# Colin and Coco's Daily Maths Workout 

## Workout 6.3 <br> Answers

## Place Value



## Place Value Workout



## Place Value Workout

What is the value of the 3 in each number? What is the value of the 7 in each number?

| $1,703,750$ | 3 thousands |
| :--- | :--- |
| $3,296,045$ | 3 millions |
| $8,167,321$ | 3 hundreds |
| $4,329,461$ | 300 thousands |
| 462,739 | 3 tens |
|  |  |

## Place Value Workout

Start with 20,100,100 each time:

Start with 19,989,199 each time:
Find 1 less 20,100,099

| 1000 less | $20,099,100$ |
| :--- | :--- |
| 10,000 less | $20,090,100$ |
|  |  |

10 less
20,100,090

Find 1 more 19,989,200
100,000 more $20,089,199$
1000 more 19,990,199
1 million more $20,989,199$

You need:
A baseboard (as shown at the bottom of this page)
Two sets of cards 1-9 (Use playing cards or print off the cards at the back of the pack.)

To play:
Shuffle the two sets of cards together.
Put the cards in a deck face down.
Player one takes three cards and chooses which cards will be the millions, hundreds of thousands and tens on thousands digits.


Then it is Player 2's turn to pick three cards and make a number.
Player 1 now picks three new cards and tries to make a number between the two numbers made so far.
If they succeed they score a point. If not, no point is scored.
Put all cards back into the deck and shuffle the deck.
Players then swap roles.
To win:
The winner is the first player to score five points.

First number

$$
\square, \square \square 0,000
$$ $\square, \square \square, 003 \begin{aligned} & \text { Try to make a number } \\ & \text { in between }\end{aligned}$

Second number

$$
\square, \square \square 0,000
$$

Put digits in the empty boxes so that the three numbers are in order from smallest to largest.

Complete them in several different ways.

$$
\begin{aligned}
& 4, \frac{6}{A} 28,579 \\
& \text { 4, 6 } 28 \text {, } 770 \\
& \text { 4,6 3 1, 874 }
\end{aligned}
$$

Are there any boxes that it is impossible to put a 7 in? Why?
What about other impossible digits?
e.g. It is impossible to put a 7 in box $A$ as it must be 6 or less

Are there any boxes that could have any of the digits in them?
Now complete it using the digits $0,1,2,3,4,5,6,7,8$, and 9 once each.

Colin and Coco are plotting numbers on a number line.
They are picking cards to fill the empty boxes. Coco is making the number at each end of the line.
Then Colin finds the number that is exactly half way between them.


The four cards they have picked are $3,5,6$ and 8
Using the number line above, make some numbers and calculate the midpoints.
Colin plots the midpoint as 5,150,000. What were Coco's numbers? 3,500,000 and $6,800,000$ or $3,800,00$ and $6,500,000$

Can you find a smaller midpoint?3,600,000 and 5,800,000 or 3,800,00 and $5,600,000$ have a midpoint of $4,700,000$

Investigate what happens to the midpoint if you keep the millions digits the same but swap the hundreds of thousands digits.
e.g. The midpoint between $5,600,000$ and $8,300,000$ compared to the midpoint between $5,300,000$ and $8,600,000$ The midpoint stays the same, because numbers change by equal amounts.

Colin is looking at prize money for some sporting events.
The prize money for the Caribou Golf World Cup competition is $£ 1,050,000$
The prize money for the Reindeer Cricket Cup is $£ 1,500,990$
The prize money for the Moose Hockey Tournament is $£ 1,111,000$
Which competition has the most prize money?
Cricket

Coco is looking at property prices.
House A is detached with stables for $£ 2,450,000$
House B is detached with tennis courts for $£ 2,495,000$
House $C$ is detached with an annex for $£ 2,500,000$
House D is detached with a paddock for $£ 2,449,000$
Put the houses in ascending order of price.
D, A, B, C

Trevor wins $£ 10,000,500$ in a lottery draw.
He gives $£ 1000$ to charity.
How much does he have left?
£9,999,500

British railway stations are busy places. In one year the number of passengers travelling through the following stations was:
Newcastle - 7,706,476 passengers
Barking - 7,427,422 passengers
Romford - 6,998,896 passengers
York - 7,581,428 passengers
Put the stations in order from busiest to quietest.
Newcastle, York, Barking, Romford

In recent research Coco finds the approximate populations of some countries.
United Kingdom - 65,080,000
France - 66.4 million
Italy - 60,930,000
Put the populations in order of size from smallest to largest.
Italy, UK, France

Create your own problems for putting numbers in order.

Using the digits from today's date create all the numbers from 1-20. You can use any or all of the four operations. You must use all the digits every time.

## 1 <br> 11

2
12
313
4
14
$5 \quad 15$
$6 \quad 16$
$7 \quad 17$
$8 \quad 18$
9
19
10 20

## Cards for the Games



