**The NPSA Escape Room Challenge**

CHEAT SHEET

If you get really stuck and can’t get past a clue, have a look at the table below. The middle column contains one more hint, but if that doesn’t help then use your cursor to highlight the white text in the right-hand column and change it to you’ll be able to read the answer.

|  |  |  |
| --- | --- | --- |
| **The clue** | **A hint** | **The answer** |
| The cryptex | Did you look at both the hints in the game? If you still can’t solve the clue, the answer is on the right.  | PERILMy friend and colleague, Captain James Collins, set sail for South America some three months ago but has not been heard from since. I see danger concealed in the headline from today’s Times newspaper: Illustrious Explorer Missing |
| The bottle lock | Did you closely at the photographs on the bookcase? | 2775 |
| The writing on the bottle | Have you tried holding a mirror up to the writing? | Professor Moriarty |
| The padlock on the box | Have you rearranged the highlighted letters in the crossword answers? You’re looking for a name that has been mentioned in the story. | CEDRIC(the crossword answers are at the end of this page) |
| The rug | Have you tried reading the decoded letters down rather than across? | BETTY STANDS GUARD |
| The safe |  | 44081(the answers to the maths problems are below) |
| The letter & the photograph | The letters are an anagram of something in the room – it’s a name. | OSPREY |
| The ship’s wheel |  | SWEN* The cryptex clue tells us that the Captain went missing on a voyage to SOUTH America.
* Clue 2 down in the crossword, the answer is WEST.
* On the back of the painting, when you take it off the wall, someone has written EAST.
* The map, the photograph and the letter all refer to NORTH Cotes.
 |

**The crossword answers:**

|  |  |
| --- | --- |
| **ACROSS** | **DOWN** |
| 3. Perseverance | 1. Kitchen |
| 5. comic | 2. West |
| 6. test | 3. Crumbs |
| 9. hobby | 7. buy |
| 10. nap | 8. blend |
| 13. hope | 9. hexagon |
| 15. break | 11. Paris |
| 16. acid | 12. haiku |
| 17. dog | 14. omit |
| 18. knot | 19. pen |
| 19. pet | 20. trunk |
| 22. penne | 21. fizz |
| 25. adventure | 23. error |
| 26. zoom | 24. lamp |
| 27. metre |  |

**The maths problems**

I am thinking of a number…

This number is a factor of 24… so it could be: 2, 3, 4, 6, 8, 12

The numbers either side of the one I’m thinking of are prime numbers… that leaves in: 4 (3 & 5 are prime), 6 (5 & 7 are prime), 12 (11 & 13 are prime)

This number is also a square number: that only leaves 4 (2 x 2 is 4)

The one number in English that has all its letters in alphabetical order when written out is: forty

I go to the shop to buy some sweets…

Start with the last piece of information: 30 blackjacks cost 50p (save 10p) i.e. 30 full price blackjacks cost 60p, which is 2p each

Then 10 blackjacks and 5 refresher chews cost 35p (save 5p) i.e. the full price should be 40p. 10 full price blackjacks @ 2p each would cost 20p, so that means 5 full price refresher chews also cost 20p, which means 1 full price refresher chew costs 4p

10 refresher chews and 10 liquorice wheels cost £1 (save 20p) i.e. the full price should be £1.20. 10 refresher chews @ 4p each cost 40p, so 10 liquorice wheels cost 80p, which means one full price liquorice wheel costs 8p.

**The magic square**

|  |  |  |
| --- | --- | --- |
| 31 | 73 | 7 |
| 13 | 37 | 61 |
| 67 | 1 | 43 |