

Maths – Addition and Subtraction

Last term, children learned strategies for addition and subtraction within 10. This week, we will revisit some of these strategies as well as learning how to use 'known facts' (number bonds) to add and subtract to and from 2-digit 'teen' numbers. Children will begin to see that adding and subtracting do the opposite of each other. Adding puts together amounts and subtracting takes away amounts or 'finds the difference' between them. We will weave the two processes together this week so that children can begin to see this relationship.

Teach	Activities
<p>Day One Monday</p> <p>Outcome: Adding by 'counting on' using addition stories and a numberline. (concrete - children will use objects)</p> <p>Children should watch today's 'Teacher Video' where a teacher will walk through the following. Pause video as necessary.</p> <p>Starter: Number Bonds to 7 - children will use objects to find the missing amounts in the number bond 'part, part whole' models.</p> <p>This week, children will begin each lesson re-capping number bonds within 10. Number bonds are also often referred to as 'number pairs'. They are simply the pairs of numbers that make up a given number. Knowledge of number bonds is essential when it comes to harder calculations involving addition and subtraction.</p> <p>Main: In the main part of today's maths lesson children will look at number lines and we will talk about these in more detail, looking at different visual representations of number lines, before beginning to hear some 'addition stories'. Using the vocabulary 'first, then and now', children will begin to break down the steps and use the numberline to support them in solving addition problems.</p>	<p>Task: Children will follow along with the teacher video to learn how to read and respond to 'first, then and now' addition stories.</p> <p>Then they will come up with their own 'first, then and now' addition stories, using objects to build their story and a number line to solve it. They will then also record their addition as a sum using the + and = symbols.</p> <p>Resources:</p> <ul style="list-style-type: none">- Objects for counting.- A number line - See number line template on powerpoint or use an online numberline here, if using a computer, laptop or tablet: https://apps.mathlearningcenter.org/number-line/- exercise books or paper to record addition sentences.

Day Two Tuesday

Outcome: Subtracting by 'counting back' using subtraction stories and a numberline. (concrete - children will use objects)

Children should watch today's 'Teacher Video' where a teacher will walk through the following. Pause video as necessary.

Starter: Number Bonds to 8 - children will use objects to find the missing amounts in the number bond 'part, part whole' models.

Main: Repeat of yesterday's lesson, this time, applying the same strategies for subtraction. Children hear some 'subtraction stories' in the teacher video and powerpoint. Using the vocabulary 'first, then and now', children will begin to break down the steps and use the numberline to support them in solving subtraction problems.

Task: Children will follow along with the teacher video to learn how to read and respond to 'first, then and now' subtraction stories.

Then they will come up with their own 'first, then and now' subtraction stories, using objects to build their story and a number line to solve it. They will then also record their subtraction as a sum using the - and = symbols.

Resources:

- Objects for counting..
- A number line - See number line template on powerpoint or use an online numberline here, if using a computer, laptop or tablet: <https://apps.mathlearningcenter.org/number-line/>
- exercise books or paper to record subtraction sentences.

Day Three Wednesday

Outcome: Adding a 1-digit number to a teen number using number bonds.

Children should watch today's 'Teacher Video' where a teacher will walk through the following. Pause video as necessary.

Starter: Number Bonds to 9 - children will use objects to find the missing amounts in the number bond 'part, part whole' models.

Today, children will begin to 'partition' the tens and the ones in their teen number, just like they did last week in their place value learning. They will break away the 'ones' in the teen number and add these to the 1-digit number they are adding. They should begin to use their known facts from their number bonds work this week, to build fluency and speed in adding these single digit numbers. Then they will see that they can simply add this onto the ten for speedy addition!

E.g) $14 + 5$ - "I know that 4 and 5 make 9. So 14 and 5 make 19".

Note: This will aim to support children in building strategies for mental calculating and show the importance of learning their number bonds well. However, please be aware that this takes time and we encourage children to continue to use objects and drawings to keep physically and visually seeing this process before acquiring such mental mathematical skills.

It is encouraged that children refer back to the number line to check their calculations today, so that they know that the number line is a useful tool that they can return to.

Task: Children will follow along with the teacher video to learn how to 'partition' numbers and 'make 10' to add.

Children will then have a go at the independent task on the powerpoint today.

Then (an extra activity, only if your child requires more) they can complete **page 21** of their **CGP maths book** where they will match more number bonds to further consolidate today's learning.

Resources:

- Objects for counting.
- Independent Task on PowerPoint - These can be completed with the support of objects. Children can use their exercise books or paper for drawings and jottings to complete the sums as explained in the teacher video.
- CGP maths book.

Day Four Thursday

Outcome: Subtracting a 1-digit number from a teen number using number bonds.

Children should watch today's 'Teacher Video' where a teacher will walk through the following. Pause video as necessary.

Starter: Number Bonds to 10 - children will learn a 'number bonds rap' today, where they will use rhyme and actions to verbally and mentally recall bonds to 10!

Children will repeat yesterday's strategy of 'partitioning' the tens and the ones in the 2-digit number. They will focus on the 'ones' and use their 'number bonds', to subtract from these. They will then add on the 10 to see that: "If I know that $8 - 5 = 3$, I also know that $18 - 3 = 15$." - Please see the visual representations on the powerpoint for more clarity on this.

They should begin to use their known facts from their number bonds work this week, to build fluency and speed in subtracting single digit numbers from a 2-digit number.

Note: This will aim to support children in building strategies for mental calculating and show the importance of learning their number bonds well. However, please be aware that this takes time and we encourage children to continue to use objects and drawings to keep physically and visually seeing this process before acquiring such mental mathematical skills.

It is encouraged that children refer back to the number line to check their calculations today, so that they know that the number line is a useful tool that they can return to.

Task: Children will follow along with the teacher video to learn how to 'partition' the teen number and use number bond facts to subtract. Applying the same idea as yesterday, this time, with subtraction.

Children will then have a go at the independent task on the powerpoint today. This strategy is a little more challenging with subtraction. So allow plenty of time and use objects to support this idea or 'partitioning' and using their 'number bond knowledge'.

Resources:

- Objects for counting.
- Independent Task on PowerPoint - These can be completed with the support of objects. Children can use their exercise books or paper for drawings and jottings to complete the sums as explained in the teacher video.

Optional Extra: If children didn't manage to complete **page 21** of their **CGP maths book yesterday**, they could do this today to keep consolidating number bonds.

Day Five Friday

Outcome: Subtracting a 1-digit number from a teen number using number bonds.

Children should watch today's 'Teacher Video' where a teacher will walk through the following. Pause video as necessary.

Starter: Number Bonds to 10 - How well can your child remember the number bonds rap we learned yesterday?!

Today, children will test their knowledge of number bonds to 10 in their starter activity, writing the bonds to match the numicon pieces.

They will then explore the relationship between bonds to 10 and bonds to 20. Can they see that the bonds to 20 are the same as the bonds to 10? They are just '10 more'. Their growing place value knowledge should help with understanding this. Can they explore making bonds to 10 and then 20 using objects and tens frames?

Finally they will practise applying their +, - and = symbols correctly, to write addition and subtraction sentences to match the given ten frames on the powerpoint.

Task: Children follow along with the powerpoint to consolidate this week's learning, where they can pause and have a go at the following...

- Can they write the 'bonds to 10' in order, using the numicon picture to support.
- Can they create addition and subtraction sentences to match the tens frames pictures.
- Can they discover what is the same and what is different between bonds to 10 and bonds to 20? Children can use objects to explore making bonds to 20 and *if ready*, can try **Page 23** of **CGP maths book**.

Resources:

- Exercise books or paper
- Objects for counting.

Optional Extra: Can children use the word cards and the part whole model given on the PowerPoint, with 19 as the whole to create addition and subtraction sentences.

