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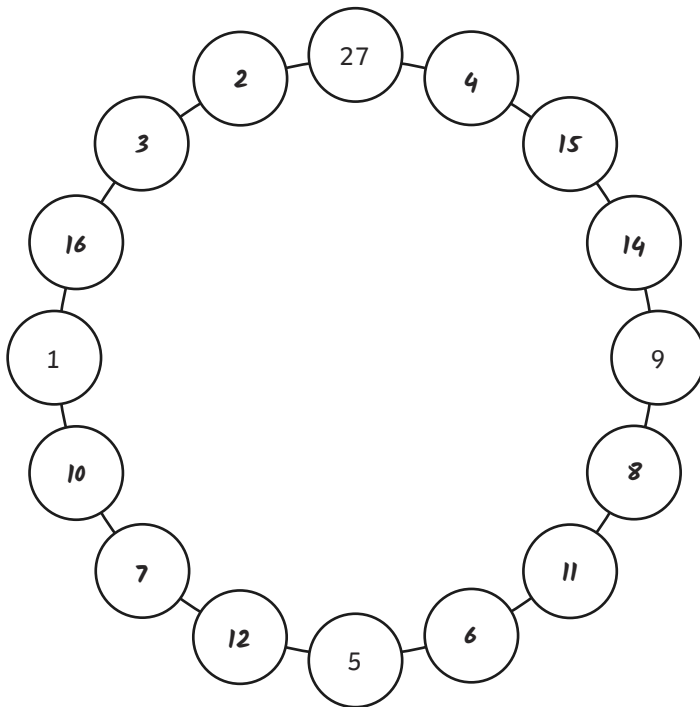
2) 11, 31, 41, 61, 71

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:

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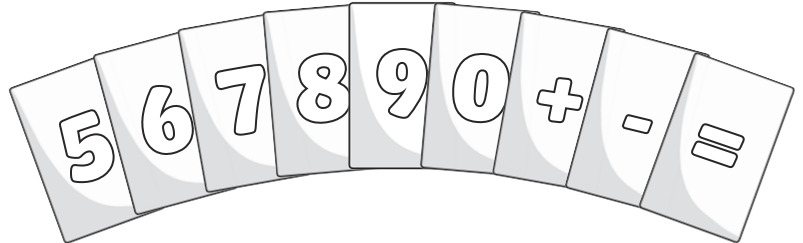Focused education on life's walk!
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Find the Primes

I can name all of the prime numbers to 20.

1) In the first column, write down all of the prime numbers to 20. The first one is done for you.

2) Use the numbers on the cards to calculate the prime numbers.

   You can only use each number once for each prime number and you can only use addition and subtraction.

   Good luck!

2	7 – 5 = 2

3) Did you get them all? Great work!

   Can you find more than one way to calculate them?

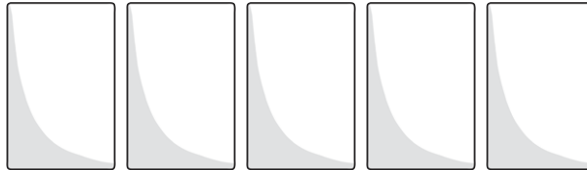**4)** Now, try choosing any 5 numbers from 0 to 9.

Which of the prime numbers can you calculate?

What if you were allowed to use × and ÷ ?

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Find the Primes **Answers**

Question	Answer
1-2	In the first column, write down all of the prime numbers to 20. The first one is done for you. Use the numbers on the cards to calculate the prime numbers. You can only use each number once for each prime number and you can only use addition and subtraction.

	2	7 – 5 = 2
	3	8 – 5 = 3
	5	5 + 0 = 5
	7	7 + 0 = 7
	11	6 + 5 = 11
	13	6 + 7 = 13
	17	8 + 9 = 17
	19	7 + 8 + 9 – 5 = 19

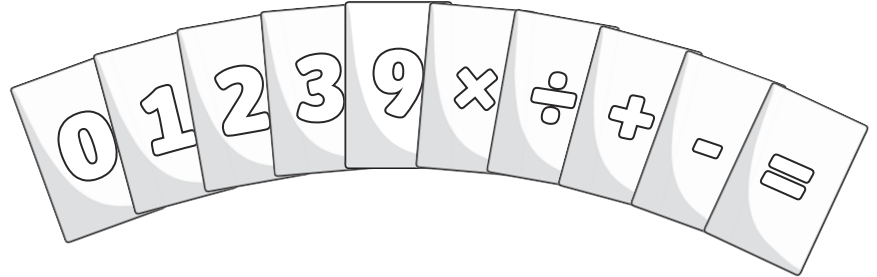| Question	Answer
3	Did you get them all? Great work! Can you find more than one way to calculate them?
	Multiple answers possible.
4	Now, try choosing any 5 numbers from 0 to 9. Which of the prime numbers can you calculate? What if you were allowed to use × and ÷ ?
	Multiple answers possible.

Find the Primes

I can name all of the prime numbers to 20.

1) In the first column, write down all of the prime numbers to 20. The first one is done for you.

2) Use the numbers on the cards to calculate the prime numbers.

   You can only use each number once for each prime number. You can use addition, subtraction, multiplication and division.

   Good luck!

2	2 + 0 = 2

3) Did you get them all? Great work!

   Can you find more than one way to calculate them?

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4) Now, try choosing any 5 numbers from 0 to 9.

Which of the prime numbers can you calculate?

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Find the Primes **Answers**

Question	Answer
1-2	In the first column, write down all of the prime numbers to 20. The first one is done for you. Use the numbers on the cards to calculate the prime numbers. You can only use each number once for each prime number. You can use addition, subtraction, multiplication and division.

	2	2 + 0 = 2
	3	1 x 3 = 3
	5	3 + 2 = 5
	7	3 x 2 + 1 = 7
	11	9 + 2 = 11
	13	9 + 1 + 3 = 13
	17	2 x 9 – 1 = 17
	19	9 x 2 + 1 = 19

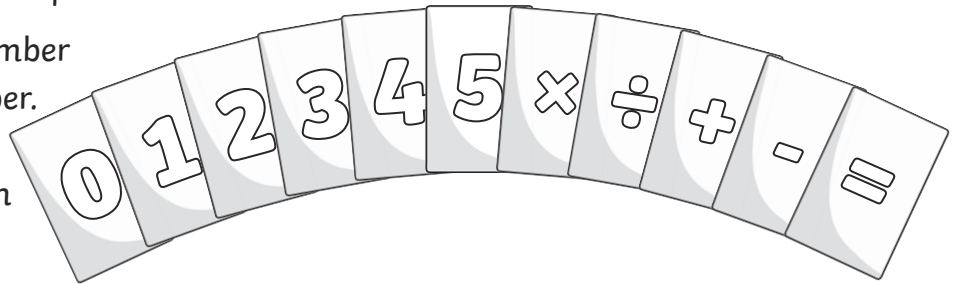| Question	Answer
3	Did you get them all? Great work! Can you find more than one way to calculate them?
	Multiple answers possible.
4	Now, try choosing any 5 numbers from 0 to 9. Which of the prime numbers can you calculate?
	Multiple answers possible.

Find the Primes

I can name all of the prime numbers to 20.

1) In the first column, write down all of the prime numbers to 20.
The first one is done for you.

2) Consecutive numbers are numbers which follow on from each other in order.
Consecutive numbers have a difference of 1 between them. Use the consecutive numbers on the cards to calculate the prime numbers.

You can only use each number once for each prime number. You can use addition, subtraction, multiplication and division.

Good luck!

2	2 – 0 = 2

3) Did you get them all? Great work!

Can you find more than one way to calculate them?

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4) Now, try choosing any 5 numbers from 0 to 9.

Which of the prime numbers can you calculate?

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Find the Primes **Answers**

Question	Answer	
1-2	In the first column, write down all of the prime numbers to 20. The first one is done for you. Consecutive numbers are numbers which follow on from each other in order. Consecutive numbers have a difference of 1 between them. Use the consecutive numbers on the cards to calculate the prime numbers. You can only use each number once for each prime number. You can use addition, subtraction, multiplication and division.	
	2	2 – 0 = 2
	3	3 – 0 = 3
	5	5 – 0 = 5
	7	5 + 2 = 7
	11	5 × 2 + 1 = 11
	13	5 × 2 + 3 = 13
	17	5 × 3 + 2 = 17
	19	5 × 3 + 4 = 19
3	Did you get them all? Great work! Can you find more than one way to calculate them?	
	Multiple answers possible.	
4	Now, try choosing any 5 numbers from 0 to 9. Which of the prime numbers can you calculate?	
	Multiple answers possible.	

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.

_____

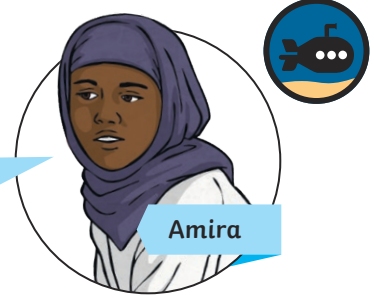**3)** What number am I?

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.

_____

_____

_____

_____

_____

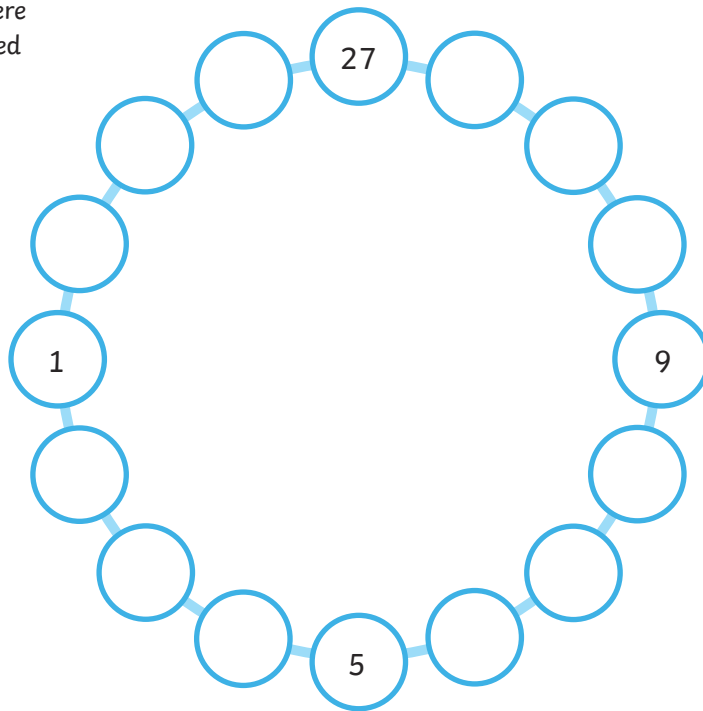**2)** Can you arrange the numbers in the circles so that each adjoining pair adds to make a prime number?

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.

27

1

9

5

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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) 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. |

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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?
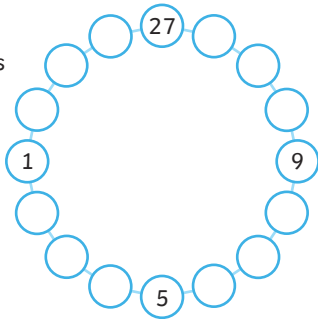
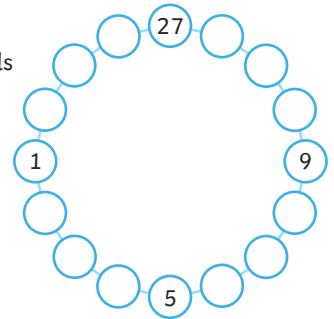Is Marc correct?
Explain your reasoning.

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

27

1

9

5

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