3.40-2 Verbal Reasoning: Letter and Number Codes Set 2: 10-minute Pack

about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

This is a 10-minute Verbal Reasoning depth practice on letter and number codes (Set 2), styled on GL Assessment 11+ multiple-choice papers. There are 40 questions across four sections: Letter Codes, Number Codes, Letters for Numbers and Substitution Ciphers. Every question is worth 1 mark, for 40 marks in total. Difficulty increases through each section and across the pack as a whole, finishing with scholarship-level stretch questions. For each question, choose the ONE best answer from the options A to E. No calculator is allowed. Read every rule or example carefully, since a different rule may apply in each question, and check whether letters or digits shift forward or backward, and whether the alphabet wraps around.

Worked example (Letter Codes). if the code for PARK is QBSL, what is the code for MILK? **Answer: NJML.** Comparing PARK and QBSL shows every letter moves forward 1 place in the alphabet (P to Q, A to B, R to S, K to L). Applying the same forward shift of 1 to MILK gives M to N, I to J, L to M, K to L, i.e. NJML. Apply this same careful, letter-by-letter approach throughout the pack, even as the sections move on to number codes, letters-for-numbers and substitution ciphers, always reading the rule or example given in each question closely, since it can change from question to question, including whether letters or digits shift forward or backward and whether the alphabet wraps around.

SECTION 1: LETTER CODES (8 minutes, 10 questions)

1 Study the example word (or words) and its code to work out the rule, then apply the same rule to the new word. A different rule may apply in each question, including how far the letters shift and whether the alphabet wraps around.

Q1. In a code, each letter is replaced by the letter one place later in the alphabet. If the code for PARK is QBSL, what is the code for MILK?

- ☐ A) MJML
- ☐ B) NIML
- ☐ C) NJMK
- ☐ D) NJLL
- ☐ E) NJML

© Revision Library | revisionlibrary.co.uk

2 (Letter Codes) Q10. In a code, LEAF is written as OHDI, and MINT is written as PLQW. Using the same rule, what is the code for YARD?

- ☐ A) BDUG
- ☐ B) ADUG
- ☐ C) BDUF
- ☐ D) BCUG
- ☐ E) BDTG

SECTION 2: NUMBER CODES (8 minutes, 10 questions)

---

3 Study the example number (or numbers) and its code to work out the rule, then apply the same rule to the new number. A different rule may apply in each question.

Q1. In a code, the code for a number is the number multiplied by 2. What is the code for 34?

- ☐ A) 70
- ☐ B) 66
- ☐ C) 64
- ☐ D) 68
- ☐ E) 36

---

4 (Number Codes) Q2. In a code, the code for a number is the number minus 15. What is the code for 42?

- ☐ A) 25
- ☐ B) 26
- ☐ C) 27
- ☐ D) 28
- ☐ E) 57

---

5 (Number Codes) Q3. In a code, each digit is replaced by double its value, keeping only the last digit if the result is 10 or more. For example, the code for 3 is 6 (3x2=6), and the code for 7 is 4 (7x2=14, keep the last digit 4). What is the code for 258?

- ☐ A) 407
- ☐ B) 401
- ☐ C) 416
- ☐ D) 206
- ☐ E) 406

© Revision Library | revisionlibrary.co.uk

6 (Number Codes) Q4. In a code, the digits of a number are rotated: the first digit moves to the end, and the others shift one place to the left. For example, the code for 1234 is 2341. What is the code for 5678?

- ☐ A) 8567
- ☐ B) 6785
- ☐ C) 6875
- ☐ D) 6758
- ☐ E) 7856

---

7 (Number Codes) Q5. In a code, the digits of a number are first reversed, then each digit has 1 added to it (a 9 becomes 0). What is the code for 4726?

- ☐ A) 8385
- ☐ B) 6274
- ☐ C) 7385
- ☐ D) 7285
- ☐ E) 7386

---

8 (Number Codes) Q6. In a code, the code for a two-digit number is the product of its two digits. For example, the code for 34 is 12 (3x4=12). What is the code for 68?

- ☐ A) 48
- ☐ B) 42
- ☐ C) 14
- ☐ D) 40
- ☐ E) 2

---

9 (Number Codes) Q7. In a code, each digit is replaced by the last digit of its square. For example, the code for 3 is 9 (3 squared is 9), and the code for 7 is 9 (7 squared is 49, last digit 9). What is the code for 4869?

- ☐ A) 1461
- ☐ B) 6468
- ☐ C) 6661
- ☐ D) 6431
- ☐ E) 6461

© Revision Library | revisionlibrary.co.uk

10 (Number Codes) Q8. In a code, each digit is replaced by (7 minus the digit); if this gives a negative number, 10 is added to make it positive. Four of the digit codes below are correct. Which ONE is WRONG?

- ☐ A) 9 -> 8
- ☐ B) 8 -> 9
- ☐ C) 3 -> 5
- ☐ D) 6 -> 1
- ☐ E) 2 -> 5

---

11 (Number Codes) Q9. In a code, the code for a number is the sum of its digits, repeated until a single digit remains. For example, the code for 39 is 3 (3+9=12, then 1+2=3). What is the code for 587?

- ☐ A) 4
- ☐ B) 3
- ☐ C) 20
- ☐ D) 2
- ☐ E) 1

---

12 (Letter Codes) Q2. In a code, each letter is replaced by the letter two places earlier in the alphabet. If the code for DUCK is BSAI, what is the code for ROSE?

- ☐ A) PMQC
- ☐ B) PMQD
- ☐ C) PNQC
- ☐ D) OMQC
- ☐ E) PMPC

---

13 (Number Codes) Q10. In a code, the first and last digits of a number swap places, and the middle digits stay the same. What is the code for 7139?

- ☐ A) 3197
- ☐ B) 9137
- ☐ C) 9731
- ☐ D) 7139
- ☐ E) 9317

© Revision Library | revisionlibrary.co.uk

Mark scheme · 3.40-2 Verbal Reasoning: Letter and Number Codes Set 2: 10-minute Pack

Question 1

E) NJML - comparing PARK and QBSL shows each letter shifts 1 place forward (P to Q, A to B, R to S, K to L); applying this to MILK gives M to N, I to J, L to M, K to L, i.e. NJML cao **B1**

Answer: E) NJML

Question 2

A) BDUG - both examples confirm the rule 'shift every letter forward by 3', since LEAF gives OHDI and MINT gives PLQW; applying this to YARD gives Y to B (wrapping past Z), A to D, R to U, D to G, i.e. BDUG cao **B1**

Answer: A) BDUG

Question 3

D) 68 - 34 multiplied by 2 is 68 (34+34=68) cao **B1**

Answer: D) 68

Question 4

C) 27 - 42 minus 15 is 27 cao **B1**

Answer: C) 27

Question 5

E) 406 - 2x2=4, 5x2=10 (keep the last digit 0), 8x2=16 (keep the last digit 6), giving 406 cao **B1**

Answer: E) 406

Question 6

B) 6785 - moving the first digit (5) to the end of 5678 gives 6785 cao **B1**

Answer: B) 6785

Question 7

C) 7385 - reversing 4726 gives 6274; adding 1 to each digit gives 6+1=7, 2+1=3, 7+1=8, 4+1=5, i.e. 7385 cao **B1**

Answer: C) 7385

Question 8

A) 48 - the digits of 68 are 6 and 8, and 6x8=48 cao **B1**

Answer: A) 48

Question 9

E) 6461 - the squares are 4x4=16 (last digit 6), 8x8=64 (last digit 4), 6x6=36 (last digit 6), 9x9=81 (last digit 1), giving 6461 cao **B1**

Answer: E) 6461

Question 10

C) 3 -> 5 is wrong - by the rule, 7 minus 3 is 4, so the code for 3 should be 4, not 5 cao **B1**

Answer: C) 3 -> 5

Question 11

D) 2 - 5+8+7=20, then 2+0=2, so the code is 2 cao **B1**

Answer: D) 2

Question 12

A) PMQC - comparing DUCK and BSAI shows each letter shifts 2 places back (D to B, U to S, C to A, K to I); applying this to ROSE gives R to P, O to M, S to Q, E to C, i.e. PMQC cao **B1**

Answer: A) PMQC

Question 13

B) 9137 - swapping the first digit (7) and the last digit (9) of 7139, and keeping the middle digits (1 and 3) the same, gives 9137 cao **B1**

Answer: B) 9137

© Revision Library | revisionlibrary.co.uk