

Bronze

1a. 3, 17, 23 and 31

2a. 35, 12 and 38

3a. 33, 10 and 31

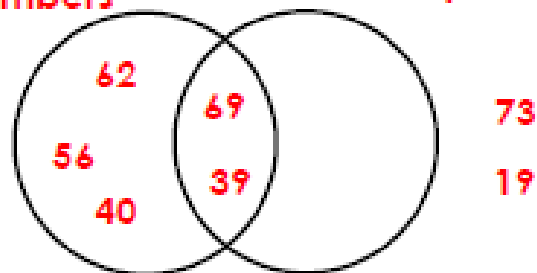
4a. False. The factors should be 3 and 7

1b. 14, 18, 34, 38, 48, 81, 84

2b. Composite

numbers

Multiples of 3



3b. False; while 2 is the only even prime number, many odd numbers are composite, for example, 15 is a multiple of 3 and 5.

Silver

5a. 4, 18 and 32

6a. 14 and 49

7a. 4, 10 and 3

8a. False. The prime factors of 4 are 2 and 2

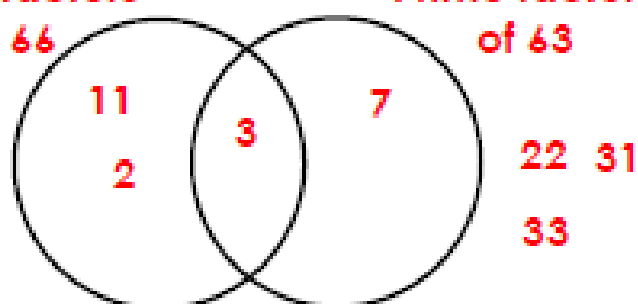
4b. 12, 18, 21, 27

5b. Prime factors

of 66

Prime factors

of 63



6b. True; all other prime numbers are odd, for example, 3, 5 and 7. All other even numbers are composite as they can be divided by 2.

Gold

9a. 15, 28 and 32

10a. 15 and 16

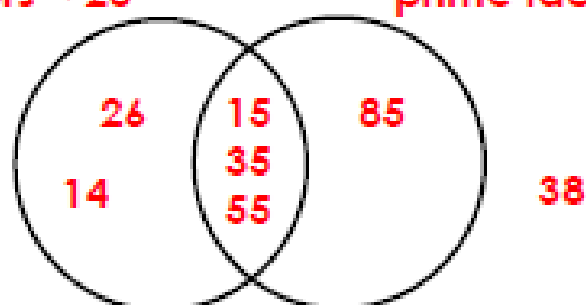
11a. 16 and 20, 10 and 16

12a. True

7b. 15, 21, 25 and 35

8b. Sum of prime
factors < 20

Has 5 as a
prime factor



9b. False; the sum of the prime factors of any composite number can be odd or even. For example, the prime factors of 10 are 2 and 5 which make 7 altogether however the prime factors of 15 are 3 and 5 which make 8 altogether.

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.

Various answers, for example:

5	2
6	35

1	6
2	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.

Various answers, outcome will depend on the numbers rolled.

Start	11	27	36	42	51	26	47	18	39	14
										41
	21	2	19	23	44	1	33	17	3	52
	35									
	54	24	5	46	7	28	49	30	53	12
										4
	22	13	43	37	32	40	8	16	48	34
	10									
	29	15	31	20	9	50	45	52	6	25
										Finish

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!