

Number boards for mini mental sessions

- Feel free to edit the document as you wish and customise boards and questions to suit your learners levels
- Print and laminate for extra sturdiness.
- Ideal for working in pairs and getting learners to talk about their strategies for solving problems
- Also included: large size version for whole class activity (includes 2 different sets of questions)
- Different size grids cater for different learner levels



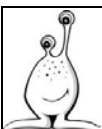
3 x 3 grid



3 x 4 grid



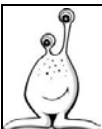
4 x 4 grid



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

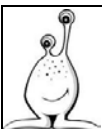
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|----|----|----|--|--|
| 15 | 4 | 20 | <ul style="list-style-type: none">■ Which is the largest number?■ Which is the smallest number?■ Can you predict which row has the highest total?■ Add together the numbers in 3rd row. What strategy did you use?■ Which two numbers add up to 20?■ Find one number that is half of another? | |
| 6 | 5 | 8 | | |
| 12 | 30 | 10 | | |



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

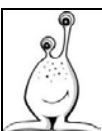
| | | | | |
|----|----|----|---|--|
| 24 | 8 | 12 | <ul style="list-style-type: none">■ Which is the largest number?■ Which is the smallest number?■ Find one number that is double another■ Can you predict which column has the lowest total?■ Halve each number in row 1. What strategy did you use?■ Find one number that is half of another■ Which numbers are bigger than this? | |
| 22 | 11 | 3 | | |
| 2 | 5 | 6 | | |



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

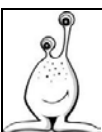
| | | | | |
|----|----|----|--|--|
| 15 | 35 | 20 | <ul style="list-style-type: none"> ■ Which is the largest number? ■ Which is the smallest number? ■ Can you predict which row has the highest total? ■ Add together the numbers in first row. What strategy did you use? ■ Which three numbers total 38. ■ Are there other numbers that total 38? You can add together as many numbers as you like to total 38. ■ What is the difference between the largest and the smallest number? ■ Find one number that is half of another? ■ Make each number in column 1 bigger by 8 | |
| 6 | 14 | 8 | | |
| 12 | 40 | 10 | | |



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

| | | | | |
|----|----|----|---|--|
| 45 | 9 | 12 | <ul style="list-style-type: none"> ■ Which is the largest number? ■ Which is the smallest number? ■ Find one number that is double another ■ Can you predict which column has the lowest total? ■ Halve each number in row 3. What strategy did you use? ■ Make each number in row 2 bigger by 12 ■ Find one number that is half of another ■ What is the middle number? ■ Which numbers are bigger than this? | |
| 24 | 22 | 31 | | |
| 2 | 16 | 62 | | |



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

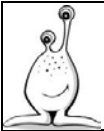
| | | | | |
|----|----|----|--|--|
| 33 | 7 | 6 | <ul style="list-style-type: none"> ■ Which is the largest number? ■ Which is the smallest number? ■ Can you predict which row has the lowest total? ■ Add together the numbers in third row. What strategy did you use? ■ Which three numbers total 34. Are there other numbers that total 34? You can add together as many numbers as you like to total 34. ■ What is the total of the largest and the smallest number? ■ Double each number in column 2. What strategy did you use? | |
| 47 | 31 | 5 | | |
| 24 | 8 | 35 | | |



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

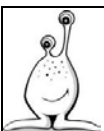
| | | | | | |
|----|----|----|----|--|--|
| 15 | 35 | 20 | 50 | <ul style="list-style-type: none"> ■ Which is the largest number? ■ Which is the smallest number? ■ Can you predict which row has the highest total? ■ Add together the numbers in first row. What strategy did you use? ■ Add together 2 odd numbers. Is the answer odd or even? Why do you think this is? ■ Find one number that is half of another? ■ Find two numbers that have a total between 65 and 75 | |
| 6 | 14 | 8 | 2 | | |
| 12 | 40 | 10 | 32 | | |



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

| | | | | | |
|----|----|----|----|--|--|
| 25 | 45 | 30 | 40 | <ul style="list-style-type: none"> ■ Which is the largest even number? ■ Which is the smallest odd number? ■ Estimate which row has the lowest total? ■ Which numbers are multiples of 5? ■ Find one number that is double of another? ■ Find two numbers that have a total smaller than 20. ■ Subtract the smallest number from the largest number. ■ Add together 3 even numbers. Is the answer odd or even? Why do you think this is? | |
| 8 | 18 | 9 | 3 | | |
| 16 | 28 | 21 | 75 | | |



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

| | | | | | |
|----|----|----|----|--|--|
| 2 | 6 | 65 | 30 | <ul style="list-style-type: none"> ■ Which is the smallest even number? ■ Which is the biggest odd number? ■ Estimate which column has the lowest total. ■ Which numbers are in the 3 times table? ■ Find one number that is half of another. Are there others? ■ Find two numbers that have a total bigger than 60. ■ Add even numbers in row 3. ■ Add together 2 numbers bigger than 50. | |
| 13 | 50 | 36 | 73 | | |
| 45 | 18 | 26 | 19 | | |

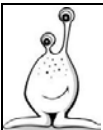


Work with a partner.

Take turns to answer a question and explain your answer to your partner.

| | | | |
|----|----|----|----|
| 11 | 47 | 1 | 9 |
| 29 | 27 | 16 | 28 |
| 50 | 5 | 8 | 44 |
| 38 | 19 | 32 | 33 |

- Find three numbers that have a total between 100 and 140. Are there more?
- Subtract the smallest number from the largest number.
- Find the number that is 4 times as big as another
- Find two numbers with a difference of 16.
- Find numbers that are in the four times table.

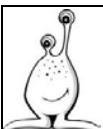


Work with a partner.

Take turns to answer a question and explain your answer to your partner.

| | | | |
|----|----|----|----|
| 16 | 83 | 78 | 5 |
| 94 | 25 | 76 | 15 |
| 24 | 4 | 2 | 65 |
| 51 | 13 | 50 | 46 |

- Find three numbers that have a bigger total than 200. Are there more?
- Subtract the smallest odd number from the largest even number.
- Find the number that is 30 smaller than another. Are there more?
- Round down the biggest number to the nearest 10.
- Find two numbers with a difference of 18. Are there more?
- Add up the second row of numbers.
- Which numbers over 50 are multiples of 2?



Work with a partner.

Take turns to answer a question and explain your answer to your partner.

| | | | |
|----|----|----|----|
| 24 | 80 | 4 | 79 |
| 50 | 9 | 23 | 90 |
| 86 | 55 | 98 | 42 |
| 28 | 75 | 15 | 99 |

- Find three numbers that have a total bigger than 260. Are there more?
- Find the 2 smallest numbers. Multiply these together.
- Find numbers that are smaller than this answer.
- Find the number that is 30 smaller than another. Are there more?
- Find two numbers with a difference of exactly 70. Are there more?
- Which numbers over 40 are multiples of 5 and 10?
- Round up the biggest number to the nearest 10.



Big version for whole class activity

| | Column 1 | Column 2 | Column 3 | Column 4 |
|-------|----------|----------|----------|----------|
| Row 1 | 16 | 88 | 75 | 5 |
| Row 2 | 44 | 25 | 32 | 15 |
| Row 3 | 64 | 4 | 2 | 35 |
| Row 4 | 8 | 11 | 50 | 22 |

Questions

- Can you predict which row has the highest total?
- Are there any 2 numbers which give an answer of 10 when you subtract them?
- Are there any numbers which are 25 more than another?
- Find one number that is double another? If you double that again, is the answer in the grid? Keep going
- Double each number in column 2. What strategy did you use for the bigger numbers?

OR

- Add 1000 to each number in Column 3. Write them down
- Add together all the numbers that are multiples of 5 (in the 5 x table). How did you do it?
- Find three numbers that have a bigger total than 200. What's a quick way of doing this?
- Add together the numbers in the last row. What strategy did you use?