Colin and Coco's

Workout 1.11
Answers
KeeP-uppI (Term 4)


KPIs for Term 4
Represent and use number bonds within 20 (addition facts)
Represent and use number bonds within 20 (subtraction facts)
Recognise and find one half
Recognise and find one quarter
Use the language position, direction and movement

## Addition Workout

Represent and calculate.

| $16+4=20$ | $13+6=19$ | $14+4=$ | 18 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| $8+12=20$ | $9+11=20$ | $8+9=$ |  |
| $\begin{aligned} & \hline \bigcirc \bigcirc O \bigcirc \\ & 00000 \end{aligned}$ | $\begin{aligned} & 0 \bigcirc 090 \\ & 00000 \end{aligned}$ | $\begin{aligned} & \bigcirc \bigcirc O \\ & \bigcirc \bigcirc O \end{aligned}$ | $\begin{aligned} & \hline 0 \\ & \hline \bigcirc \end{aligned}$ |
|  |  | $\begin{aligned} & \bigcirc \bigcirc 0 \\ & \bigcirc O C \\ & \hline \end{aligned}$ |  |
| Subtraction Workout <br> Represent and calculate. |  |  |  |
| $17-8=9$ | $18-7=11$ | $20-7=$ |  |
|  |  |  |  |
| $20-8=12$ | 17-7=10 | 19-6= |  |
| $\begin{aligned} & \hline 00 \bigcirc 0 \\ & 00000 \end{aligned}$ | $\begin{aligned} & 0 \bigcirc 090 \\ & 00000 \end{aligned}$ | $\begin{aligned} & 0 \bigcirc 0 \\ & 0 \bigcirc 0 \end{aligned}$ |  |
| $\begin{aligned} & \hline \bigcirc \bigcirc \bigcirc 0 \\ & 0 \bigcirc 000 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0000 \\ & 00000 \end{aligned}$ | $\begin{aligned} & \bigcirc \bigcirc 0 \\ & \bigcirc \bigcirc 0 \end{aligned}$ | $2 \bigcirc$ |

FractionWorkout

Show $\frac{1}{4}$ of each shape.
$11+7=18$

| 00 | 00 |
| :--- | :--- | :--- |
| 00 | 00 |
| 00 | 00 |
| 00 | 00 |
| 00 | 00 |

$9+9=18$
00000 00000 00000

$19-9=10$


## $20-9=11$



Workout C

Show $\frac{1}{2}$ of each shape.


One out of 2 equal parts or 2 out of 4 equal parts shaded



One out of 4 equal parts shaded


## Direction Game

Arrow counter for each player (at the bottom of this page)
Direction Board (on the next page)
Direction Cards (at the bottom of this page)
To play:
Shuffle the cards and have them face down in a deck.
Start with your arrow counter on one of the shaded arrow squares.
Take turns to pick a card and move your arrow counter as instructed.
Score the number you land on.
If your arrow falls off the board you score nothing and start again, next turn, from any shaded arrow square.
Replace the card at the bottom of the deck.


To win:
The winner is the first player to score more than 15 points.


Direction Game Board


Put digits in the empty boxes so that the calculations are correct.

Complete them in several different ways.
Possible solution

$$
\begin{aligned}
& 17-10=7 \\
& 12+6=18 \\
& 19-5=14 \\
& 20-13=7
\end{aligned}
$$

Are there any boxes that it is impossible to put a 0 in? Why? What about other impossible digits?

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.

## A-Maze-ing Challenge

Colin is trying to go from one square to another, through the grid, to get to KeePuppI. He cannot go through the shaded squares.

Find different routes for him. Describe the routes using the language of direction.

Directions could include such instructions as:
Go forward $\qquad$ squares.
Make a quarter turn right or left.
Find a route with only 3 instructions:
Go forward $\qquad$ squares
Make a quarterturn right
Go forward $4 \quad$ squares.


Find a route with 7 instructions forward 4, turn right, forward 2, turn left, forward 1, turn right, forward 2

What other numbers of instructions can you give?
Now give KeePuppI directions to get to Colin.

1. Colin has a pack of twelve crayons.

Colin takes half of them out of the pack. How many are left in the pack?
2. Coco has 16 crackers.

She eats half of the crackers then eats 3 more. How many crackers does she have left?
3. Some children go out to play.

Half of them are girls. There are 10 girls.
How many children are there altogether?
4. Coco plants 12 plants in a pot.

One quarter of the plants have flowers.
How many plants have flowers?
5. In a choir one quarter of the singers are men.

There are 20 singers in the choir altogether. How many men are there?

Create your own problems using fractions of amounts.

Match questions to correct answers or to other questions with the same answer. Fill in the missing buddies.

| $9+11$ |
| :---: |
| $17-8$ |
| $19-9$ |
| 5 |
| $8+9$ |
| $6+13$ |
| 7 |
| $20-12$ |
| $18-12$ |

Match fractions of amounts to their answers. Fill in the missing buddies.

| $\frac{1}{2}$ of 8 |  |
| :--- | :--- |
| $\frac{1}{2}$ of 10 |  |
| $\frac{1}{4}$ of 12 |  |
| $\frac{1}{2}$ of 8 |  |
| $\frac{1}{4}$ of 4 |  |
| $\frac{1}{2}$ of 6 |  |
| $\frac{1}{2}$ of 20 |  |
| $\frac{1}{4}$ of 16 |  |
|  | 3 |
|  | 3 |
|  | 3 |

Create your own Matching Workout.

