## To understand and find common

 factors,
## GET READY

| $1 \times 6=6$ | $1 \times 7=7$ | $1 \times 8=8$ | $1 \times 9=9$ |
| :--- | :--- | :--- | :--- |
| $2 \times 6=12$ | $2 \times 7=14$ | $2 \times 8=16$ | $2 \times 9=18$ |
| $3 \times 6=18$ | $3 \times 7=21$ | $3 \times 8=24$ | $3 \times 9=27$ |
| $4 \times 6=24$ | $4 \times 7=28$ | $4 \times 8=32$ | $4 \times 9=36$ |
| $5 \times 6=30$ | $5 \times 7=35$ | $5 \times 8=40$ | $5 \times 9=45$ |
| $6 \times 6=36$ | $6 \times 7=42$ | $6 \times 8=48$ | $6 \times 9=54$ |
| $7 \times 6=42$ | $7 \times 7=49$ | $7 \times 8=56$ | $7 \times 9=63$ |
| $8 \times 6=48$ | $8 \times 7=56$ | $8 \times 8=64$ | $8 \times 9=72$ |
| $9 \times 6=54$ | $9 \times 7=63$ | $9 \times 8=72$ | $9 \times 9=81$ |
| $10 \times 6=60$ | $10 \times 7=70$ | $10 \times 8=80$ | $10 \times 9=90$ |
| $11 \times 6=66$ | $11 \times 7=77$ | $11 \times 8=88$ | $11 \times 9=99$ |
| $12 \times 6=72$ | $12 \times 7=84$ | $12 \times 8=96$ | $12 \times 9=108$ |

1) List the factors of 36
2) Which number is not a factor of 14 ?

$$
\begin{array}{llll}
1 & 4 & 7 & 14
\end{array}
$$

3) What fraction of the multiples of 7 are odd?

Less than half
Half
More than half
4) 64

48
32

1) List the factors of 36

$$
1,2,3,4,6,9,12,18,36
$$

2) Which number is not a factor of 14 ?

$$
\begin{array}{llll}
1 & 4 & 7 & 14
\end{array}
$$

3) What fraction of the multiples of 7 are odd?

Less than half
More than half
4) $64 \quad \boxed{56} \quad 48 \quad 40 \quad 32$

## LET'S LEARN

A common factor is a number that exactly into two or more numbers.


1 row of 8 is equal to $8 \quad 1$ and 8 are factors of 8


2 rows of 4 are equal to $8 \mathbf{2}$ and 4 are factors of 8
The factors of 8 are: 1, 2, 4 and 8

Have a think
The factors of 12 are: $1,2,3,4,6$ and 12
The factors of 8 are: 1, 2, 4 and 8
1,2 and 4 are factors of 12 and 8
1,2 and 4 are common factors of 12 and 8 Whitney and Dexter both have dark hair. They have dark hair in common.


## YOUR TURN

## Have a go at questions

 1-3 on the worksheetWhat is the highest common factor of 27 and 90 ?
The factors of 27 are 1, 3,9 and 27

The factors of 90 are
Have a think

1. $2,3,5,6,9,10,15,18,30,45$ and 90


Rosie has 14 tennis balls. Amir has 24 tennis balls.


Ball containers can hold 2, 4, 8 or 10 balls.
Each child wants to buy containers all of the same size and to have only full containers.

1) Which container size could both Amir and Rosie use?
2) Which container size could neither Amir nor Rosie use?

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## 10

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## YOUR TURN

## Have a go at questions

4-9 on the worksheet

