Colin and Coco's Daily Maths Workout

Workout 6.3   **Answers**

Place Value

Place Value Workout

Insert < or >

702,000 (>) 701,000   1,062,043 (<) 1,062,304

4,940,000 (<) 5,190,000   5,140,320 (>) 5,140,032

4,734,000 (>) 3,737,000   6,734,377 (>) 1,734,733

2,435,000 (<) 2,465,000   2,099,999 (<) 2,100,001

810,100 (>) 801,100   7,811,000 (>) 7,810,999

Place Value Workout

What is the value of the 3 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

What is the value of the 7 in each number?

2,274,650 | 70 thousands

5,289,475 | 7 tens

8,765,321 | 700 thousands

7,329,491 | 7 millions

3,427,839 | 7 thousands

Place Value Workout

Start with 20,100,100 each time:

Find 1 less | 20,100,099

1000 less | 20,099,100

10,000 less | 20,090,100

10 less | 20,100,090

Start with 19,989,199 each time:

Find 1 more | 19,989,200

100,000 more | 20,089,199

1000 more | 19,990,199

1 million more | 20,989,199

Largest Wins Game

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.

> I have turned over a 3, 7 and 4. I am going to make 7 million, 4 hundred and thirty thousand.

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   ☐,☐☐0,000

☐,☐☐0,000   Try to make a number in between

Second number   ☐,☐☐0,000

Missing Number Workout

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

Complete them in several different ways.

4, [6] 2 [8] , [5] 7 [9]
   A

4, 6 [2] 8, [7] 7 [0]

4, 6 [3] [1] , 8 7 [4]

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.
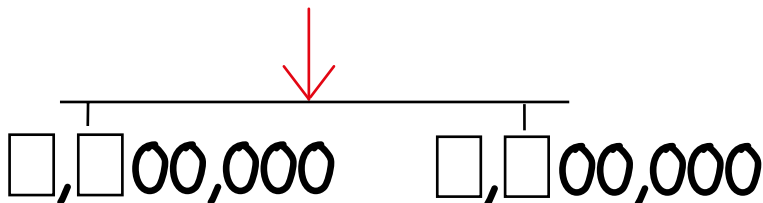
Midpoint Challenge

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.

□,□00,000   □,□00,000

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.

Word Problem Workout

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.

1 - 20 Workout

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 _____   11 _____

2 _____   12 _____

3 _____   13 _____

4 _____   14 _____

5 _____   15 _____

6 _____   16 _____

7 _____   17 _____

8 _____   18 _____

9 _____   19 _____

10 _____   20 _____

Cards for the Games

1	2	3
4	5	6
7	8	9