



1) Finish the definitions:

A prime number \_\_\_\_\_

A composite number \_\_\_\_\_



2) Sort the numbers correctly to show whether they are prime or composite numbers.

3, 6, 7, 9, 13, 15, 18, 27, 33, 41, 61, 81

Prime	Composite

3) Find all the prime numbers between 70 and 100 and write them in a list.



1) Michael says,

'All prime numbers are odd.'



Do you agree? Explain your thinking.

2) What number am I?

Use the clues to find all the possible numbers.

You might want to use a hundred square to help you.

I am a prime number less than 100.

I am 1 more than a multiple of 10.

3) What number am I?

I am a prime number less than 100.

I am 2 less than a multiple of 5.



1) Amira sets a challenge for her friend Marc.



Amira

I am thinking of a number. It is higher than 20. It is less than 60. It is a prime number. The sum of its digits is an odd number.

Can you find all the possible numbers she could be thinking of?

Is Marc correct?  
Explain your reasoning.



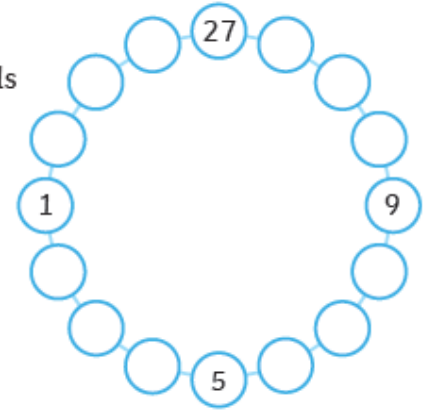
Marc

There are three possibilities.

2) Can you arrange the numbers in the circles so that each adjoining pair adds to make a prime number?

2, 3, 4, 6, 7, 8, 10,  
11, 12, 14, 15, 16

**Top Tip:** think about where the odd numbers will need to be placed.



# ANSWERS

- 1) A prime number *has only 2 factors: 1 and itself.*  
A composite number *has more than 2 factors.*

2)

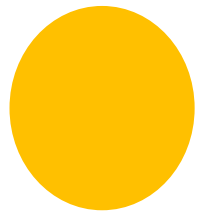
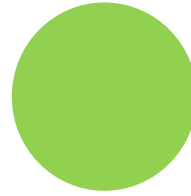
Prime	Composite
3	6
7	9
13	15
41	18
61	27
	33
	81

- 3) 71, 73, 79, 83, 89, 97

- 1) *Michael is incorrect, as 2 is a prime number and it is even. 2 is the only even prime number.*

- 2) 11, 31, 41, 61, 71

- 3) 3, 13, 23, 43, 53, 73, 83



1) Marc is incorrect. There are 5 numbers that fit all the criteria: 23, 29, 41, 43 and 47. They are all greater than 20, less than 60 and they are all prime. Their digit sums are all odd.

2) This is one possible solution:

