# EYFS, Year 1 and Year 2 Number bond models and activities
# Year 3-6 times tables models and activities

To be used alongside the Number Bond and Time4Tables programme taught daily.

Please vary your models and images when teaching to ensure that children have been exposed to a selection to deepen understanding.

| Number Bond activities | |
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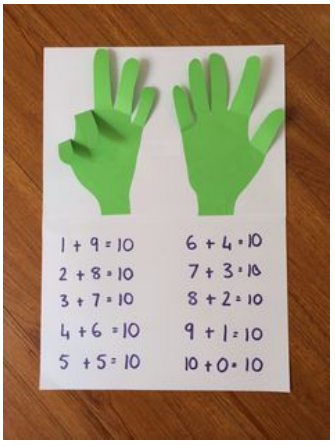
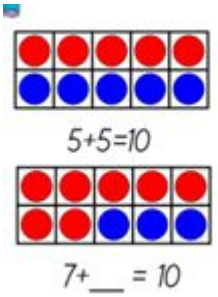
| **Number bond fingers**-<br>Either on paper or with physical hands. One hand for number bonds to 5, both for number bonds to 10 |  |
| **Tens Frame**<br>Perfect for bonds to 10, but also use two for bonds to 20.<br>Use tens frame stamps for children to create their own. |  |

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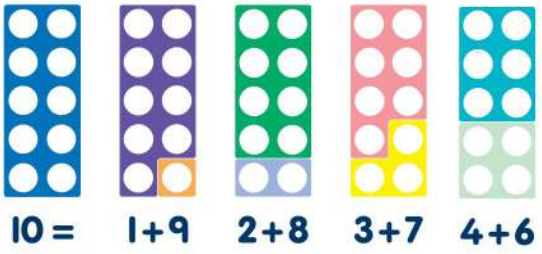
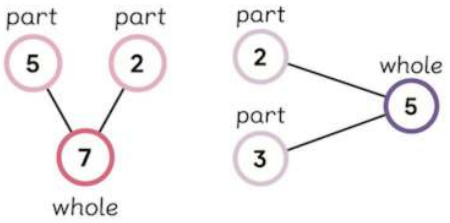
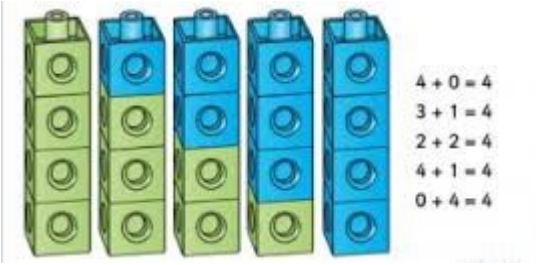
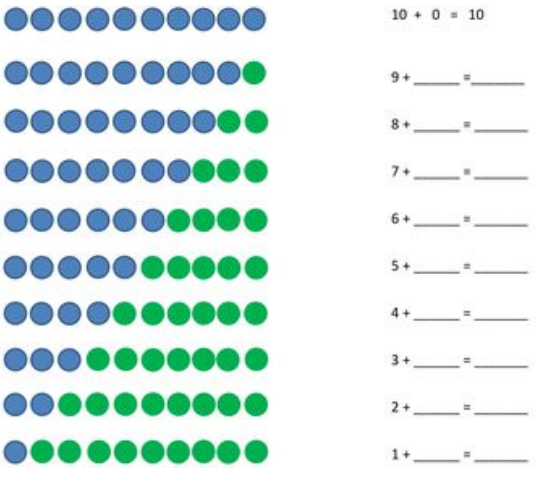
| **Numicon**<br>Fit the bricks together to create the number bonds.<br>Finding different ways to make a number. |  |
| **Cherry model**<br>Either with digits or objects.<br>Create large cherry models together.<br>Ensure to use them in different orientations. |  |
| **Bar model**<br>EIther with digits or objects<br>Create large bar models together |  |
| **Bricks**<br>Using towers and different coloured bricks to represent the number bonds. |  |
| **Flippy counters**<br>Flip the counters over to quickly manipulate the numbers. |  |

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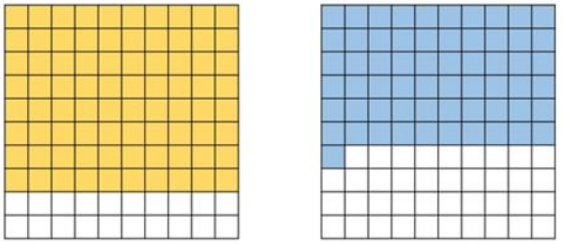
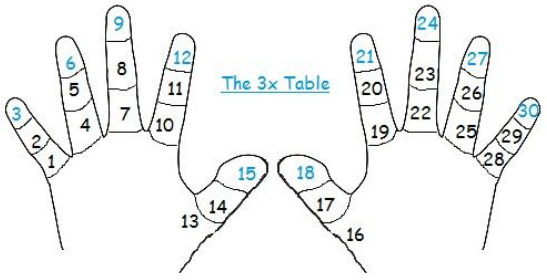
| **Hundred squares**<br><br>Colour in the rows of 10 to demonstrate the tens and ones (for bonds to 100) |  |
| **Base 10**<br>Manipulate/exchange to create bonds to 100. | |
| **Number bond rainbow**<br>See the relationship between lowest and highest numbers. |  |
| **Number bond chains**<br>Create paper chains with different coloured paper to represent number bonds. |  |
| **Times table activities** | |
| **3x table activities**<br>**Hands counting**<br>Count the sections of the fingers!<br>(Whisper, whisper, shout)<br><br>"One two, THREE, four, five, SIX, seven, eight, NINE…" |  |

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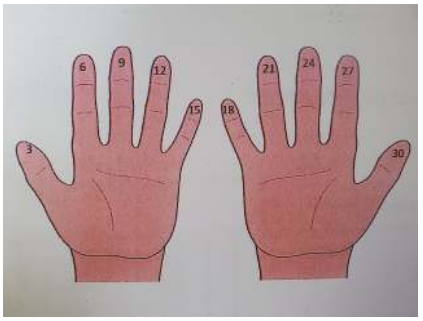
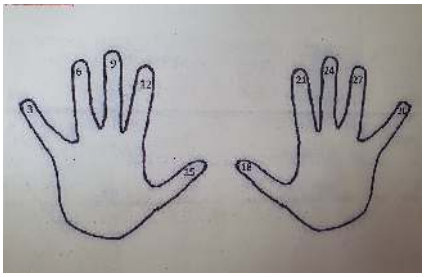
| **In 3's**<br>Forwards and backwards! |  |
| **Multiples**<br>Draw around hands and write the times table on the fingertips. Now cover over the answers with their own hands…<br><br>Five 3's?<br>Say it, then check it |  |
| **Counting stick**<br>Label the counting stick and practise counting aloud altogether as you touch each point on the stick. Be clear that the children say the answer when you make contact with the stick- clear message that it is **not** a race to answer first.<br><br>Count saying "3, 6, 9, 12…"<br><br>Later: teacher says "One three is…" Children say "3".<br><br>Watch this for inspiration:<br>https://www.youtube.com/watch?v=yXdHGBfogfw&t=325s |  |
| **Counting stick**<br>Count in order forwards and backwards, developing confidence in repetition and rhyme. As the children become more confident remove some of the post its that they no longer need EG: 1x3, 2x3 & 10x3.<br><br>Special voices for key facts- use a 'squeaky mouse voice' to say 5x3. This will help later as they connect learning, that is, if I know 5x3 then I can quickly calculate 6x3.<br><br>Start jumping about the counting stick, not in order.<br><br>Use known facts to quickly calculate 'next door' facts. |  |

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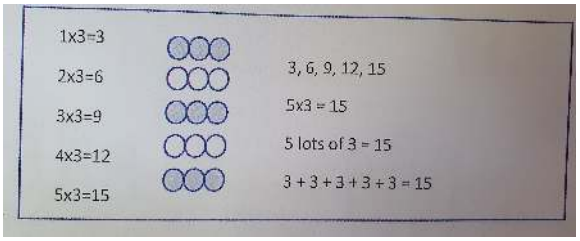
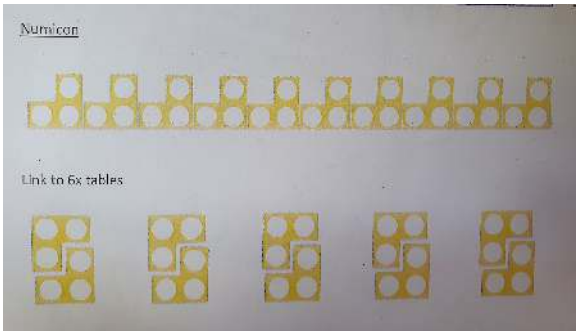
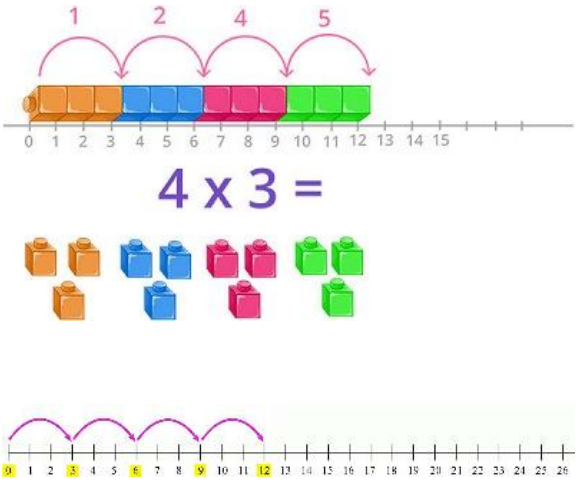
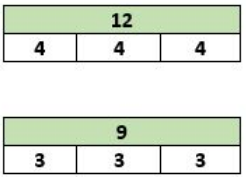
| **Rhymes**<br>"3, 6, 9 the goose drank wine"<br><br>Develop your own rhymes- how creative can you be? "12, 15, 18 the geese were seen…" | |
| **Arrays**<br>Give a fact EG: 5x3. Say "5 lots of 3"<br><br>Children build or draw an array. Annotate the image with number sentences.<br><br>NOTE: When using objects, or drawing, make the group size (of 3) clear by connecting the groups or colouring. |  |
| **Numicon**<br>Once the children are confident with using a physical manipulative always make the links between tables really explicit to deepen their understanding. |  |
| **Number line (link with Numicon where appropriate)**<br>It is also really important when you introduce a new visual representation to have a comparison the children are used to above it.<br><br>Make sure the number sentence is also written alongside this too. |  |
| **Number rods**<br>This will begin to introduce the children and make the link to bar modelling. |  |
| **Bar modelling** |  |

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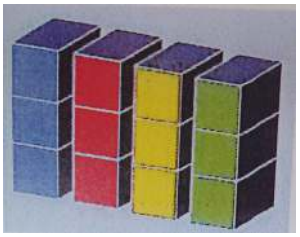
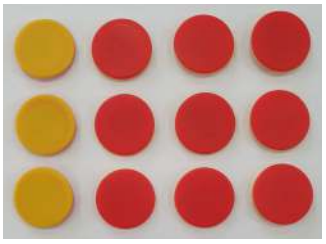
| **Cubes**<br>Build it!<br><br>Cubes connected indicating group size |  |
| **Counters**<br><br>Colour indicating group size |  |
| **Speedy tables**<br>Children to work in pairs and write down all of the multiples of the times table you have been working on. The other child to time how long it takes them. Then they swap over roles.<br><br>When it gets back to the 1st childs go they fold over their paper so they can't see what they wrote before and do it again. | |
| **Video resources**<br>These are brilliant...<br><br>3 times table:<br>https://www.youtube.com/watch?v=5vNwMWiNxgE<br>4 times table:<br>https://www.youtube.com/watch?v=bjVIQ7RpMvE<br>6 times table:<br>https://www.youtube.com/watch?v=aciiJVB9Vgg<br>7 times table:<br>https://www.youtube.com/watch?v=x4Iyvoo7wNI<br>8 times table:<br>https://www.youtube.com/watch?v=aiT3uADZLXw<br>9 times table:<br>https://www.youtube.com/watch?v=HH171nowcJk<br>12 times table:<br>https://www.youtube.com/watch?v=_zMbMPVi5F4 | |