## Securing Multiplication Facts: Representing the Seven Times Table

 WorksheetMathematics

Mr Ward

## Warm up - Multiple Mystery!

Can you use your knowledge of the 4x
multiplication table to identify the multiples of 4

## 366 <br> 64 <br> 201 <br> 452

525

## Exploring patterns in the 7x multiplication table

Do you spot any patterns?


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## Talk Task - Match the representations

Can you match the multiplications with the representations?

| $7+7+7+7$ | $4 \times 7$ | $7 \times 3$ | $\begin{aligned} & 0000000 \\ & 0000000 \\ & 0000000 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| $\underbrace{3} \underbrace{3} \underbrace{3} \underbrace{3} \underbrace{3}$ |  |   <br> 7  |  |
| 7 lots of 3 | $3 \times 7$ | $3+3+3+3+3+3+3$ | $7+7+7$ |




## Representing multiplications

Find different ways to represent the following equations using different abstract equations, drawings, equipment and jottings.

Representations could include:
Bar models
Area models
Cuisenaire rods
Arrays
Number sentences
Geoboards

$$
\begin{aligned}
& 7 \times 6=42 \\
& 7 \times 7=48 \\
& 7 \times 8=56 \\
& 7 \times 9=63
\end{aligned}
$$

## Challenge Slide

Can you use inverse to show these equations?
How many different ways can you do so?
$\square \div \square=32$
$\square \div \square 6$
$\square \div \square=56$
$\square \div \square=84$
$\square \div \square=64$
$\square \div \square=120$

