## FACTORS

## GET READY

1) What is the lowest common multiple of 5 and 8 ?
2) Which number is not a multiple of 9 ?

$$
\begin{aligned}
& 97 \quad 81 \\
& \text { 3) } \begin{array}{l}
\text { 37 } \\
\times 8
\end{array}=32
\end{aligned}
$$

$$
\text { 4) } 6 \times 3=\_-8
$$

1) What is the lowest common multiple of 5 and 8 ? 40
2) Which number is not a multiple of 9 ?

$$
\begin{array}{llll}
97 & 81 & 54 & 18
\end{array}
$$

3) $\underline{4} \times 8=32$
4) $6 \times 3=\underline{26}-8$

## LET'S LEARN

A factor is a number that you ___ by another number to make a product.

A factor is a number that exactly into another number.

What is a factor?


2 rows of 3 are equal to $6 \quad 2 \times 3=6$
3 columns of 2 are equal to $63 \times 2=6$
2 and 3 are factors of 6
Have a think
Are there any other factors of 6 ?


1 row of 6 is equal to $6 \quad 1 \times 6=6$
6 columns of 1 are equal to $6 \quad 6 \times 1=6$
1 and 6 are factors of 6
The factors of 6 are: 1, 2, 3 and 6


The factors of 18 are: $1,2,3,6,9$ and 18


The factors of 20 are: $1,2,4,5,10$ and 20

Have a think


The factors of 25 are: 1,5, and $1 n 2625$
(3)

Write all the factor pars for these numbers.


Any number which has 8 as a factor also has and as factors.

Any number which has 10 as a factor also has $\qquad$ and $\qquad$ as factors.
$\qquad$
$\qquad$

## YOUR TURN

Have a go at questions 1 to 4 on the worksheet

## 1,3 and 7 are all factors of a number between

 40 and 50What is the number? 42

The number must be a multiple of $\mathbf{3}$ and $\mathbf{7}$

| 3 | 24 |
| :--- | :--- |
| 6 | 27 |
| 9 | 30 |
| 12 | 33 |
| 15 | 36 |
| 18 |  |
| 21 |  |


| 7 | 56 |
| :--- | :--- |
| 14 | 63 |
| 21 | 70 |
| 28 | 77 |
| 35 | 84 |
| 42 |  |
| 49 |  |

List the factors of these numbers:

## 21 and 2

What do you notice?
$29 \quad 1$ and 29
They all only have 2 factors

$$
0.5 \times 22=11
$$

This means that 0.5 is a factor of 11

Factors have to be integers (whole numbers).

## Have a think $\square$

What are the factors of 11 ?

$$
1 \text { and } 11
$$

## YOUR TURN

Have a go at questions 5 to 9 on the worksheet

