Bronze

1a. Circle the prime numbers.

3, 8, 9, 17, 23, 31

VF

2a. Which of the following are composite numbers?

5	29	35
19	12	38

VF

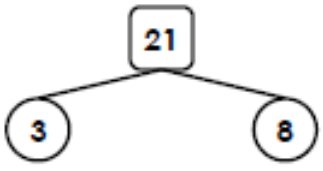
3a. Circle the numbers which are in the wrong place.

Prime Numbers	Composite Numbers
33	12
10	26
11	31
2	40

VF

4a. True or false?

The factor tree below is correct.



1b. Choose from the digit cards below to create composite numbers up to 100.

3	4	1	8

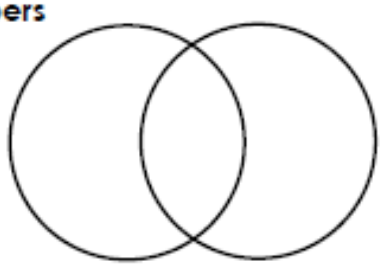
Find all the possibilities.

PS

2b. Place the numbers below on the Venn diagram.

Composite numbers

Multiples of 3



73	62	19	69	56	40	39

PS

3b. True or false?

All odd numbers are prime numbers.

Jacob

Explain your answer.

Silver

5a. Circle the numbers that have 2 as a prime factor.

4, 5, 9, 18, 29, 32

VF

6a. Which of the following are composite numbers that have 7 as a prime factor?

89	17	14
32	49	7

VF

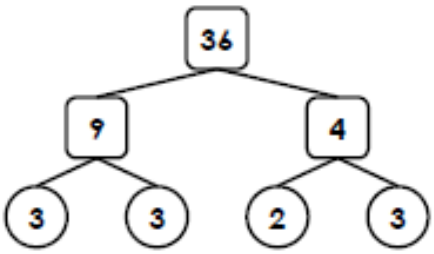
7a. Circle the numbers which are in the wrong place.

Prime Factor of 30	Not a Prime Factor of 30
2	30
4	6
5	15
10	3

VF

8a. True or false?

The factor tree below is correct.



4b. Choose from the digit cards below to create composite numbers up to 50 that have a prime factor of 3.

8	1	2	7

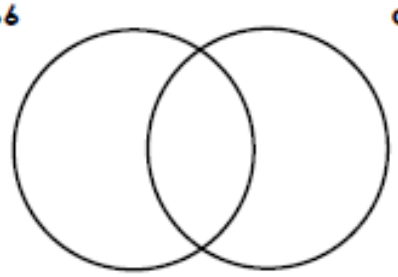
Find all the possibilities.

PS

5b. Place the numbers below on the Venn diagram.

Prime factors of 66

Prime factors of 63



33	7	11	22	2	31	3

PS

6b. True or false?

2 is the only even prime number.

Grace

Explain your answer.

Gold

9a. Circle the numbers where the sum of the prime factors is less than 12.

15, 26, 28, 32, 41, 49

VF

10a. Which of the following are composite numbers and have 8 as the sum of their prime factors?

15	89	20
59	16	9

VF

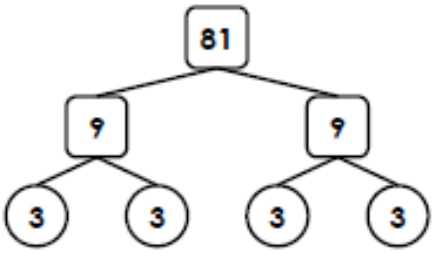
11a. Circle the number pairs which are in the wrong place.

Sum of Prime Factors is 15	Sum of Prime Factors is not 15
16 and 20	10 and 16
21 and 6	12 and 21

VF

12a. True or false?

The sum of the prime factors in the tree below does not equal 13.



7b. Choose from the digit cards below to create composite numbers up to 50 that have only two prime factors.

5	2	3	1

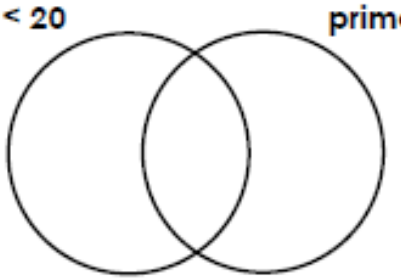
Find all the possibilities.

PS

8b. Place the numbers below on the Venn diagram.

Sum of prime factors < 20

Has 5 as a prime factor



26	15	38	35	85	55	14

PS

9b. True or false?

Theo

The sum of the prime factors of any composite number is always odd.

Explain your answer.

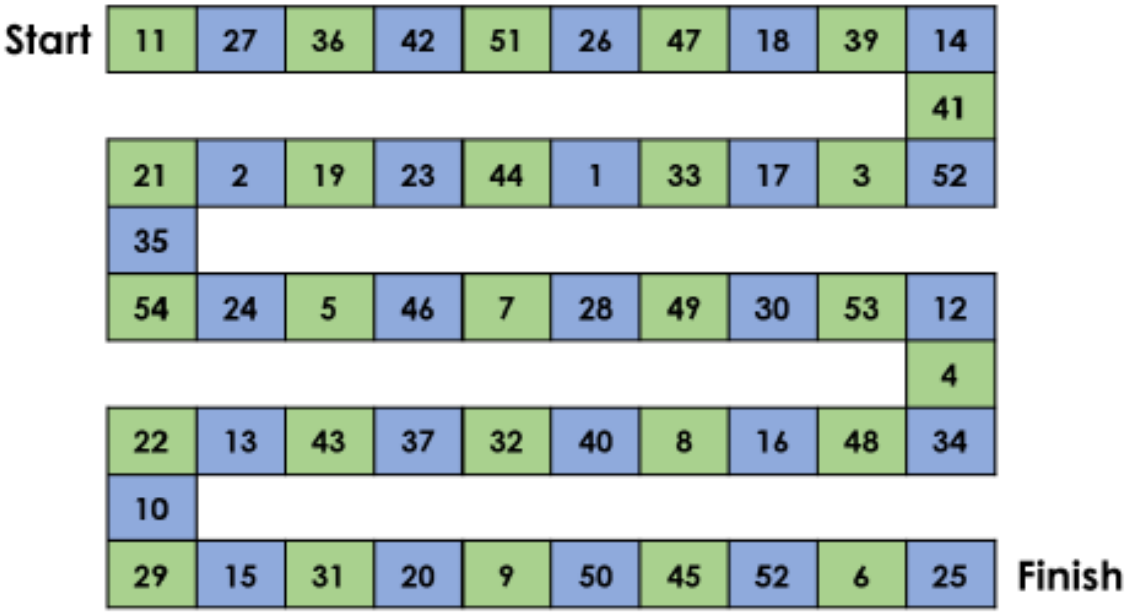
Challenge

1. Complete the grid below so that each row and column add together to make a prime number. An example has been done for you.

5	2
6	35

Investigate the different possibilities.

2. With a partner, take it in turns to roll the die and move forward the correct number of spaces on the game below.



Be careful! If you land on a prime number, move back two spaces. If you land on a prime number that is also a prime factor of 30, move forward two spaces.

The first player to reach the finish wins!

DP