

## MATHS CHALLENGE 2

|               |                    |
|---------------|--------------------|
| <b>TASK</b>   | Number bonds to 20 |
| <b>REWARD</b> | Ruler              |

I need to learn all the different ways to make the numbers from 11 – 20, so I can use them to work out calculations in my head quickly:

Please help me to learn:

| How to make 11: | How to make 12: | How to make 13: | How to make 14: | How to make 15: |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 11+0            | 12+0            | 13+0            | 14+0            | 15+0            |
| 10+1            | 11+1            | 12+1            | 13+1            | 14+1            |
| 9+2             | 10+2            | 11+2            | 12+2            | 13+2            |
| 8+3             | 9+3             | 10+3            | 11+3            | 12+3            |
| 7+4             | 8+4             | 9+4             | 10+4            | 11+4            |
| 6+5             | 7+5             | 8+5             | 9+5             | 10+5            |
| 5+6             | 6+6             | 7+6             | 8+6             | 9+6             |
| 4+7             | 5+7             | 6+7             | 7+7             | 8+7             |
| 3+8             | 4+8             | 5+8             | 6+8             | 7+8             |
| 2+9             | 3+9             | 4+9             | 5+9             | 6+9             |
| 1+10            | 2+10            | 3+10            | 4+10            | 5+10            |
| 0+11            | 1+11            | 2+11            | 3+11            | 4+11            |
|                 | 0+12            | 1+12            | 2+12            | 3+12            |
|                 |                 | 0+13            | 1+13            | 2+13            |
|                 |                 |                 | 0+14            | 1+14            |
|                 |                 |                 |                 | 0+15            |
| How to make 16: | How to make 17: | How to make 18: | How to make 19: | How to make 20: |
| 16+0            | 17+0            | 18+0            | 19+0            | 20+0            |
| 15+1            | 16+1            | 17+1            | 18+1            | 19+1            |
| 14+2            | 15+2            | 16+2            | 17+2            | 18+2            |
| 13+3            | 14+3            | 15+3            | 16+3            | 17+3            |
| 12+4            | 13+4            | 14+4            | 15+4            | 16+4            |
| 11+5            | 12+5            | 13+5            | 14+5            | 15+5            |
| 10+6            | 11+6            | 12+6            | 13+6            | 14+6            |
| 9+7             | 10+7            | 11+7            | 12+7            | 13+7            |
| 8+8             | 9+8             | 10+8            | 11+8            | 12+8            |
| 7+9             | 8+9             | 9+9             | 10+9            | 11+9            |
| 6+10            | 7+10            | 8+10            | 9+10            | 10+10           |
| 5+11            | 6+11            | 7+11            | 8+11            | 9+11            |
| 4+12            | 5+12            | 6+12            | 7+12            | 8+12            |
| 3+13            | 4+13            | 5+13            | 6+13            | 7+13            |
| 2+14            | 3+14            | 4+14            | 5+14            | 6+14            |
| 1+15            | 2+15            | 3+15            | 4+15            | 5+15            |
| 0+16            | 1+16            | 2+16            | 3+16            | 4+16            |
|                 | 0+17            | 1+17            | 2+17            | 3+17            |
|                 |                 | 0+18            | 1+18            | 2+18            |
|                 |                 |                 | 0+19            | 1+19            |
|                 |                 |                 |                 | 0+20            |

You can test me by saying things like:

If we are making 20 and my number is 4, what is your number?

Give me two ways to make 17.

If I have 3 pencils, how many more do I need to make 19 pencils?

If I had 16 sweets and I ate 4, how many would I have left?

If I show my teachers that I know them when they test me, I will get a reward