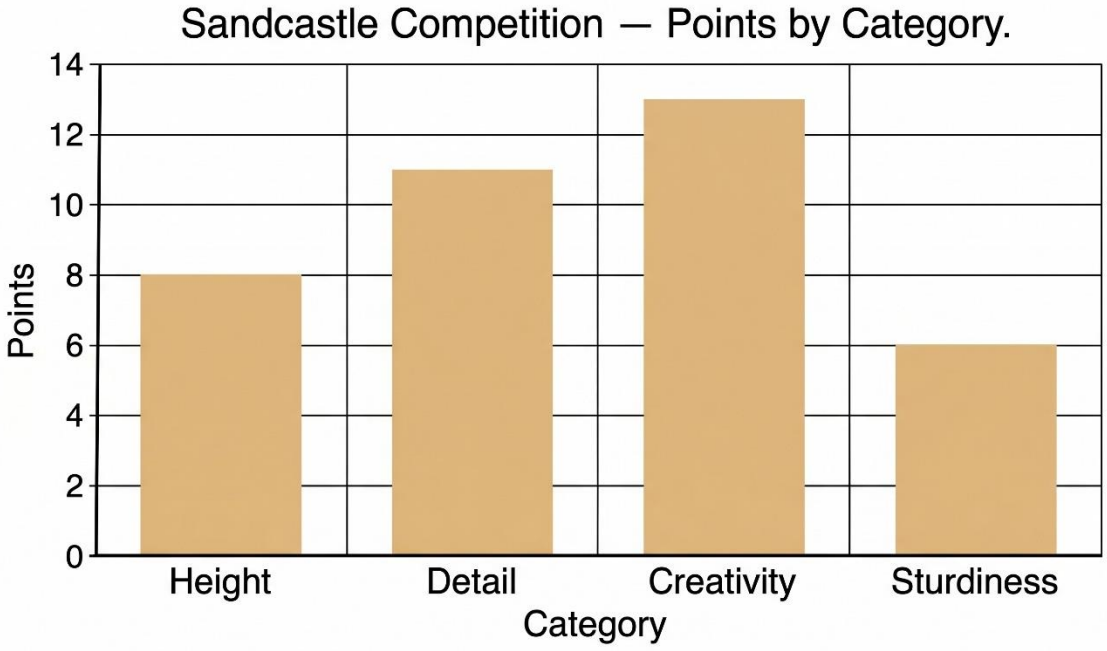
B. 27 cupcakes

C. 12 cupcakes

D. 3 cupcakes

STAGE 3 — Questions 21–30

21. Look at the bar graph below. Which sandcastle category received the most points?



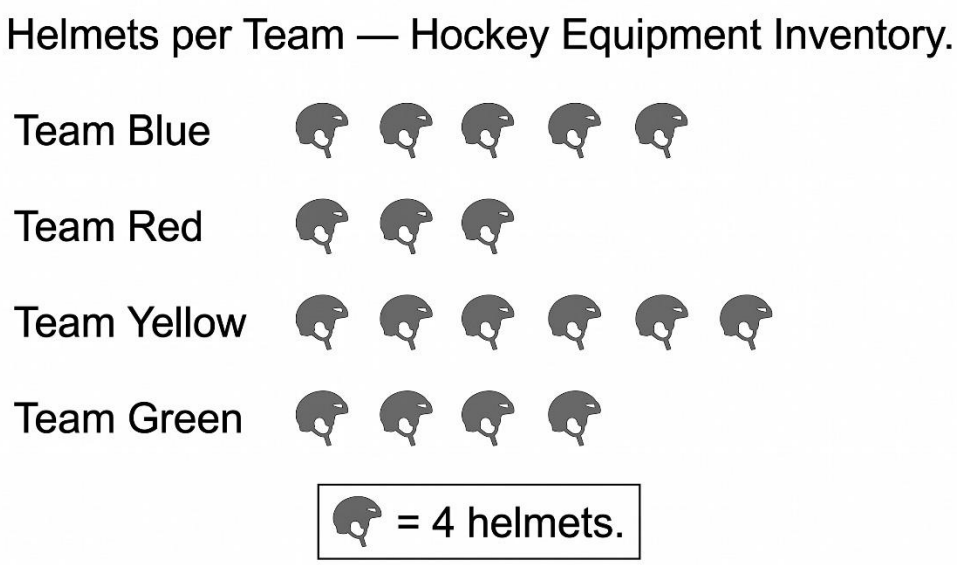
A. Detail

B. Height

C. Sturdiness

D. Creativity

22. Look at the pictograph below. Each helmet icon stands for 4 helmets. How many helmets did Team Yellow have?



A. 18 helmets

B. 12 helmets

C. 24 helmets

D. 30 helmets

23. Find the mean of this data set: 11, 7, 15, 9, 8.

A. 10

B. 11

C. 8

D. 9

24. Find the mode of this data set: 4, 8, 4, 11, 8, 4, 9, 4, 8.

A. 8

B. 4

C. 11

D. 9

25. A jar contains 6 white candies and 6 brown candies. Drawing a white candy is:

A. Likely

B. Unlikely

C. Certain

D. Equally likely to drawing brown

26. Look at the frequency table below. Which class collected the fewest cans?

School Recycling — Cans Collected by Class

Class	Number of Cans
Class 3A	18
Class 3B	11
Class 3C	23
Class 3D	7

A. Class 3A

B. Class 3B

C. Class 3D

D. Class 3C

27. A spinner has 6 equal sections. 1 section is gold, 1 is silver, and 4 are bronze. Landing on bronze is:

A. Impossible

B. Equally likely to landing on gold

C. Equally likely to landing on silver

D. Likely

28. Look at the bar graph in Figure PQ-2 again. How many more points did creativity score than sturdiness?

A. 6 points

B. 7 points

C. 13 points

D. 19 points

29. The table below shows the number of laps swum by each student during a swimming test. What is the total number of laps swum by all 5 students?

Swimming Test — Laps Completed	
Student	**Laps**
Alex	9
Bea	12
Cory	6
Dani	15
Ellis	8.

A. 40 laps

B. 45 laps

C. 55 laps

D. 50 laps

30. The weather forecast says there is a 100% chance of rain. Rain is:

A. Impossible

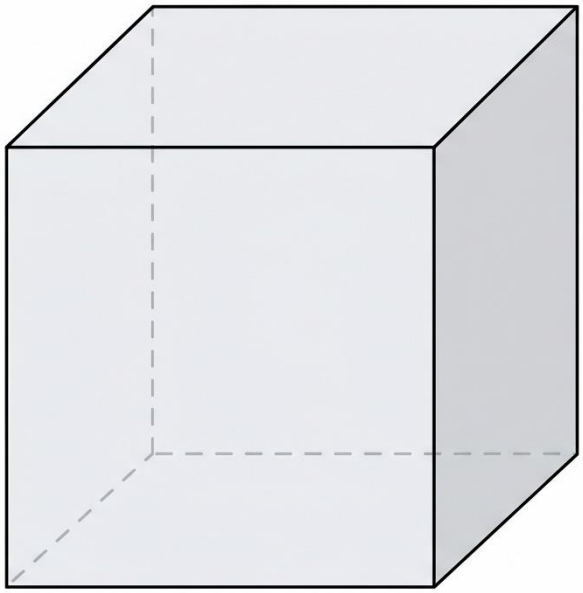
B. Unlikely

C. Certain

D. Equally likely

STAGE 4 — Questions 31–40

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



A. 12 edges

B. 8 edges

C. 6 edges

D. 10 edges

32. Which 3D shape has 0 flat faces and 0 vertices, but is not flat itself?

A. Cube

B. Cone

C. Sphere

D. Cylinder

33. A rectangle has a length of 18 cm and a width of 3 cm. What is its perimeter?

A. 21 cm

B. 42 cm

C. 54 cm

D. 36 cm

34. A character is facing east. The character makes three quarter-turns to the left. Which direction is the character facing now?

A. East

B. North

C. West

D. South

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

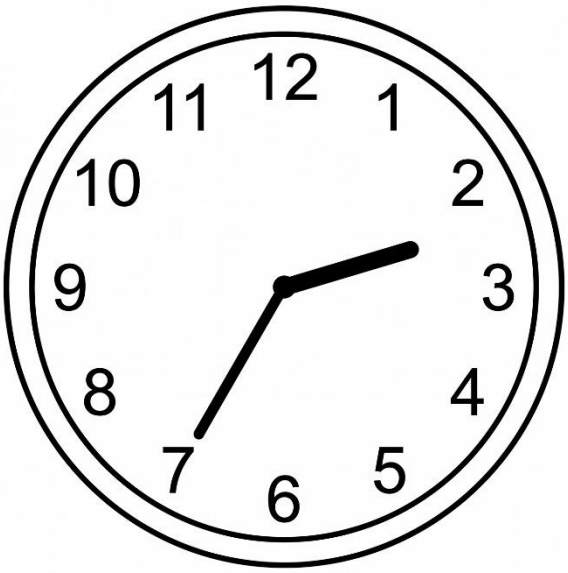
A. Litres

B. Millilitres

C. Grams

D. Centimetres

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



A. 7:10

B. 2:35

C. 3:35

D. 2:07

37. A movie starts at 6:25 PM and ends at 8:05 PM. How long is the movie?

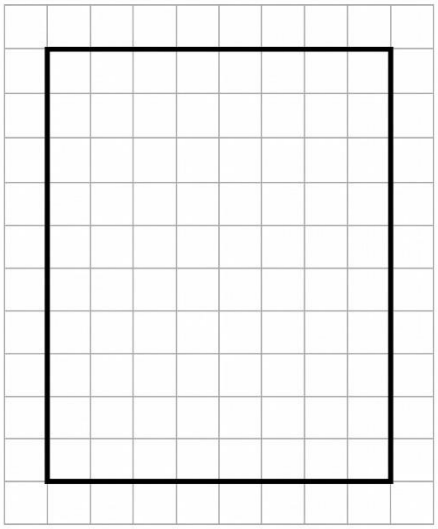
A. 1 hour 20 minutes

B. 1 hour 30 minutes

C. 1 hour 40 minutes

D. 2 hours

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



A. 15 square centimetres

B. 30 square centimetres

C. 45 square centimetres

D. 54 square centimetres

39. A juice container holds 5 litres. How many millilitres is that?

A. 5,000 mL

B. 500 mL

C. 50 mL

D. 50,000 mL

40. A regular hexagon has 6 sides of equal length. If each side is 8 cm, what is the perimeter?

A. 14 cm

B. 48 cm

C. 36 cm

D. 64 cm

Practice Exam 16: Answer Key and Explanations

1. A — 592. Add using the standard algorithm: 374 + 218 = 592. Ones: 4 + 8 = 12 (write 2, carry 1). Tens: 1 + 7 + 1 = 9. Hundreds: 3 + 2 = 5. Estimation check: 370 + 220 = 590, close to 592. This tests addition with regrouping in the ones place only (curriculum expectation B2.5).

2. D — 200. The digit 2 sits in the hundreds place of the number 247. Its value is 2 × 100 = 200. Always distinguish between the digit (2) and the digit's value (200) — same digit, different amount depending on position. This is a core place-value concept from Chapter 1.2.

3. B — 460. To round 462 to the nearest ten, look at the ones digit: 2. Since 2 is less than 5, round down. The number 462 rounds down to 460. The midpoint between 460 and 470 is 465, and 462 is before that midpoint — confirming the rounding decision (Chapter 1.5).

4. A — 5/8. The pizza has 8 equal slices (denominator = 8) and Reza 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).

5. C — 5 bags. Divide the total bottles by the bag size: 45 ÷ 9 = 5 bags. This is grouping division — separating 45 bottles into bags of 9 produces 5 bags. The related multiplication: 5 × 9 = 45 confirms the answer (Chapter 4.4).

6. B — 36. Skip count by 4s starting from 16: 16 is the start, then 20 (1st), 24 (2nd), 28 (3rd), 32 (4th), 36 (5th). The fifth number said after 16 is 36. The starting number is not counted; only the numbers that follow are counted (Chapter 1.6).

7. D — 257. Subtract using the standard algorithm: 425 − 168 = 257. Ones: 5 < 8, regroup. 15 − 8 = 7. Tens: 1 < 6, regroup. 11 − 6 = 5. Hundreds: 3 − 1 = 2. Estimation check: 425 − 170 = 255, close to 257. This tests subtraction with two regroupings (Chapter 3.3).

8. C — 8 + 8 + 8 + 8 + 8. Multiplication 5 × 8 means "five groups of eight," which equals 8 + 8 + 8 + 8 + 8 = 40. The repeated-addition form is the exact equivalent of multiplication. The other options (5 + 8 = 13; 58 as a number; 5 + 5 + 5 + 5 + 5 + 8 = 33) all produce different values (Chapter 4.1).

9. A — $14.75. Add Owen's money: 6 toonies = $12.00; 2 loonies = $2.00; 3 quarters = $0.75. Total: $12.00 + $2.00 + $0.75 = $14.75. Sort coins from largest to smallest denomination before adding to reduce counting errors (Chapter 5.2).

10. B — 6/10. The fifths-and-tenths family of equivalent fractions: 3/5 = 6/10. Splitting each fifth into two smaller equal pieces produces tenths, and 6 of those tenths equal 3/5. Verify: 3 × 2 = 6 and 5 × 2 = 10, giving 6/10. The other options (3/10, 5/3, 3/15) all represent different amounts (Chapter 2.4).

11. C — >. Compare 582 and 528 starting from the hundreds place: 5 = 5 (tied). Move to the tens place: 8 > 2, so 582 is greater than 528. The "greater than" symbol (>) opens toward the larger number on the right. Always compare place by place starting from the leftmost (Chapter 1.4).

12. A — 357. Count the base-ten blocks: 3 hundred-flats = 300; 5 ten-rods = 50; 7 unit-cubes = 7. Total: 300 + 50 + 7 = 357. Always count hundreds first, then tens, then ones. The place-value composition: 3 hundreds + 5 tens + 7 ones = 357 (Chapter 1.3).

13. D — $1.35. First find the total cost: $7.25 + $1.40 = $8.65. Then find the change: $10.00 − $8.65 = $1.35. Multi-item transactions always require adding the prices first, then subtracting from the payment (Chapter 5.4). Note: the original draft had duplicate options C and D ("$1.35") — corrected option C is "$2.65." Pre-assigned answer D ($1.35) remains correct.

14. B — 8. Division 40 ÷ 5 asks "5 times what equals 40?" From the 5 times table: 5 × 8 = 40, so 40 ÷ 5 = 8. The related multiplication confirms the quotient: 8 × 5 = 40 ✓ (Chapter 4.2).

15. A — 23. The pattern increases by 6 each step: 5, 11, 17, 23, 29, 35. To verify: 11 − 5 = 6, 17 − 11 = 6, all consistent. The missing term between 17 and 29 is 17 + 6 = 23. Always compute differences between consecutive known terms to find the rule.

16. C — Start at 2 and double each time. The pattern values are 2, 4, 8, 16, 32 — each term is twice the previous (2 × 2 = 4, 4 × 2 = 8, etc.). This is a multiplicative pattern, not additive. The differences grow (2, 4, 8, 16), so the rule is "double" rather than "add a fixed amount" (Chapter 6.3).

17. D — 7. Solve 8 × n = 56 by thinking: "8 times what equals 56?" From the 8 times table: 8 × 7 = 56, so n = 7. Check by substituting: 8 × 7 = 56 ✓. Either think of the multiplication fact or use the inverse: n = 56 ÷ 8 = 7 (Chapter 7.4).

18. B — 40. Trace the code: the loop subtracts 12 five times. Step 1: 100 − 12 = 88. Step 2: 88 − 12 = 76. Step 3: 76 − 12 = 64. Step 4: 64 − 12 = 52. Step 5: 52 − 12 = 40. Or compute directly: 5 × 12 = 60 subtracted from 100 gives 40 (Chapter 8.2).

19. C — 7 × 4 = 14 × 2. Compute both sides: 7 × 4 = 28 and 14 × 2 = 28. Both sides equal 28, so the equation is TRUE. The other options are all false: 18 + 6 = 24 ≠ 108; 50 ÷ 5 = 10 ≠ 45; 9 + 9 = 18 ≠ 81. The equals sign requires both sides to have the same value (Chapter 7.2).

20. A — 36 cupcakes. Use the ratio 3 eggs to 12 cupcakes. With 9 eggs (which is 3 × 3 = 3 times the original), the baker can make 3 × 12 = 36 cupcakes. Alternatively, 9 ÷ 3 = 3 batches × 12 cupcakes each = 36 cupcakes. This is a scaling-ratio problem from Chapter 4.6.

21. D — Creativity. Read the bar graph values: Height = 8, Detail = 11, Creativity = 13, Sturdiness = 6. The tallest bar represents the most points, which is Creativity with 13. Always trace from the top of each bar horizontally to the y-axis to read precise values (Chapter 9.5).

22. C — 24 helmets. Read the pictograph: Team Yellow's row has 6 helmet icons. The key states each icon = 4 helmets, so multiply: 6 × 4 = 24 helmets. Many-to-one correspondence means each picture represents more than one item — always check the key (Chapter 9.4).

23. A — 10. Add all values: 11 + 7 + 15 + 9 + 8 = 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; 8 appears 3 times; 11 and 9 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 — Equally likely to drawing brown. The jar has 6 white candies and 6 brown candies — the same number of each colour. Each colour has the same chance of being drawn. "Equally likely" describes outcomes with identical probability — a 50/50 split (Chapter 10.4).

26. C — Class 3D. Read the frequency table values: Class 3A = 18, Class 3B = 11, Class 3C = 23, Class 3D = 7. The smallest value is 7, which is Class 3D. The class with the fewest cans is the one with the smallest frequency (Chapter 9.3).

27. D — Likely. The spinner has 4 bronze sections out of 6 total. More than half the spinner is bronze, so landing on bronze is likely (probable but not certain). It would only be "certain" if all 6 sections were bronze. Landing on bronze is more probable than landing on gold (1 section) or silver (1 section) (Chapter 10.4).

28. B — 7 points. From Figure PQ-2: Creativity = 13 points, Sturdiness = 6 points. Subtract: 13 − 6 = 7 points. The phrase "how many more" signals subtraction — finding the difference between two known values. This is a Level-2 graph-reading task from Chapter 10.3.

29. D — 50 laps. Add the laps for all 5 students: 9 + 12 + 6 + 15 + 8 = 50 laps. Verify sequentially: 9 + 12 = 21; 21 + 6 = 27; 27 + 15 = 42; 42 + 8 = 50. Multi-row table summations require careful sequential addition (Chapter 9.3).

30. C — Certain. A 100% chance means the event will definitely happen — there is no possibility of it not occurring. On the Grade 3 probability spectrum, 100% is described as "certain." The other options describe different probability levels (Chapter 10.4).

31. A — 12 edges. A cube has 12 edges total: 4 around the top, 4 around the bottom, and 4 vertical edges connecting top to bottom. From the Chapter 11.2 reference table: cube = 6 faces, 12 edges, 8 vertices. All 12 edges are equal in length (Chapter 11.2).

32. C — Sphere. A sphere has 0 flat faces, 0 edges, and 0 vertices — it is one continuous curved surface. A cube has 6 flat faces; a cone has 1 flat face and 1 vertex; a cylinder has 2 flat faces and curved edges. Only the sphere matches all the described features (Chapter 11.1).

33. B — 42 cm. Perimeter of a rectangle = 2 × (length + width) = 2 × (18 + 3) = 2 × 21 = 42 cm. Or add all four sides: 18 + 3 + 18 + 3 = 42 cm. The shortcut formula is faster than adding all sides individually (Chapter 13.2).

34. D — South. A quarter-turn rotates 90 degrees. Three quarter-turns to the left equal 270 degrees counter-clockwise — the same as one quarter-turn to the right (90° clockwise). Starting facing east, a single right quarter-turn rotates clockwise from east to south. Final direction: south (Chapter 12.3).

35. A — Litres. A swimming pool holds thousands of litres of water — firmly in the litre range, sometimes measured in kilolitres for the very largest pools. Millilitres would produce unwieldy numbers (millions of mL); grams measure mass; centimetres measure length. Only litres is appropriate for the capacity of a pool (Chapter 13.4).

36. B — 2:35. The hour hand sits between the 2 and the 3, closer to the 2 — so the hour is 2 (the smaller of the two numbers it sits between). The minute hand points to the 7, which equals 35 minutes past the hour (7 × 5 = 35). The time is 2:35 (Chapter 14.1).

37. C — 1 hour 40 minutes. From 6:25 PM to 7:25 PM is 1 hour. From 7:25 PM to 8:05 PM is 40 minutes (7:25 to 8:00 is 35 minutes; 8:00 to 8:05 is 5 minutes; 35 + 5 = 40). Total elapsed time: 1 hour + 40 minutes = 1 hour 40 minutes (Chapter 14.3).

38. D — 54 square centimetres. The rectangle is 6 cm wide and 9 cm tall. Area = length × width = 6 × 9 = 54 square centimetres. Or count the unit squares: 6 columns × 9 rows = 54 squares. Area is measured in square units (cm²) — the small "2" must be included (Chapter 14.5).

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

40. B — 48 cm. A regular hexagon has 6 equal sides. Perimeter = 6 × side length = 6 × 8 = 48 cm. Or add all six sides: 8 + 8 + 8 + 8 + 8 + 8 = 48 cm. The multiplication shortcut works for any regular polygon — multiply the number of sides by the side length (Chapter 13.2).