## Maths Mastery Challenge Cards

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 ?


## 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 40 and 75, explaining how you know.

Write some numbers for which a partner should find common 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

## 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

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 $\mathbf{2}$ digits are in the 4 times table.

## 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

## 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 $\mathbf{2}$ is a common factor.
The highest common factor is $\mathbf{2}$.

## 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 $\mathbf{0}$, so $\mathbf{5}$ is a common factor.
The highest common factor is 5 .

## 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 $\mathbf{0}$, 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.
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Work through each number to see if it one of a pair. In this case $2 \times 18,3 \times 12,4 \times 9.5$ is not a factor. $6 \times 6$. This is the last pair as the numbers from 1 and from 36 have met at 6 .

