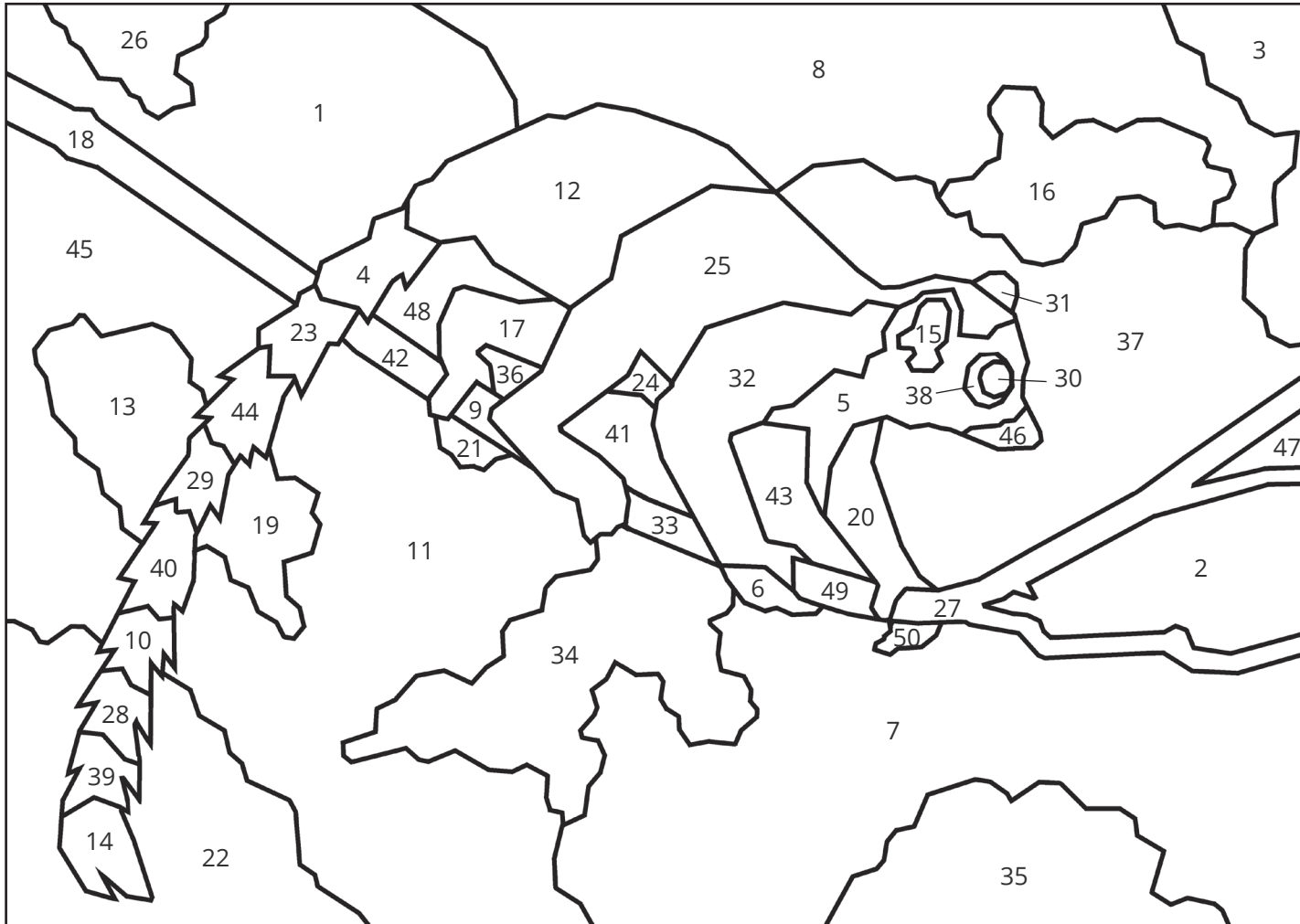


Colour by Numbers Sequences (Essential)

The number in each section corresponds to a question on the following page. Each question contains the first four terms of an arithmetic sequence. Calculate the 5th term of the sequence. Based on your answer, use the key to find out which colour to shade that section.



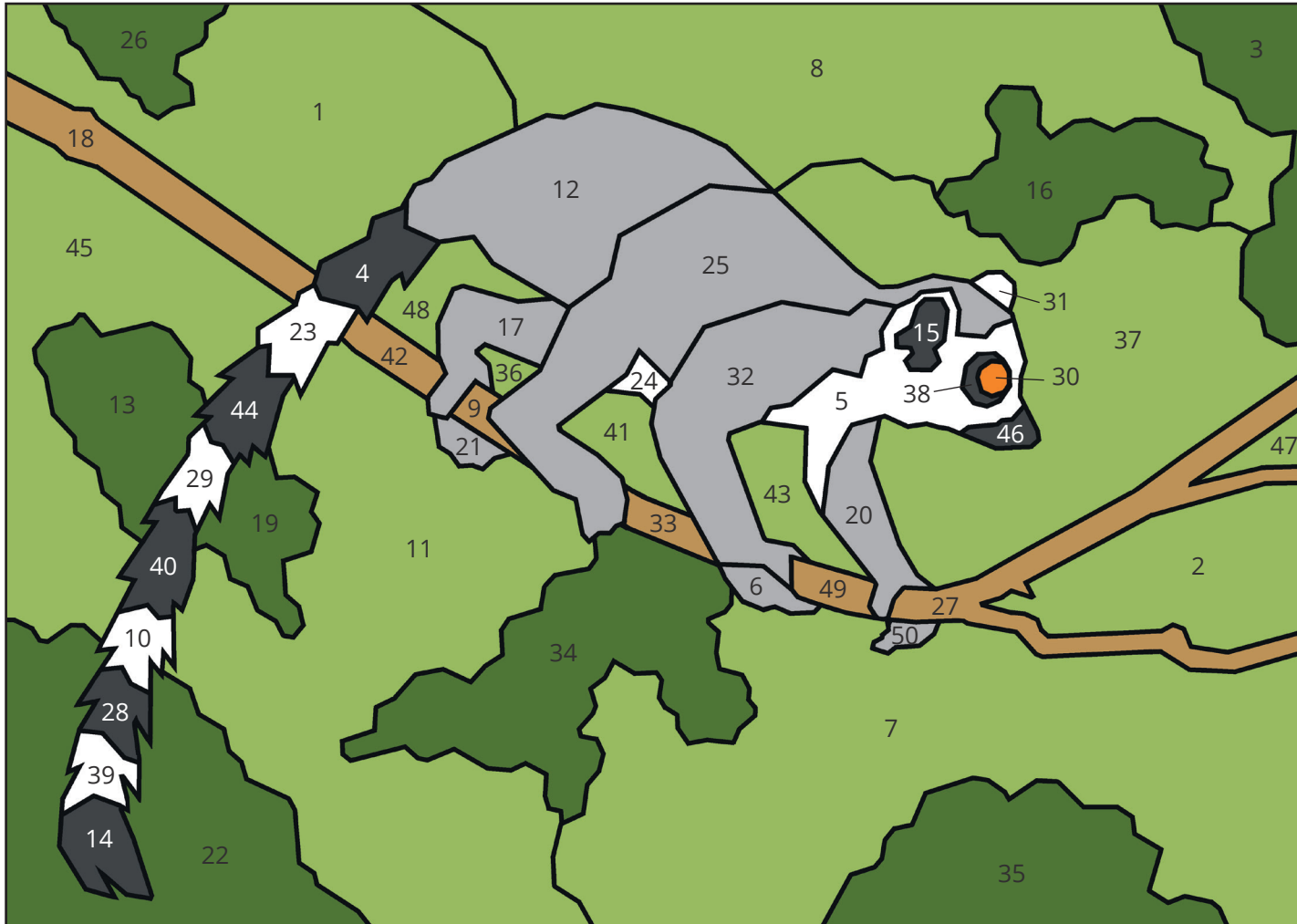
Light Green	1 to 10
Dark Green	11 to 15
Brown	16 to 20
Orange	21 to 25
Grey	26 to 30
Black	31 or more
White	A negative answer

Colour by Numbers **Sequences (Essential)**

1	2, 4, 6, 8,...
2	-7, -5, -3, -1,...
3	3, 6, 9, 12,...
4	8, 15, 22, 29,...
5	6, 4, 2, 0,...
6	6, 11, 16, 21,...
7	10, 8, 6, 4,...
8	7, 6, 5, 4,...
9	4, 7, 10, 13,...
10	7, 4, 1, -2,...
11	9, 7, 5, 3,...
12	4, 10, 16, 22,...
13	4, 6, 8, 10,...
14	19, 23, 27, 31,...
15	14, 19, 24, 29,...
16	1, 4, 7, 10,...
17	10, 15, 20, 25,...
18	33, 29, 25, 21,...
19	6, 7.5, 9, 10.5,...
20	16, 19.5, 23, 26.5,...
21	13, 17, 21, 25,...
22	19, 17, 15, 13,...
23	-10, -8, -6, -4,...
24	-29, -22, -15, -8,...
25	37, 35, 33, 31,...


























26	60, 48, 36, 24,...
27	48, 41, 34, 27,...
28	7, 18, 29, 40,...
29	17, 12, 7, 2,...
30	5, 10, 15, 20,...
31	-11, -9, -7, -5,...
32	42, 38, 34, 30,...
33	6, 9, 12, 15,...
34	82, 65, 48, 31,...
35	77, 61, 45, 29,...
36	30, 25, 20, 15,...
37	14, 11, 8, 5,...
38	9, 15, 21, 27,...
39	56, 41, 26, 11,...
40	40, 38, 36, 34,...
41	1.5, 3, 4.5, 6,...
42	2, 6, 10, 14,...
43	0.25, 0.75, 1.25, 1.75,...
44	57, 52, 47, 42,...
45	17, 13, 9, 5,...
46	59, 52, 45, 38,...
47	0.9, 1.8, 2.7, 3.6,...
48	1.2, 1.6, 2.0, 2.4,...
49	6, 9.5, 13, 16.5,...
50	75, 63, 51, 39,...


























Colour by Numbers Sequences (Essential) **Answers**



Light Green	1 to 10
Dark Green	11 to 15
Brown	16 to 20
Orange	21 to 25
Grey	26 to 30
Black	31 or more
White	A negative answer

Colour by Numbers Sequences (Essential) **Answers**

1	2, 4, 6, 8,...	10	
2	-7, -5, -3, -1,...	1	
3	3, 6, 9, 12,...	15	
4	8, 15, 22, 29,...	36	
5	6, 4, 2, 0,...	-2	
6	6, 11, 16, 21,...	26	
7	10, 8, 6, 4,...	2	
8	7, 6, 5, 4,...	3	
9	4, 7, 10, 13,...	16	
10	7, 4, 1, -2,...	-5	
11	9, 7, 5, 3,...	1	
12	4, 10, 16, 22,...	28	
13	4, 6, 8, 10,...	12	
14	19, 23, 27, 31,...	35	
15	14, 19, 24, 29,...	34	
16	1, 4, 7, 10,...	13	
17	10, 15, 20, 25,...	30	
18	33, 29, 25, 21,...	17	
19	6, 7.5, 9, 10.5,...	12	
20	16, 19.5, 23, 26.5,...	30	
21	13, 17, 21, 25,...	29	
22	19, 17, 15, 13,...	11	
23	-10, -8, -6, -4,...	-2	
24	-29, -22, -15, -8,...	-1	
25	37, 35, 33, 31,...	29	

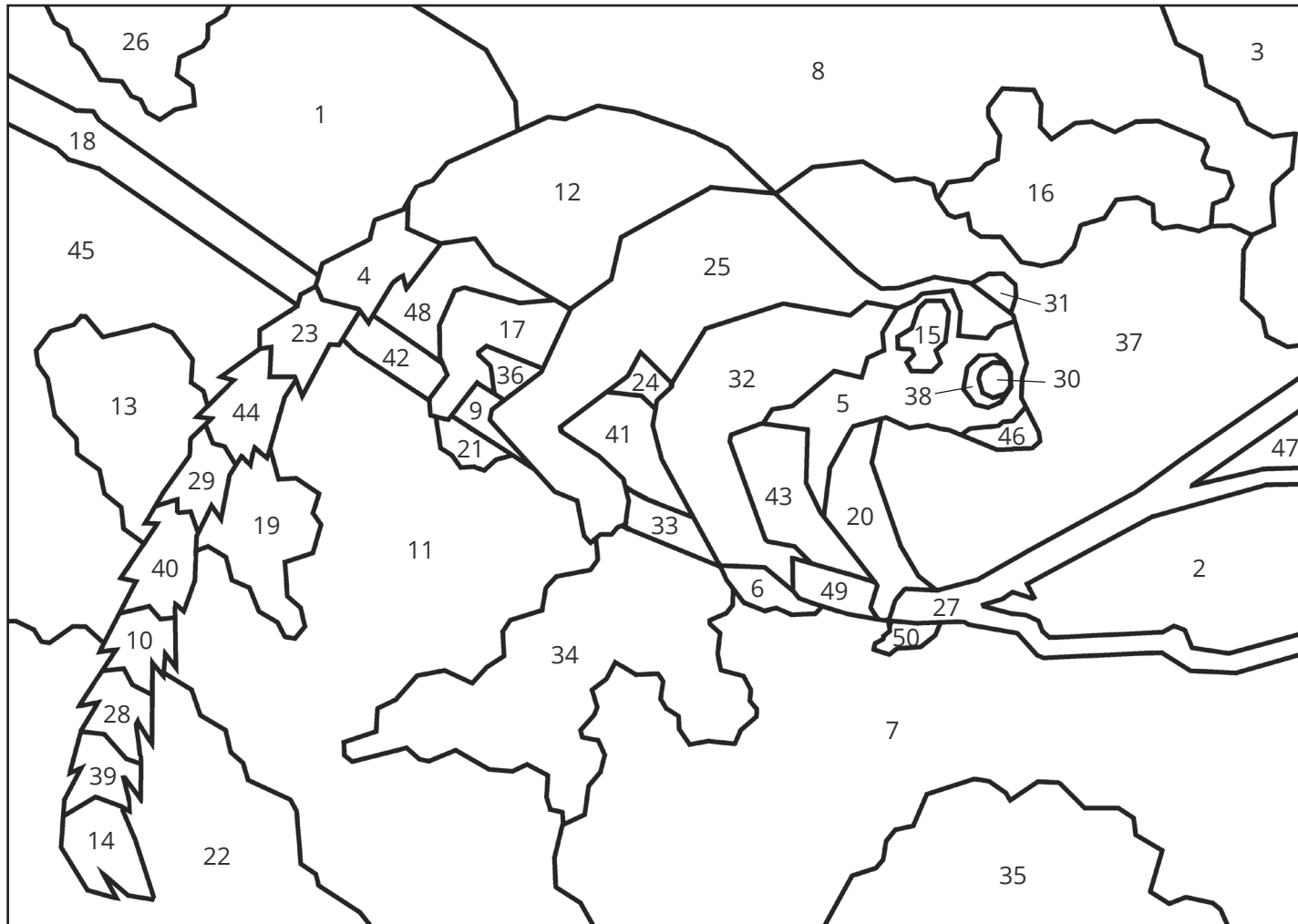
26	60, 48, 36, 24,...	12	
27	48, 41, 34, 27,...	20	
28	7, 18, 29, 40,...	51	
29	17, 12, 7, 2,...	-3	
30	5, 10, 15, 20,...	25	
31	-11, -9, -7, -5,...	-3	
32	42, 38, 34, 30,...	26	
33	6, 9, 12, 15,...	18	
34	82, 65, 48, 31,...	14	
35	77, 61, 45, 29,...	13	
36	30, 25, 20, 15,...	10	
37	14, 11, 8, 5,...	2	
38	9, 15, 21, 27,...	33	
39	56, 41, 26, 11,...	-4	
40	40, 38, 36, 34,...	32	
41	1.5, 3, 4.5, 6,...	7.5	
42	2, 6, 10, 14,...	18	
43	0.25, 0.75, 1.25, 1.75,...	2.25	
44	57, 52, 47, 42,...	37	
45	17, 13, 9, 5,...	1	
46	59, 52, 45, 38,...	31	
47	0.9, 1.8, 2.7, 3.6,...	4.5	
48	1.2, 1.6, 2.0, 2.4,...	2.8	
49	6, 9.5, 13, 16.5,...	20	
50	75, 63, 51, 39,...	27	

Colour by Numbers Sequences (Expert)

The number in each section corresponds to a question on the following page. Each question contains an arithmetic sequence. Calculate the n th term of the sequence. Use the n^{th} term rule to calculate the value of term 0, then use the key to find out which colour to shade that section.

Top tip: the zero term is the term which comes before the first term in a sequence.

For example: You have calculated the n th term of a sequence to be $2n + 1$. The 1 is the zero term. If the n th term of a sequence is $5 - 2n$ then the 5 is the zero term.



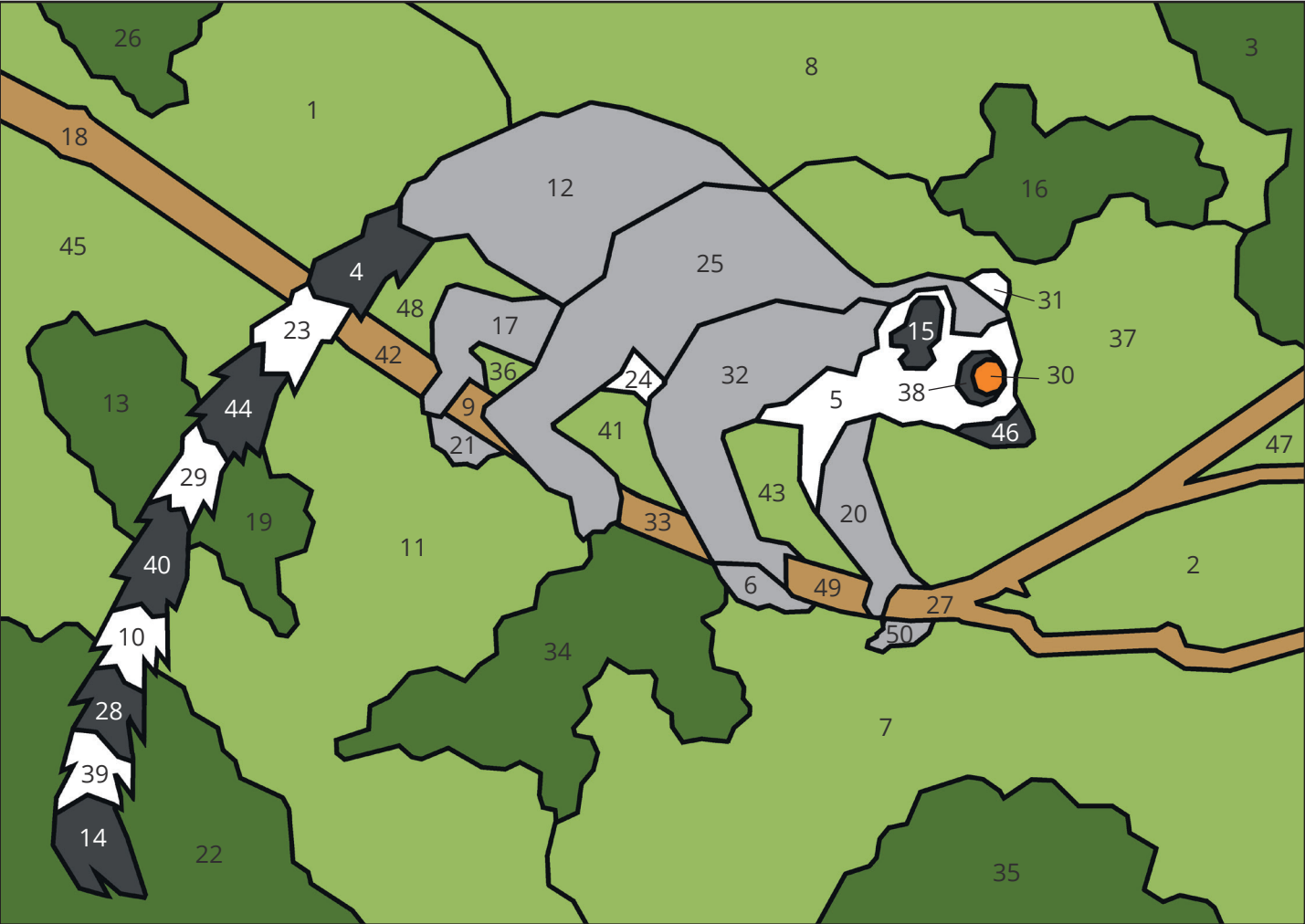
Light Green	-10 to -5
Dark Green	-4 to -1
Brown	0 or 1
Orange	2
Grey	3
Black	4
White	5

Colour by Numbers **Sequences (Expert)**

1	___, 1, 7, 13, 19, 25
2	___, 2, 9, 16, 23, 30
3	___, 1, 6, 11, 16, 21
4	___, 8, 12, 16, 20, 24
5	___, 10, 15, 20, 25, 30
6	___, 6, 9, 12, 15, 18
7	___, 0, 6, 12, 18, 24
8	___, 2, 11, 20, 29, 38
9	___, 3, 5, 7, 9, 11
10	___, 0, -5, -10, -15, -20
11	___, 0, 8, 16, 24, 32
12	___, 7, 11, 15, 19, 23
13	___, 2, 5, 8, 11, 14
14	___, 9, 14, 19, 24, 29
15	___, -1, -6, -11, -16, -21
16	___, 5, 12, 19, 26, 33
17	___, 1, -1, -3, -5, -7
18	___, 5, 9, 13, 17, 21
19	___, -4, -6, -8, -10, -12
20	___, 2, 1, 0, -1, -2
21	___, 4.5, 6, 7.5, 9, 10.5
22	___, 1, 5, 9, 13, 17
23	___, 1, -3, -7, -11, -15
24	___, 12, 19, 26, 33, 40
25	___, 10, 17, 24, 31, 38


























26	___, 0.5, 2.0, 3.5, 5, 6.5
27	___, 2, 4, 6, 8, 10
28	___, 6, 8, 10, 12, 14
29	___, 8, 11, 14, 17, 20
30	___, 5, 8, 11, 14, 17
31	___, 11, 17, 23, 29, 35
32	___, 12, 21, 30, 39, 48
33	___, 7, 14, 21, 28, 35
34	___, -4.5, -8, -11.5, -15, -18.5
35	___, 3, 10, 17, 24, 31
36	___, -8, -6, -4, -2, 0
37	___, -11, -16, -21, -26, -31
38	___, 6.5, 9, 11.5, 14, 16.5
39	___, 15.5, 26, 36.5, 47, 57.5
40	___, 10, 16, 22, 28, 34
41	___, 5, 15, 25, 35, 45
42	___, 5.5, 10, 14.5, 19, 23.5
43	___, 5, 17, 29, 41, 53
44	___, 25, 46, 67, 88, 109
45	___, -4, -2, 0, 2, 4
46	___, 11, 18, 25, 32, 39
47	___, -10, -15, -20, -25, -30
48	___, -22, -35, -48, -61, -74
49	___, 7, 13, 19, 25, 31
50	___, -2, -7, -12, -17, -22

























Colour by Numbers Sequences (Expert) **Answers**



Light Green	-10 to -5
Dark Green	-4 to -1
Brown	0 or 1
Orange	2
Grey	3
Black	4
White	5

Colour by Numbers Sequences (Expert) **Answers**

1	___, 1, 7, 13, 19, 25	-5	
2	___, 2, 9, 16, 23, 30	-5	
3	___, 1, 6, 11, 16, 21	-4	
4	___, 8, 12, 16, 20, 24	4	
5	___, 10, 15, 20, 25, 30	5	
6	___, 6, 9, 12, 15, 18	3	
7	___, 0, 6, 12, 18, 24	-6	
8	___, 2, 11, 20, 29, 38	-7	
9	___, 3, 5, 7, 9, 11	1	
10	___, 0, -5, -10, -15, -20	5	
11	___, 0, 8, 16, 24, 32	-8	
12	___, 7, 11, 15, 19, 23	3	
13	___, 2, 5, 8, 11, 14	-1	
14	___, 9, 14, 19, 24, 29	4	
15	___, -1, -6, -11, -16, -21	4	
16	___, 5, 12, 19, 26, 33	-2	
17	___, 1, -1, -3, -5, -7	3	
18	___, 5, 9, 13, 17, 21	1	
19	___, -4, -6, -8, -10, -12	-2	
20	___, 2, 1, 0, -1, -2	3	
21	___, 4.5, 6, 7.5, 9, 10.5	3	
22	___, 1, 5, 9, 13, 17	-3	
23	___, 1, -3, -7, -11, -15	5	
24	___, 12, 19, 26, 33, 40	5	
25	___, 10, 17, 24, 31, 38	3	

26	___, 0.5, 2.0, 3.5, 5, 6.5	-1	
27	___, 2, 4, 6, 8, 10	0	
28	___, 6, 8, 10, 12, 14	4	
29	___, 8, 11, 14, 17, 20	5	
30	___, 5, 8, 11, 14, 17	2	
31	___, 11, 17, 23, 29, 35	5	
32	___, 12, 21, 30, 39, 48	3	
33	___, 7, 14, 21, 28, 35	0	
34	___, -4.5, -8, -11.5, -15, -18.5	-1	
35	___, 3, 10, 17, 24, 31	-4	
36	___, -8, -6, -4, -2, 0	-10	
37	___, -11, -16, -21, -26, -31	-6	
38	___, 6.5, 9, 11.5, 14, 16.5	4	
39	___, 15.5, 26, 36.5, 47, 57.5	5	
40	___, 10, 16, 22, 28, 34	4	
41	___, 5, 15, 25, 35, 45	-5	
42	___, 5.5, 10, 14.5, 19, 23.5	1	
43	___, 5, 17, 29, 41, 53	-7	
44	___, 25, 46, 67, 88, 109	4	
45	___, -4, -2, 0, 2, 4	-6	
46	___, 11, 18, 25, 32, 39	4	
47	___, -10, -15, -20, -25, -30	-5	
48	___, -22, -35, -48, -61, -74	-9	
49	___, 7, 13, 19, 25, 31	1	
50	___, -2, -7, -12, -17, -22	3	