

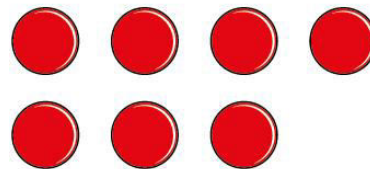
# Prime numbers

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? \_\_\_\_\_



1

Draw counters to support your answer.

b) What are the factors of 7?

and

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		

- 3 A prime number has two factors: 1 and itself.  
List the prime numbers up to 20
-

- 4 Is 25 a prime number? \_\_\_\_\_  
How do you know?

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5 Here are sequences of consecutive prime numbers.

Complete the sequences.

a) 7, 11, 13, , 19

b) 37, 31, 29, , 19

6 Colour 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

7

Here are some numbers.

126

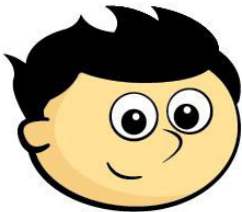
175

2,378

777

381

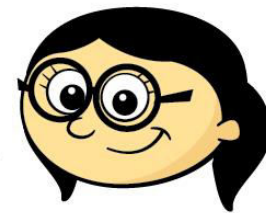
9,000



Jack

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

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



Annie



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

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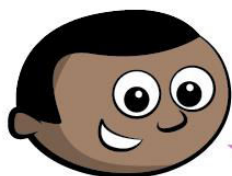
Compare answers with a partner.





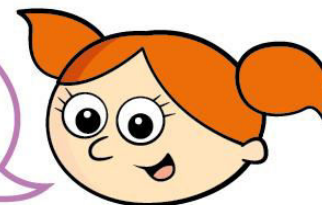
8

Mo and Alex are talking about prime numbers.



Prime numbers  
are always odd.

I think prime  
numbers can  
be even.



Who is correct? \_\_\_\_\_

How do you know?

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9

Teddy writes five consecutive numbers.

Three of the numbers are prime.

What are the five consecutive numbers?

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- 10 Kim is thinking of a prime number.  
It is in between a multiple of 11 and a factor of 48  
What number is Kim thinking of?