






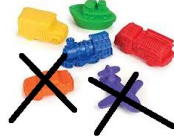





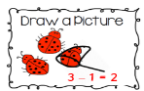
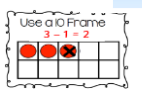


**Statutory requirements for Number - addition and subtraction** Pupils should be taught to:

- read, write and interpret mathematical statements involving subtraction (-) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- subtract one-digit and two-digit numbers to 20, including 0
- solve one-step problems that involve subtraction, using concrete objects and pictorial representations

**Notes and guidance (non-statutory)**

Pupils memorise and reason with number bonds to 10 and 20 in several forms (for example,  $9 + 7 = 16$ ;  $16 - 7 = 9$ ;  $7 = 16 - 9$ ). They should realise the effect of adding or subtracting 0. This establishes addition and subtraction as related operations. Pupils combine and increase numbers, counting forwards and backwards. They discuss and solve problems in familiar practical contexts, including using quantities. Problems should include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than, so that pupils develop the concept of addition and subtraction and are enabled to use these operations flexibly.

**VOCAB** take away less subtract minus fewer is the same as equals part whole calculation

	Mental starter	Learning Intentions	Teaching Input and activities	Success Criteria
MONDAY	Subtraction with a tens frame song. <a href="https://www.youtube.com/watch?v=HvxSdytKggg&amp;safe=true">https://www.youtube.com/watch?v=HvxSdytKggg&amp;safe=true</a> 	To solve one-step problems that involve subtraction, using concrete objects and pictorial representations	<p><b>Class hook (Reflect / Record problem on wipe boards)-</b> What do we know about subtraction? Re-cap using maths learning wall to re-cap. See HOOK on MON PPT</p> <p><b>Teaching PPT</b> - discuss MON PPT - subtraction by crossing out.</p> <p><b>Teaching point</b> - Select a number then take a way a smaller number by crossing out. Why does it need to be a smaller number? What happens if we choose the same number? What happens if we choose 0? Explore patterns on the board.</p> <p><b>Independent work</b>- Select a number e.g. 7 (differentiated by table ability – support 1-6, core 1-12, ext 1-20). Draw 7 (simple) objects (e.g. conkers / balloons / leaves), then choose a smaller number to subtract by crossing them out. Draw a picture and write the calculation to show what has happened.</p> <p><b>(DRAGS AND CATS IN BOOKS)</b></p>    $6 - 2 = 4$	<p><b>RECORDING IN BOOKS or WIPEBOARDS</b> I can create pictures and use them to write a subtraction calculation.</p> <p><b>PM FLUENCY USE OF MINI MATHS FLUENCY ppt.</b></p> 
TUESDAY	Subtraction action song <a href="https://www.youtube.com/watch?v=pwQKugrFmJQ">https://www.youtube.com/watch?v=pwQKugrFmJQ</a> 	To subtract one-digit and two-digit numbers to 20, including 0	<p><b>Class hook (Reflect / Record problem on wipe boards)-</b> Re-cap on methods used so far using the cards below- What can I use to help me to subtract? See Tuesday HOOK on PPT</p>       <p><b>Teaching PPT</b> - discuss TUES PPT - subtraction using different methods.</p> <p><b>Teaching point</b> -Demo how we can also use a tens frame, to help us to subtract. encourage chn to subitise and use what they already know (eg.a full tens frame is 10, there's one less so it must be 9).</p> <p><b>Independent work</b>- children to select a subtraction card and use one of the methods to record the calculation and their method in their books. For the next subtraction card, they should use a different method. At the end of the session encourage the children to focus on which methods they felt most comfortable with and why. Which method was the most difficult for them? Why? Chn to continue with their 'Tricky' one on a wipe board. <b>(BEES AND ANTS IN BOOKS)</b></p>	<p><b>RECORDING IN BOOKS or WIPEBOARDS</b> I understand that I can use different methods to help me to subtract from a larger number.</p> <p><b>PM FLUENCY USE OF MINI MATHS FLUENCY ppt.</b></p> <p>Some frogs are on a lily pad. Three frogs jumped off and there are three frogs remaining.</p>  <p>Complete the sentences. First there were ____ frogs. Then ____ frogs jumped off. Now there are ____ frogs on the lily pad. In the 'then' picture, do the 3s show the same thing? What not? What if 4 jumped off, how many frogs would there have been at first?</p>



WEDNESDAY

Count backwards from 20 song  
<https://www.youtube.com/watch?v=mOL5bPK4TuE&safe=true>



To subtract on a number line.

**Class hook (Reflect / Record problem on wipe boards)-** See WED HOOK on PPT  
**Teaching PPT** - discuss WED PPT

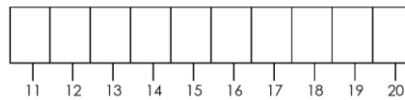
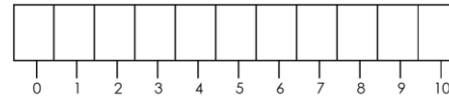
**Teaching point** - you may wish to model counting back on a number line by using on-line game now or have as a PM independent task

[http://www.hbschool.com/activity/count\\_back\\_numberline/](http://www.hbschool.com/activity/count_back_numberline/)

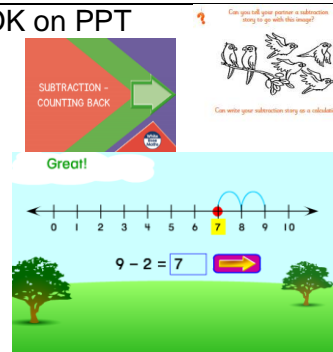
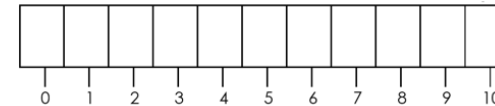
You will need to unblock flash to enable this - ask Julie if unsure how to!

**Independent work-** Practical game, e.g. Start on 10, who can get back to 0 first, using a 1-3 dice throw. Record matching calculations on a wipe board.

Number Line Subtraction



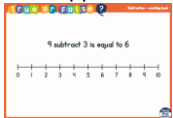
Number Line Subtraction



**GAME WITH WIPEBOARD RECORDING**

I can subtract on a number line.

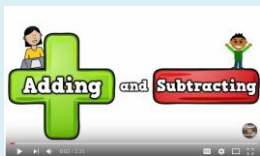
**PM FLUENCY**  
USE OF MINI MATHS FLUENCY ppt.



THURSDAY

Re-cap on addition and subtraction video

<https://www.youtube.com/watch?v=NHI0ePgwlgU&t=32s>

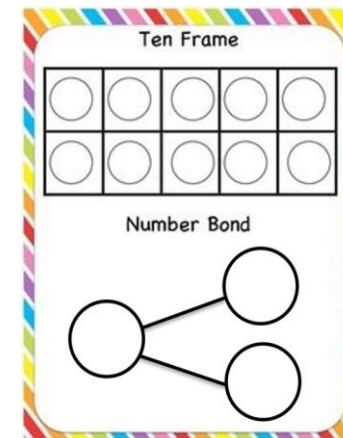
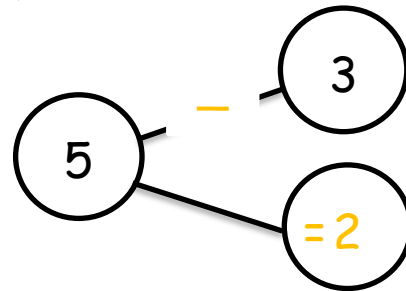


To use the part, part, whole method to complete subtraction calculations.

**Class hook (Reflect / Record problem on wipe boards)-** See THURS HOOK on PPT  
Write down subtraction calculation children to use any methods to work out how many are left. Model incorrectly- change the calculation round (i.e. to  $2 = 6 - 4$ ) - ask the children for their thoughts. Address misconceptions.

**Teaching point** - Demonstrate how we can use a part, part, whole approach to find the missing number in a subtraction calculation. Create large hoop version on carpet.

**Independent work-** Children to explore this method with a partner on wipe boards or laminated part, part, whole cards. Have maths toolboxes available.



**PM FLUENCY**  
USE OF MINI MATHS FLUENCY ppt.

Eva is calculating  $7 - 2$  and does this by counting backwards on a number line. She gets an answer of 6.



What mistake has she made?  
What should the answer be?



FRIDAY

Counting backwards from 30 - show children the less than subtract link.

<https://www.youtube.com/watch?v=ndj6D-cWseA>



To use the part, part, whole method to complete subtraction calculations.

**Class hook (Reflect / Record problem on wipe boards)-** See FRI HOOK on PPT.

Show these calculations on the PPT - can the chn match them on their wipeboards and explain their reasons.

**Teaching point**-Re-cap on Thursday session - demonstrate under visualiser to address any problems or misconceptions

**Independent work**- children to record in books on one of three differentiated sheets.

The worksheets contain the following problems:

- Sheet 1:  $5 - 3 =$ ,  $5 - 2 =$ ,  $5 - 1 =$ ,  $5 - 4 =$
- Sheet 2:  $5 - 3 =$ ,  $6 - 2 =$ ,  $8 - 5 =$ ,  $9 - 8 =$
- Sheet 3:  $10 - 3 =$ ,  $10 - 5 =$ ,  $11 - 8 =$ ,  $6 - 3 =$ ,  $15 - 6 =$

Which calculations match?

Explain your reasons.

One has been done for you.

$7 = 9 - 2$        $9 = 10 - 1$

$10 - 1 = 9$        $9 - 2 = 7$

$3 - 3 = 0$        $0 = 3 - 3$

**RECORD IN BKS**  
I can use the part whole method to help me with subtraction problems.

NO PM FLUENCY