Work together! Discuss together! Agree on your answer!!

Choose a number from the grid and match it to the correct calculation.

Join the number and the calculation with a line. We have done the first one.

| 25 + 10 |
|---------|
|---------|

| 16 - 9 | -7 | 11  | 12 |
|--------|----|---|----|
| 4 + 7  | 18 | Read the<br>rules<br>before you<br>start! | 21 |
| 48 - 4 | 27 | 35  | 44 |

These boards are a way to encourage children to work together in twos (and later in threes) to carefully follow instructions and then scan and solve mental maths problems rapidly and collaboratively. There are a varied number of solutions for each calculation. Children should also be encouraged to read and work out instructions for themselves. We have also added a card version of this activity.

Webaddress: www.collaborativelearning.org/mentalmathsboards.pdf Last updated: 27th April 2020

These boards are another way to encourage children to work together in twos (and later in threes) to carefully follow instructions and then scan and solve mental maths problems rapidly and collaboratively. There are a varied number of solutions for each calculation. Children should also be encouraged to read and work out instructions for themselves. Two formats so far:

- a set of reusable boards for printing and laminating, so that the calculations and numbers can be joined with wipe off marker pens.

- a set of boards with numbers but no calculations where pupils can put in the calculations and pass them to other groups to try out.

- a blank board with no numbers and no calculations where pupils can produce their own versions.

Depending on how they work we can change the boards to have a different set of whole numbers moving up to larger numbers and vary the number of calculations rather than have the same for each number.

Index to the boards

Flying Frog – three calculations for 7, 11, 12, 18, 21, 27. 35, and 44. Green Tree Frog, Macaw and Squirrel Monkey – one calculation for Flying Frog numbers. Chameleon and Caterpillar – different numbers – some numbers have one calculation, some have two.

www.collaborativelearning.org/mentalmathsboards.pdf

#### Rules for playing.

Flying Frog Board

Work together! Discuss together! Agree on your answer!!

Choose a number from the grid.

How many calculations you can find around the grid that match this number? Use your whiteboard pens to join the number and calculations.

| 9 + 2           |         | 10 - 3                                    |        | 30 - 3           |
|-----------------|---------|---|--------|------------------|
| 16 - 9          | 3 x     | 9   | 48 - 4 | . 2 x 6          |
| 7 + 11<br>3 × 7 | 7       | 11  | 12     | 15 + 3           |
| 9 x 2           | 18      | Read the<br>rules<br>before you<br>start! | 21     | 4 x 3            |
| 25 + 10         | 27      | 35  | 44     | 25 - 4<br>40 - 5 |
| 22 + 5          | 7 x 5   | 4 + 3                                     | 40 + 4 | 4 + 7            |
| 11 × 4          | 24 - 12 | 16 - 5                                    |        | 9 + 12           |



Rules for playing.

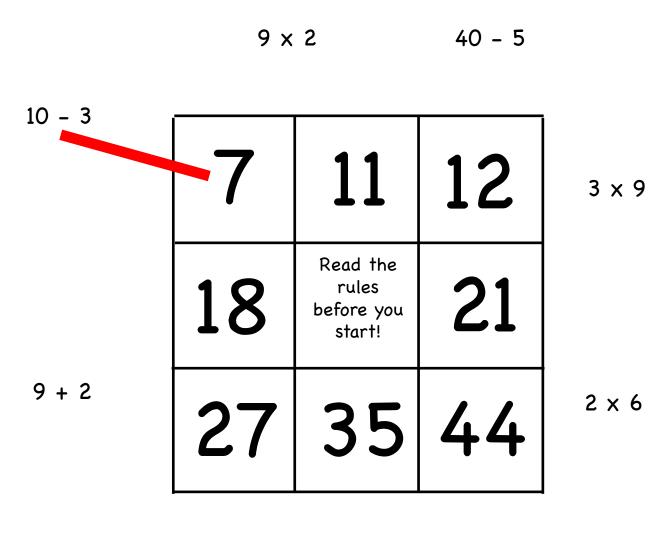
Green Tree Frog Board



Work together! Discuss together! Agree on your answer!!

Choose a number from the grid and match it to the correct calculation.

Join the number and the calculation with a line. We have done the first one.



25 - 4

7 x 5

Macaw Board

#### Rules for playing.

Work together! Discuss together! Agree on your answer!!

Choose a number from the grid and match it to the correct calculation.

Join the number and the calculation with a line. We have done the first one.

25 + 10

 16 - 9
 7
 11
 12

 4 + 7
 18
 Read the rules before you start!
 21
 4 × 3

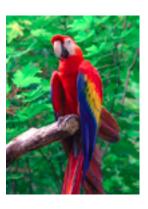
 48 - 4
 27
 35
 44

3 x 7

7 + 11

#### Can you make some more calculations for these numbers?

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30 - 3

Rules for playing.

Squirrel Monkey Board

Work together! Discuss together! Agree on your answer!!

Choose a number from the grid and match it to the correct calculation.

Join the number and the calculation with a line. We have done the first one.

15 + 3

| 4 + 3   | -7 | 11  | 12 | 27 + 8 |
|---------|----|---|----|--------|
| 24 - 12 | 18 | Read the<br>rules<br>before you<br>start! | 21 | 9 + 12 |
|         | 27 | 35  | 44 |        |

16 - 5

22 + 5

11 × 4



Rules for playing.

Chameleon Board

Work together! Discuss together! Agree on your answer!!

Choose a number from the grid.

How many calculations you can find around the grid that match this number? Use your whiteboard pens to join the number and calculations.

| 10 - 5  |         | 8 + 2                                     | 1     | 4 + 5    |
|---------|---------|---|-------|----------|
| 6 x 6   | 5       | 10  | 19    | 30 - 11  |
| 19 + 10 | 22      | Read the<br>rules<br>before you<br>start! | 24    | 7 + 17   |
|         | 29      | 36  | 40    | 15 + 25  |
| 2 × 11  | 16 - 11 | 1   | 0 × 4 | - 22 + 7 |

Rules for playing.

Caterpillar Board

Work together! Discuss together! Agree on your answer!!

Choose a number from the grid.

How many calculations you can find around the grid that match this number? Use your whiteboard pens to join the number and calculations.

18 - 9 29 - 811 - 8 15 7 x 3 5 + 11Read the rules 21 16 4 x 4 before you start! 50 - 13 42 32 37 30 - 21 22 + 2016 + 166 x 6 9 + 6



## Make your Own Mental Maths Board

#### Rules for making.

Work together! Discuss together! Agree on your calculations!!

Try to make more than two calculations for each number on the grid. Write the calculations round the board. Choose a name and draw a picture for your board.

Pass your board to another group to play

#### Rules for playing.

Work together! Discuss together! Agree on your answer!!

Choose a number from the grid.

How many calculations you can find around the grid that match this number? Use your whiteboard pens to join the number and calculations.

| 7  | 11   | 12 |
|----|--|----|
| 18 | Read the<br>rules<br>before you<br>start to<br>play! | 21 |
| 27 | 35   | 44 |

## Make your Own Mental Maths Board

#### Rules for making.

Work together! Discuss together! Agree on your calculations!!

Write 8 numbers on the grid. Try to make more than two calculations for each number on the grid. Write the calculations round the board. Choose a name and draw a picture for your board.

Pass your board to another group to play

#### Rules for playing.

Work together! Discuss together! Agree on your answer!!

Choose a number from the grid.

How many calculations you can find around the grid that match this number? Use your whiteboard pens to join the number and calculations.

| Read the<br>rules<br>before you<br>start to<br>play! |  |
|--|--|
|  |  |