Answers

1. **1435** — \( D = 1, R = 4, A = 3, M = 5 \)
2. **4235** — \( R = 4, E = 2, A = 3, M = 5 \)
3. **WEAR** — \( W = 6, E = 2, A = 3, R = 4 \)
4. **6512** — \( M = 6, I = 5, T = 1, E = 2 \)
5. **3265** — \( S = 3, E = 2, M = 6, I = 5 \)
6. **TERM** — \( T = 1, E = 2, R = 4, M = 6 \)
7. **wand** — Take letters 1 and 3 from the first word, followed by letters 4 and 1 from the second word.
8. **muse** — Take letters 4 and 3 from the first word, followed by letters 1 and 2 from the second word.
9. **post** — Take letters 3 and 2 from the second word, followed by letters 3 and 4 from the first word.
10. **lip** — Take letters 3 and 2 from the first word, followed by letter 1 from the second word.
11. **arch** — Take letter 1 from the second word, followed by letters 3 and 1 from the first word, and then letter 3 from the second word.
12. **idea** — Take letter 3 from the first word, followed by letter 3 from the second word, followed by letter 5 from the first word, and then letter 1 from the second word.
13. **rare** — Take letters 3 and 1 from the second word, followed by letter 1 from the first word, and then letter 4 from the second word.
14. **BAN** — The complete word is ARMABANDS.
15. **ADD** — The complete word is HADDOCK.
16. **ASH** — The complete word is SPLASHED.
17. **ILL** — The complete word is VANILLA.
18. **EAT** — The complete word is WEATHER.
19. **d** — The new words are ‘goad’, ‘defy’, ‘fleed’ and ‘null’.
20. **s** — The new words are ‘pris’, ‘saeve’, ‘loss’ and ‘sure’.
21. **n** — The new words are ‘bran’, ‘nest’, ‘warn’ and ‘nose’.
22. **m** — The new words are ‘looni’, ‘mole’, ‘form’ and ‘melt’.
23. **k** — The new words are ‘bark’, ‘kilt’, ‘rink’ and ‘kind’.
24. **LS** — The first letter moves forward 2 letters each time. The second letter moves forward 1 letter, then back 3 letters alternately.
25. **YA** — The first letter moves in the sequence +1, +2, +3, +4, +5. The second letter moves in the sequence +2, +3, +4, +5, +6.
26. **OO** — The first letter moves forward 3 letters, then forward 6 letters alternately. The second letter moves back 2 letters then back 4 letters alternately.
27. **ZJ** — The first letter moves in the sequence -2, -1, 0, +1, +2, +3. The second letter moves in the sequence 0, -1, -2, -3, -4.
28. **GK** — The first letter moves forward 2 letters, then back 5 letters alternately. The second letter moves back 5 letters, then forward 2 letters alternately.
29. **D** — Louise finishes second and Ken finishes fifth. Hada and Artur both finish after Louise, so they must each be in either third or fourth place. This means Fiona must finish first.
30. **B** — Norio and Paul both throw their stones on odd numbers. Sylvia throws her stone onto number 7. Nobody throws a stone onto numbers 1, 5 or 10. Norio throws his stone on a lower number than anyone else, so this must be 3. No two people throw their stones on the same number, so the only remaining odd number for Paul is 9.
31. **top athletes** — The hidden word is ‘path’.
32. **pyjamas should** — The hidden word is ‘mass’.
33. **cumin thoroughly** — The hidden word is ‘mint’.
34. **Cobras have** — The hidden word is ‘rash’.
35. **Laura celebrate** — The hidden word is ‘race’.
36. **FUN** — To get from the code to the word move the letters in the sequence +2, +1, +2.
37. **NIGHT** — This is a mirror code, where each letter is an equal distance from the centre of the alphabet. M is 1 letter back from the centre, and N is 1 letter forward. R is 5 letters forward and L is 5 letters back. T is 7 letters forward and G is 7 letters back. S is 6 letters forward and H is 6 letters back; G is 7 letters back and T is 7 letters forward.
38. **ONYJ** — To get from the word to the code move the letters in the sequence +3, +5, +3, +5.
39. **YLZH** — To get from the word to the code move the letters in the sequence -4, +3, +4, +3.
40. **FLOWER** — This is a mirror code, where each letter is an equal distance from the centre of the alphabet. U is 8 letters forward from the centre, and F is 8 letters back; O is 2 letters forward and L is 2 letters back; L is 2 letters back and O is 2 letters forward; D is 10 letters back and W is 10 letters forward. V is 9 letters forward and E is 9 letters back. I is 5 letters back and R is 5 letters forward.
41. **QEPGU** — To get from the word to the code move the letters in the sequence +5, +4, +3, -2, +1.
42. **KEHL** — To get from the word to the code move the letters in the sequence -2, -4, -6, -8.
43. **6** — 9 + 5 = 12, 12 = 2 x 6
44. **11** — 3 x 9 = 14 = 13, 13 = 24 - 11
45. **19** — 15 - 3 x 12 = 60, 60 = 41 + 19
46. **6** — 24 + 4 + 5 = 11, 11 = 66 - 6
47. **4** — 8 x 6 - 13 = 38, 38 = 7 x 6 - 4
48. **permit** — ‘permit’ can mean ‘to allow’ or ‘a certificate of permission’.
49. **march** — ‘march’ can mean ‘a demonstration’ or ‘to walk at a regular pace’.
50. **discharge** — ‘discharge’ can mean ‘to let someone go’ or ‘to emit’.
51. **entrance** — ‘entrance’ can mean ‘a way in’ or ‘to fill with delight or wonder’.
52. **subject** — ‘subject’ can mean ‘an area of study’ or ‘a person who lives in a country’.
53. **33** — Add 4 and 2 alternately: +4, +2, +4, +2.
54. **0** — Subtract ascending odd numbers: -1, -3, -5, -7, -9.
55. **32** — There are two sequences which alternate. In the first, 3 is added each time, and in the second the numbers are multiplied by 2 each time.
56. **19** — The numbers follow the sequence +3, +2, +1, 0, -1.
57. **23** — The two previous numbers are added together to get the next number in the sequence, i.e. 5 + 9 = 14, 14 + 9 = 23.
58. **56** — Add square numbers in ascending order: +1, +4, +9, +16, +25.
59. **advance withdraw** — They are the closest synonyms of ‘proceed’ and ‘recede’.
60. **honourable shameful** — They are adjectives that best describe the nouns ‘soldier’ and ‘traitor’.
61. **telescope binoculars** — They are the instruments that have one and two lenses.
62. **blood air** — They are the substances pumped by the heart and lungs.
63. **obliterate assemble** — They are the closest synonyms of ‘destroy’ and ‘build’.
64. **Chandni** — Chandni bought a painted postcard, a wooden ornament, a patchwork quilt and a silk scarf.
65. **Lucas** — Lucas only learnt to make origami frogs.
66. **JR** — The first letter in the pair moves forward 2 letters,
67. RS — BY and JQ are mirror pairs, where the two letters are an equal distance from the centre of the alphabet. R is the mirror of I and S is the mirror of H.

68. WK — The first letter in the pair moves forward 4 letters, the second letter moves forward 8 letters.

69. PS — DW and MN are mirror pairs, where the two letters are an equal distance from the centre of the alphabet. P is the mirror of K and S is the mirror of H, but the letters are reversed.

70. EJ — The first letter in the pair moves forward 6 letters, the second letter moves back 5 letters.

71. 16 — Multiply the first and the third numbers together.

72. 7 — Subtract the first number from the third number and then divide by 2.

73. 6 — Find the mid-point between the two outer numbers by adding the outer numbers together and dividing the answer by 2.

74. 13 — Multiply the first and third numbers and then add 1.

75. 19 — Add the first and third numbers together, multiply the answer by 2 and then add 1.

76. b — The new words are ‘road’ and ‘cube’.

77. r — The new words are ‘face’ and ‘frog’.

78. u — The new words are ‘fond’ and ‘tours’.

79. r — The new words are ‘head’ and ‘rode’.

80. i — The new words are ‘gene’ and ‘ruin’.