

Maths Mastery Challenge Cards

Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 2?

How do you know a number is a multiple of 3?

How do you know a number is a multiple of 4?



Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 5?

How do you know a number is a multiple of 6?



Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 9?

How do you know a number is a multiple of 10?



Multiples and Factors

Common Factors

Name one common factor of 28 and 54, explaining how you know.



Can you find the highest common factor of 28 and 54?

Multiples and Factors

Common Factors

Name one common factor of 35 and 60, explaining how you know.



Can you find the highest common factor of 35 and 60?

Multiples and Factors

Common Factors

Name one common factor of 40 and 75, explaining how you know.

Write some numbers for which a partner should find common factors.



Multiples and Factors

Factor Pairs

Explain how you would find all the factor pairs of 36 to make sure you have found them all.

Compare your answer with a partner.
Can you improve your explanations?



Maths Mastery Challenge Cards

Answers

Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 2?

The number is even – ends in 0, 2, 4, 6 or 8.

How do you know a number is a multiple of 3?

The digital root is 3, 6 or 9 (add the digits until you get a single digit).

How do you know a number is a multiple of 4?

The last 2 digits are in the 4 times table.

Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 5?

The last digit is 5 or 0.

How do you know a number is a multiple of 6?

The digital root is 3, 6 or 9 and the number is even.

Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 9?

The digital root is 9.

How do you know a number is a multiple of 10?

The last digit is 0

Multiples and Factors

Common Factors

Name one common factor of 28 and 54, explaining how you know.

Can you find the highest common factor of 28 and 54?

Both numbers are even, so 2 is a common factor.

The highest common factor is 2.

Multiples and Factors

Common Factors

Name one common factor of 35 and 60, explaining how you know.

Can you find the highest common factor of 35 and 60?

Both numbers end in 5 or 0, so 5 is a common factor.

The highest common factor is 5.

Multiples and Factors

Common Factors

Name one common factor of 40 and 75, explaining how you know.

Write some numbers for which a partner should find common factors.

Both numbers end in 5 or 0, so 5 is a common factor.

The highest common factor is 5.

Multiples and Factors

Factor Pairs

Explain how you would find all the factor pairs of 36 to make sure you have found them all.

Compare your answer with a partner. Can you improve your explanations?

Start with 1 and the number itself - 36. Write either end of the list.

1 36

Work through each number to see if it one of a pair. In this case 2×18 , 3×12 , 4×9 . 5 is not a factor. 6×6 . This is the last pair as the numbers from 1 and from 36 have met at 6.