## Multiplication patterns <br> Worksheet

Mr Ward

Warm up - Missing values
Can you complete the calculations?
$7 \times \square=28 \quad 40=\square \times 8 \quad 6 \times 9=\square \quad 42=\square \times 7$

$$
\times 6=72 \quad 7 \times \square=56 \quad 121=11 \times \square \quad 9 \times 9=\square
$$

Using a counting stick to show times tables Shading $10 \times 10$ grids


Shade all multiples of 6 in the grid
Continue beyond $10 \times 6=60$
What patterns do you notice?

## Using a counting stick to show times tables

 Shading $10 \times 10$ grids

Shade all multiples of 12 in the grid What patterns do you notice?

## Talk Task - Exploring multiplication patterns

1. Shade in the $10 \times 10$ grids for the $2 x, 4 \times$ and $8 x$ tables
2. Reflect on the following questions:

What do you notice? What's the same? What patterns exist?

2x multiplication table

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4x multiplication table


8x multiplication table


## Identifying multiplication patterns.

1. Shade in the $10 \times 10$ grids for the $3 x, 7 x, 11 x$ and $12 x$ tables
2. Compare the different multiplication tables
3. Consider the questions already asked such as:

What do you notice? What's the same? What patterns exist?


7x table



12x table

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Identifying multiplication patterns.

3x table

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7x table

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Identifying multiplication patterns.

11x table

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## Challenge Slide

How many different ways can you complete the multiplications shown below?

$$
\begin{array}{ll}
\square x \square=24 & \square x \square=50 \\
\square \times \square=32 & \square x \square=75 \\
\square \times \square=44 & \square \times \square=100
\end{array}
$$

