

Advent Calendar Walkthrough

1 – Column 1 and row 2 is B1.

2 – E2 - In column 2 as far down as possible.

3 – C3 - A knight's move (1 square in one direction and two in the other) from both 1 and 2.

4 – A4 – In a line from E2 and C3 (each time going one column right and 2 rows up).

			4	
1				
	5	3		
6	2			

5 – C2 – The only square on a row, column or diagonal with all the numbers 1 to 4.

6 – E1 - Must be on a row, column or diagonal with 1, 2 and 3 (so B2, E1 or D3) but not 4 or 5.

			4	
1				
	5	3		
		7		
6	2		8	

7 – D3 - Must be on a row, column or diagonal with 2, 3 and 5 (so B2, C4, D2 or D3) but not 1, 4 or 6.

8 – E4 - Must be on a row, column or diagonal with 1, 2 or 4 (so A2, B5, D1 or E4) but not right next to them.

			4	
1	10			
	5	3		12
9	11	7		
6	2		8	

9 – D1 - Must be on a row, column or diagonal with 1 (=1x1) and 4 (=2x2) but not right next to them.

10 – B2 – $10 = 1 \times 2 \times 5$.

11 – D2 - Must be next to 2, 3, 5 and 7.

12 – C5 – The only square not adjacent to a number.

13			4	
1	10			
	5	3	15	12
9	11	7	14	
6	2	16	8	

13 – A1 – On a diagonal with 3 but not on a row or column with any other prime.

14 – D4 – Next to 3 As in C3, C5 and E4.

15 – C4 – If 15 was in column 1 or 2 it is the biggest number in the column, if 15 was in column 3 or 5 then 2 bigger numbers are going to be added to the column – so 15 is in column 4. If 15 was in row 2 then 2 bigger numbers are going to be added to the column – so 15 is in row 3.

16 – E3 – $16 = 2 \times 8$.

13			4	
1	10	19	20	
17	5	3	15	12
9	11	7	14	
6	2	16	8	18

17 – C1 – Next to Roman numerals X, D and M (A2 is next to 3 Roman numerals but they are not all different).

18 – E5 – 18 is R, the 18th letter of the alphabet – Similarly 13 is M the 13th letter and 14 is N, the 14th letter and 18 is on a diagonal with both of them.

19 – B3 – On a row, column or diagonal with 1, 3, 4, 5, 7, 9.

20 – B4 – This is the only square that could possibly have 4 identical letters round it, given the letters known and the limited spaces available. The letters are 4 As in B3, B5, C3 and C5.

13	22	23	4	21
1	10	19	20	24
17	5	3	15	12
9	11	7	14	E
6	2	16	8	18

21 – A5 – $21 = 2 + 19$.

22 – A2 – 22 is 20 in base 9 and 10 in base 4. From A2 one can see 10 but not 20.

23 – A3 – The letters round A3 make REAMS.

24 – B5 – From B5 one can see 3 Ys (misheard as wise).

E - If you read the letters horizontally, starting from the top, you see a seasonal message and can deduce that the letter is E.

25 – C5 – The last number is 25.

AOD, updated 29/11/17