

# Prime Numbers

A natural number greater than 1 with no divisors other than 1 and itself.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
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
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

**Remember these facts about prime numbers!**

There are no even numbers except 2.

There are no prime numbers ending in 5, except 5.

The digits can't add up to 3 except 3 (digital root).

# Prime Numbers

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 list them below.

\_\_\_\_\_

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.

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

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.



Amira

Is Marc correct? Explain your reasoning.



Marc

There are three possibilities.

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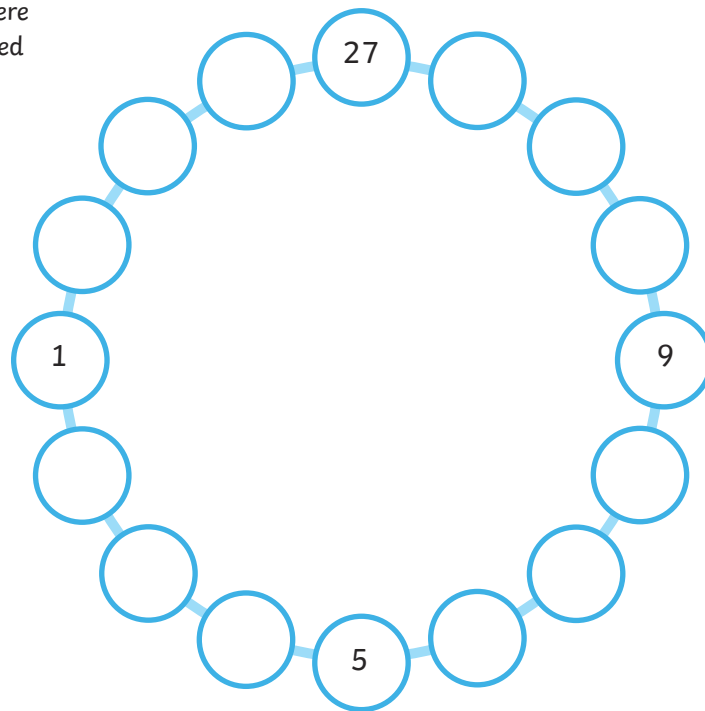


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2) Can you arrange the numbers in the circles so that each adjoining pair adds to make a prime number?

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.



# Prime Crime

I can identify prime numbers up to 100 and recall prime numbers up to 19.



- 1) The prime numbers to 20 have gone missing!  
Can you write them in the boxes below?

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- 2) The only clue we have about the identity of the thief is that they live in a house with a prime number. Tick the houses below where the thief might live.

