Colin and Coco's Daily Maths Workout

Workout 4.12   Answers

KeeP-uppI (Term 5)

KPIs for Term 5
  Divide 1 and 2-digit numbers by 10 and 100
  Add and subtract fractions with the same denominator beyond the whole
  Find families of equivalent fractions
  Recall factor-factor-product relationships for 6,7,9,11 and 12 multiplication tables

Divide by 10 and 100 Workout

$3 \div 10 =$ 0.3 $7 \div 100 =$ 0.07 $26 \div 100 =$ 0.26 $9 \div 10 =$ 0.9

$13 \div 10 =$ 1.3 $9 \div 100 =$ 0.09 $62 \div 100 =$ 0.62 $9 \div 100 =$ 0.09

$31 \div 10 =$ 3.1 $1 \div 100 =$ 0.01 $71 \div 100 =$ 0.71 $53 \div 10 =$ 5.3

$57 \div 10 =$ 5.7 $5 \div 100 =$ 0.05 $87 \div 100 =$ 0.87 $53 \div 100 =$ 0.53

$9 \div 10 =$ 0.9 $3 \div 100 =$ 0.03 $99 \div 100 =$ 0.99 $98 \div 100 =$ 0.98

Fractions Workout

Calculate

$\frac{2}{3} + \frac{2}{3} = \boxed{\frac{4}{3}}$ $\frac{5}{4} - \frac{2}{4} = \boxed{\frac{3}{4}}$ $\frac{3}{7} + \boxed{\frac{6}{7}} = \frac{9}{7}$

$\frac{5}{7} + \frac{4}{7} = \boxed{\frac{9}{7}}$ $\frac{8}{7} - \frac{3}{7} = \boxed{\frac{5}{7}}$ $\boxed{\frac{4}{5}} + \frac{4}{5} = \frac{8}{5}$

$\frac{3}{6} + \frac{5}{6} = \boxed{\frac{8}{6}}$ $\frac{7}{5} - \frac{4}{5} = \boxed{\frac{3}{5}}$ $\frac{10}{7} - \boxed{\frac{4}{7}} = \frac{6}{7}$

$\frac{5}{10} + \frac{8}{10} = \boxed{\frac{13}{10}}$ $\frac{15}{12} - \frac{7}{12} = \boxed{\frac{8}{12}}$ $\boxed{\frac{15}{9}} - \frac{7}{9} = \frac{8}{9}$

$\boxed{\frac{15}{9}} = \frac{7}{9} + \frac{8}{9}$ $\boxed{\frac{11}{9}} = \frac{15}{9} - \frac{4}{9}$ $\boxed{\frac{21}{12}} = \frac{10}{12} + \frac{11}{12}$

Complete the family of equivalent fractions

$\frac{1}{2} = \frac{\boxed{2}}{\boxed{4}} = \frac{\boxed{3}}{\boxed{6}} = \frac{\boxed{4}}{\boxed{8}}$

$\frac{1}{3} = \frac{\boxed{2}}{\boxed{6}} = \frac{\boxed{3}}{\boxed{9}} = \frac{\boxed{4}}{\boxed{12}}$

$\frac{1}{4} = \frac{\boxed{2}}{\boxed{8}} = \frac{\boxed{3}}{\boxed{12}} = \frac{\boxed{4}}{\boxed{16}}$

$\frac{1}{5} = \frac{\boxed{2}}{\boxed{10}} = \frac{\boxed{3}}{\boxed{15}} = \frac{\boxed{4}}{\boxed{20}}$

Times Tables Workout

$6 \times 7 =$ 42 $12 \times 6 =$ 72 $72 \div 6 =$ 12 $8 \times 12 =$ 96

$6 \times 9 =$ 54 $9 \times 12 =$ 108 $108 \div 12 =$ 9 $63 \div 7 =$ 9

$6 \times 6 =$ 36 $12 \times 11 =$ 132 $84 \div 7 =$ 12 $72 \div 9 =$ 8

$7 \times 7 =$ 49 $12 \times 12 =$ 144 $132 \div 12 =$ 11 $132 \div 11 =$ 12

$8 \times 7 =$ 56 $11 \times 11 =$ 121 $96 \div 12 =$ 8 $81 \div 9 =$ 9

Times Tables Game

You need:
Game Template for each player
Card Set A (print off the cards) for each player.
Card Set B (print off the cards) for each player.

To play:
Each player shuffles Card Set A, places them face down and picks 5 cards. They turn the cards over and place them on the template.
Each player shuffles Card Set B, places them face down and picks 5 cards. They turn the cards over and decides where to place each card on the template.
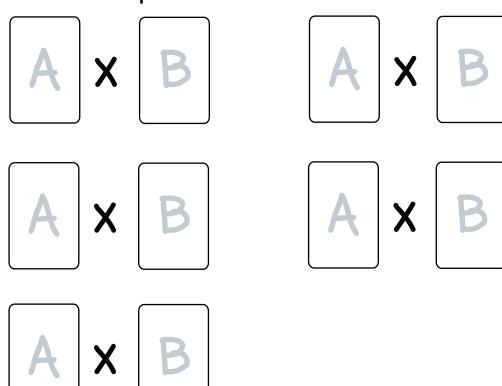
Both players now calculate the 5 products.
Both players find the sum of their 5 products.

To win:
The player who calculates the highest total wins one point.
The first player to get 10 points wins the Game.

Game Template

A X B   A X B

A X B   A X B

A X B

Times Tables Cards

Set A

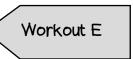| 5 | 6 | 7 | 8 |

| 9 | 10 | 11 | 12 |

Set B

| 6 | 7 | 8 |

| 9 | 11 | 12 |

Adding and Subtracting Workout

Put digits in the empty boxes to make the calculations correct.

Complete them in several different ways, where possible.

Possible Solution

$$\frac{\boxed{6}}{\boxed{8}} + \frac{\boxed{3}}{8} = \frac{9}{8}$$

$$\frac{\boxed{1}\,\boxed{0}}{\boxed{9}} - \frac{5}{9} = \frac{\boxed{5}}{9}$$

$$\frac{9}{7} = \frac{\boxed{4}}{\boxed{7}} + \frac{3}{7} + \frac{\boxed{2}}{7}$$

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

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 at least once each.

Equivalent Fraction Investigation

Complete the Times Tables grid.

· x	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Pick 2 rows ... e.g. Row 1 and Row 5

Write out all the multiples to create a family of equivalent of fractions.

1	2	3	4	5	6	7	8	9	10	11	12
5	10	15	20	25	30	35	40	45	50	55	60

Use other rows to investigate families of equivalent fractions.

Word Problem Workout

1. Colin and Coco are designing flags.
   $\frac{3}{5}$ of Colin's flag is blue. $\frac{6}{10}$ of Coco's flag is blue.
   Who has the most blue on their flag?

   Both the same

2. A pallet of 100 slabs weighs 550kg
   What does one slab weigh?

   5.5kg

3. Ten tickets to see a show cost £375?
   How much does each ticket cost?

   £37.50

4. In ten days the elephant at the zoo is fed 85kg of grain.
   He is fed the same amount each day.
   How much grain is he fed each day?

   8.5kg

5. A Farmer has a herd of 100 cows. He caters for them to eat 1290kg of
   food in total per day.
   How much is that per cow?

   12.9kg

6. A car is advertised for sale at £9995
   It can be bought with a first payment of £1500 then 100 equal installments.
   How much is each installment?

   £84.95

7. Coco gets seven out of ten in a French test. Colin gets fourteen out of twenty.
   Colin says he is better at French. Do you agree? Explain your thinking.

   No. They are the same.
   $\frac{7}{10} = \frac{14}{20}$

Create your own word problems.

Matching Buddies Workouts

÷10 and ÷100
Fill in the missing buddies.

17 ÷ 10		0.77
71 ÷ 100		0.17
7 ÷ 100		1.7
17 ÷ 100		0.07
70 ÷ 100		0.71
77 ÷ 10		7.7
77 ÷ 100		0.7

Multiplication Facts Workout
Fill in the missing buddies.

9 x 9		110
10 x 11		132
8 x 9		96
11 x 12		6 x 12
9 x 7		36
8 x 12		63
6 x 6		81

Division Facts Workout
Fill in the missing buddies.

108 ÷ 9		6
72 ÷ 12		7
54 ÷ 6		8
84 ÷ 12		9
132 ÷ 12		10
56 ÷ 7		11
110 ÷ 11		12

Equivalent Fractions
Fill in the missing buddies.

$\frac{1}{4}$		$\frac{4}{20}$
$\frac{1}{6}$		$\frac{9}{12}$
$\frac{1}{8}$		$\frac{6}{24}$
$\frac{3}{4}$		$\frac{8}{24}$
$\frac{1}{5}$		$\frac{8}{12}$
$\frac{2}{3}$		$\frac{3}{24}$
$\frac{1}{3}$		$\frac{4}{24}$

Create your own Matching Workouts