## Colin and Coco's Daily Maths Workout

## Workout 4.5

Fractions: Calculating


$$
\begin{aligned}
& \frac{1}{6}+\frac{1}{6}=\square \\
& \frac{2}{6}+\frac{1}{6}=\square \\
& \frac{1}{5}+\frac{3}{5}=\square \\
& \frac{5}{8}+\frac{2}{8}=\square
\end{aligned}
$$

$$
\frac{1}{4}+\frac{1}{4}=\square
$$

$$
\frac{1}{9}+\frac{1}{9}=
$$

$\square$

$$
\frac{1}{9}+\frac{2}{9}=\square
$$

$$
\frac{5}{8}+\frac{3}{8}=
$$

$\square$

$$
\frac{3}{7}+\frac{3}{7}=\square
$$

$\square$

$$
\frac{2}{9}+\frac{6}{9}=
$$

$\square$

$$
\frac{6}{9}+\frac{3}{9}=\square
$$

$$
\frac{2}{8}+\frac{1}{8}+\frac{4}{8}=
$$

$\square$
Fractions: Calculating Workout

$$
\begin{aligned}
& \frac{2}{6}-\frac{1}{6}=\square \\
& \frac{3}{5}-\frac{1}{5}=\square \\
& \frac{4}{6}-\frac{3}{6}=\square \\
& \frac{3}{7}-\frac{1}{7}=\square
\end{aligned}
$$

$$
\frac{6}{7}-\frac{1}{7}=\square
$$

$$
\frac{2}{9}-\frac{1}{9}=
$$

$\square$

$$
\frac{7}{8}-\frac{2}{8}=\square
$$

$$
\frac{7}{9}-\frac{5}{9}=
$$

$\square$

$$
\frac{5}{6}-\frac{2}{6}=\square
$$

$$
\frac{5}{6}-\frac{4}{6}=
$$

$\square$

$$
\frac{3}{9}-\frac{2}{9}=\square
$$

$\square$
Fractions: Calculating Workout
$\square$

$$
\frac{8}{9}-\frac{1}{9}-\frac{2}{9}=
$$

$$
\begin{array}{r}
F \\
\frac{1}{5} \text { of } 25=\square
\end{array}
$$

$\square$ $\frac{1}{3}$ of $45=$ $\square$ $\frac{2}{3}$ of $39=$ $\square$
$\frac{1}{4}$ of $64=$

$$
\frac{3}{4} \text { of } 56=
$$

$\square$ $\frac{1}{5}$ of $65=$ $\square$
$\frac{2}{3}$ of $51=$ $\square$ $\frac{3}{5}$ of $60=$ $\square$ $\frac{3}{8}$ of $72=$ $\square$
$\frac{2}{3}$ of $48=$ $\square$ $\frac{4}{5}$ of $55=$ $\square$ $\frac{5}{8}$ of $80=$ $\square$

You need:
Fractions of Amounts (4) Game Board
Counters or pencils

To play:
Every time it is your turn you cover (or colour) two numbers on the board.
The bold number represents the 'Whole.'
The italic number represents the fraction of that whole.
Choose whether to find $\frac{2}{3}$ or $\frac{2}{5}$ of any of the wholes. Cover that whole and the answer.


To win:
The winner is the first player to colour 5 in a line, next to each other, horizontally, vertically or diagonally.

Fractions of Amounts (4) Board

| 20 | 18 | 27 | 12 | 45 | 20 | 24 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 8 | 9 | 14 | 25 | 6 | 40 | 2 |
| 25 | 2 | 50 | 16 | 12 | 10 | 27 | 8 |
| 10 | 16 | 15 | 14 | 40 | 14 | 45 | 18 |
| 30 | 20 | 20 | 12 | 21 | 12 | 18 | 10 |
| 3 | 10 | 18 | 4 | 30 | 14 | 30 | 6 |
| 12 | 12 | 6 | 18 | 15 | 8 | 21 | 16 |
| 15 | 18 | 35 | 16 | 24 | 4 | 35 | 8 |

Put digits in the empty boxes to complete the calculations. Complete each one in several different ways.

$$
\begin{aligned}
& \square+\frac{3}{7}=\frac{\square}{7} \\
& \frac{5}{9}=\frac{\square}{\square}+\frac{\square}{9} \\
& \frac{\square}{\square 0}-\frac{2}{10}=\frac{\square}{1 \square}
\end{aligned}
$$

Are there any boxes that it is impossible to put a 7 in? Why?

Are there any boxes that could have any of the digits in them?

Now complete all the calculations together using the digits $0,1,2,3,4,5,6,7,8$ and 9 once each.

## Coco is buying packets of sweets.

Jellied Eels Mint Rock Liquorice Sticks


If she buys Jellied Eels and Mint Rock the total weight of the two packets of sweets is $\frac{7}{8} \mathrm{~kg}$.

If she buys Jellied Eels and Liquorice Sticks the total weight of the two packets of sweets is $\frac{5}{8} \mathrm{~kg}$.

If she buys Mint Rock and Liquorice Sticks the total weight of the two packets of sweets is $\frac{6}{8} \mathrm{~kg}$.

What is the weight of each packet of sweets?

Coco has a book with 240 pages.
She reads $\frac{5}{8}$ of the book.
How many pages has she read?

Colin is baking a cake. He has a bag of flour with 750 g of flour in it. He uses $\frac{4}{5}$ of the flour.
What weight of flour does he use?

Coco has a bottle of lemonade. It has 880 ml of lemonade in it. Coco drinks $\frac{3}{8}$ of the lemonade. How much lemonade is left?

Coco is making a fruit salad.
$\frac{3}{9}$ of the salad is apples. Oranges make up $\frac{2}{9}$ of the salad.
Bananas make up $\frac{1}{9}$ of the salad.
The rest of the salad is pears.
What fraction of the salad is made up of pears?

Coco is baking cup cakes for the school fair.
She takes $\frac{4}{5}$ of the cakes to the fair and gives the rest to Colin.
She gives 6 cup cakes to Colin.
How many cup cakes did she bake altogether?

Create your own problems calculating with fractions.

## Use the clues to work out Colin's mystery number.

You may want to cross numbers off on the 100 grid as you consider each clue.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

1) I am an even number less than 80
2) I am not a multiple of 10
3) My digits are not equal
4) I am a multiple of 2
5) The difference between my digits is less than 4
6) The sum of my digits is odd
7) I am not a multiple of 6
8) My tens digit is less than my ones digit
9) I am a multiple of 4
10) I am the product of two consecutive numbers

Colin's mystery number is $\square$

## Create your own 'Who am I?' puzzle

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

Please share your puzzle with Colin @MathsCanDo

