Prime numbers



1	Aisha makes different arrays with 7 counters.
	She makes an array with 1 counter in each column.





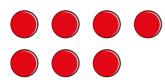








She makes an array with 2 counters in a column.



a) Is it possible to arrange the counters in another way so that they make a rectangular array?



Draw counters to support your answer.

2 2 2 2 2 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2					

b) What are the factors of 7?

	and	
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c) Explain why 7 is a prime number.

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2 Complete the table.

Number	Factors	Is the number prime?
5	1 and 5	Yes
9		
11		
14		
15		
19		

A prime number has exactly two factors: 1 and itself.

List the prime numbers up to 20

Is 25 a prime number? _____

How do you know?

Here are sequences of consecutive prime numbers.
Complete the sequences.

a) 7, 11, 13, , 19

b) 37, 31, 29, , 1



Here is part of a hundred square. Shade all the prime numbers.

51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

Here are some numbers.

175 126

2,378

777

9,000

381



The numbers are big. It is hard to check if they are prime.

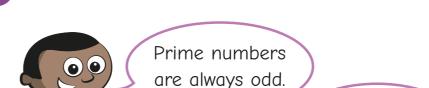
Tommy

I can tell quickly that none of these numbers are prime.



How does Annie know that none of the numbers are prime?						

Compare answers with a partner.



Mo and Alex are talking about prime numbers.



I think prime numbers can be even.



Alex

How do you know?	
Who is correct?	

Teddy writes five consecutive numbers.

Three of the numbers are prime.

What are the five consecutive numbers?

,	,	,	,	

Kim is thinking of a prime number.

It is one more than a multiple of 11 and one less than a factor of 48

What number could Kim be thinking of?

Are there any other answers?





