

## Place Value Mystery Number

Work with a partner or in a group to solve this puzzle.
Use these clues to find the missing number.

| The mystery number has been ordered with these numbers. |  |  |  | If you count back from the mystery number in thousands, you will come to the number 84. |
| :---: | :---: | :---: | :---: | :---: |
| 263872 | 264302 | ? | 279187 |  |
| smallest |  |  | greatest |  |
| Rounded to the nearest ten thousand, the mystery number is $\mathbf{2 7 0} 000$. |  |  |  | The digit sum of the mystery number is $\mathbf{2 7}$. |

The mystery number is $\qquad$ .

Think of your own mystery number. Can you write clues about your mystery number?
$\square$


How did you feel when solving this puzzle?

## Calculation Course

Mark and Jules are going to school. They both set off from their homes with a number. Their numbers change as they make their way along the paths. What number will they have when they reach school?


## Fraction Flags

Shade each flag using the given fractions.


Can you give a fraction for each of the 'remaining' colours?


## Decimal Place Value Game

## Each player will need:

0-9 digit cards

## Instructions:

Shuffle your set of cards and place them face down.
The first player must turn over a digit card and place it on their grid. The second player will take their turn.


Repeat this until both players have a distance.
The aim of the game is to make the greatest distance. The player with the greatest distance scores one point.

The winner is the first player to score five points.


Want to try something different? Why not decide on a target distance in metres and the winner is the person who gets closest to the number. For example, try to make a distance closest to 2800m.


## Matching Times

Roll two dice and find the time on the grid. If you can say an equivalent time, you can claim the square. For example, if you land on 540 seconds, you could say this is also 9 minutes. If not, your turn passes to the other player. The winner is the first player to connect four in a row, horizontally, diagonally or vertically.

|  | $\begin{gathered} 360 \\ \text { seconds } \end{gathered}$ | $\begin{gathered} 660 \\ \text { seconds } \end{gathered}$ | $\begin{gathered} 24 \\ \text { hours } \end{gathered}$ | $\begin{gathered} 60 \\ \text { seconds } \end{gathered}$ | $\begin{gathered} 2 \\ \text { weeks } \end{gathered}$ | $\begin{gathered} 21 \\ \text { days } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 120 \\ \text { seconds } \end{gathered}$ | $\begin{gathered} 72 \\ \text { hours } \end{gathered}$ | $\stackrel{2}{\text { minutes }}$ | $\begin{gathered} 480 \\ \text { minutes } \end{gathered}$ | $\begin{gathered} 720 \\ \text { seconds } \end{gathered}$ | $\begin{gathered} 35 \\ \text { days } \end{gathered}$ |
|  | $\begin{aligned} & 240 \\ & \text { minutes } \end{aligned}$ | $\begin{gathered} 30 \\ \text { seconds } \end{gathered}$ | $\begin{gathered} 300 \\ \text { minutes } \end{gathered}$ | $\begin{gathered} 1 \\ \text { hour } \end{gathered}$ | $\begin{gathered} 35 \\ \text { days } \end{gathered}$ | $\begin{gathered} 5 \\ \text { minutes } \end{gathered}$ |
|  | $\begin{gathered} 3 \\ \text { minutes } \end{gathered}$ | $\begin{gathered} 1 \\ \text { minute } \end{gathered}$ | $\begin{gathered} 600 \\ \text { seconds } \end{gathered}$ | $\begin{aligned} & 3600 \\ & \text { seconds } \end{aligned}$ | $\begin{aligned} & 600 \\ & \text { minutes } \end{aligned}$ | $\begin{gathered} 96 \\ \text { hours } \end{gathered}$ |
| $\bigcirc$ | $\begin{gathered} 420 \\ \text { seconds } \end{gathered}$ | $\begin{gathered} 48 \\ \text { hours } \end{gathered}$ | $\begin{gathered} 360 \\ \text { minutes } \end{gathered}$ | $1$ | $\begin{gathered} 1 \\ \text { year } \end{gathered}$ | $\begin{gathered} 240 \\ \text { seconds } \end{gathered}$ |
| $\bigcirc$ | $\begin{gathered} 62 \\ \text { minutes } \end{gathered}$ | $\stackrel{6}{\text { minutes }}$ | $\begin{gathered} 14 \\ \text { days } \end{gathered}$ | $\begin{gathered} 180 \\ \text { seconds } \end{gathered}$ | $\begin{gathered} 1 \\ \text { day } \end{gathered}$ | $\begin{gathered} 720 \\ \text { minutes } \end{gathered}$ |
|  | $\bigcirc$ |  |  |  |  |  |




