mathsgenie.co.uk Pleas			se do not w	vrite	te on this sheet mathsgenie.co.uk			
1	Here are the first five term 2 4 Write down the next two	ns of a sequence. 7 11 terms in the sequence.	16 (2 marks)	6	6 Here are the first 5 terms of a sequence. 17 14 11 8 5 (a) Find the next term of this sequence. The <i>n</i> th term of a different sequence is $10n^2 + 5$			
2	The first term in a sequen The term to term rule is a			(b) Work out the 5 th term of this sequence. (2 marks)				
	Is 97 a term in the sequen Give a reason for your and	ce? swer.	(2 marks)	7	 7 Here are the first four terms of a sequence. 7 13 19 25 			
3	Here are the first five tern 1 2	ns of a Fibonacci sequence 3 5	8		(a) Write down the next term in the sequence.(b) Explain how you got your answer (2 marks)			
	Write down the next two	terms in the sequence.	(2 marks)	8	 8 Here are the first four terms of a number sequence. 2 3 5 9 			
4	The nth term of a sequence is $4n + 3$ (a) Find the first two terms of this sequence.			The rule to continue the sequence is multiply the previous term by 2 and then subtract 1 Work out the 5 th term of this sequence.				
	(b) Is 35 a term in this se You must show how y	quence. ou get your answer.	(2 marks)	9	9 Here are the first 5 terms of a Fibonacci sequence.			
5	The nth term of a sequence (a) Find the first two term	the is $n^2 + 1$ is of this sequence.			2 2 4 6 10 Find the 8th term of this sequence. (2 marks)			
	(b) Is 35 a term in this sequence. You must show how you get your answer.			. 10	 10 The <i>n</i>th term of a sequence is n² + 3 (a) Find the first three terms of this sequence. (b) Find the 10th term in this sequence. 			
Grade 4 Sec			Sequ	Jenc	nces Grade 4			

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11 Here is a sequence of patter	ns made from white	tiles and grey tiles.	13 Here are the first five terms of a sequen				ence.	
				31 (a) Find th	27 he first nega	23 tive term in the	19 sequence.	15
				(b) Is -30 Give a	a term in th a reason for	is sequence? your answer.		(3 marks)
pattern number 1 pat	tern number 2	pattern number 3	14	Here are the first 5 terms of an arithmetic sequer			etic sequence.	
				-3	1	5	9	13
(a) Draw pattern number 4.	(a) Draw pattern number 4.			(a) Find an expression, in terms of <i>n</i> , for the <i>n</i> th term of this sequence.				
(b) Work out the total numb	(b) Work out the total number of tiles to make pattern number 7.				The <i>n</i> th term of a different arithmetic sequence is $2n - 3$			
Kyle says "There are 4 white tiles in pattern number 3 so there will be 8 white tiles in pattern number 6."				(b) Is 101 Show 1	a term in th how you get	is sequence? your answer.		(4 marks)
(c) Is Kyle right?	(c) Is Kyle right?			Here are th	ne first 5 teri	ms of a sequenc	e.	
You must give a reason f	for your answer.			9	14	19	24	29
(4 marks)				Find an expression, in terms of <i>n</i> , for the <i>n</i> th term of this sequence.				
12 Here is a sequence of patterns made from grey counters.								(2 marks)
			16	Here are th	ne first 5 ter	ns of a sequenc	e.	
				25	22	19	16	13
pattern number 1 patte	ern number 2	pattern number 3		Find an ex	pression, in	terms of <i>n</i> , for	the <i>n</i> th term of	this sequence.
(a) Draw pattern number 4.								(2 marks)
(b) Work out the total nu								
(3 marks)								
Grade 4	Sequences					G	rade 4	

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17	Here are the	first four term	s of an arithme	tic sequence.			
	4	11	18	25			
	Write down sequence.	an expression,	in terms of <i>n</i> , f	for the <i>n</i> th ter	m of the		
					(2 marks)		
18	Here are the first four terms of an arithmetic sequence.						
	35	31	27	23			
	Write down sequence.	an expression,	in terms of n , f	for the <i>n</i> th ter	rm of the		
					(2 marks)		
19	Here are the	first five term	s of an arithmet	tic sequence.			
	21	27	33	39	45		
	Write down sequence.	an expression,	in terms of <i>n</i> , f	for the <i>n</i> th ter	m of the		
					(2 marks)		
20	Here are the	first five term	s of an arithmet	tic sequence.			
	2	7	12	17	22		
	Write down sequence.	an expression,	in terms of <i>n</i> , f	for the <i>n</i> th ter	rm of the		
					(2 marks)		
	Grade	4			Seau	ences	Grade 4