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.

b) What are the factors of 7?

c) Explain why 7 is a prime number.
(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
$\qquad$
4. Is 25 a prime number? $\qquad$
How do you know?

5 Here are sequences of consecutive prime numbers.
Complete the sequences.
a) 7, 11, 13, $\square$ , 19
b) $37,31,29$, $\qquad$ , 19

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.


How does Annie know that none of the numbers are prime?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
8 Mo and Alex are talking about prime numbers.


Who is correct? $\qquad$
How do you know?
$\qquad$

9 Teddy writes five consecutive numbers.
Three of the numbers are prime.
What are the five consecutive numbers?


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?
$\square$

