| DAY | We Are Learning To (WALT): | MODEL / INTRODUCTION | INDEPENDENT WORK | PLENARY |
| :---: | :---: | :---: | :---: | :---: |
| M | Mental: <br> To be able to count up to and back from 50 in 5s <br> Main: <br> Find one or ten more / add a two-digit number <br> Aut006 | Mental: <br> Have children count in 5 s from 0 to 50 and back, doing a star jump for each number <br> Main: <br> TA to take children who are unable to find one more than another number. If unsure if some children can do this, ask them to do a couple of examples quickly to find out. <br> TA to model for children how to find one more than a number on a number line, by beginning on the first number and moving one space forward. Emphasise how when we add more we move forward / up the number line. <br> Once children are confident with this, model how to find one more than a number mentally, by putting the number in their heads (pretend to push it in to your head) and counting on one <br> Teacher (with remainder of class) <br> Explain that we will be learning how to find 1 more or 10 more than a number. <br> Model how to do this on a number line (exaggerate how slow it is and how long it takes to jump ten spaces) <br> Introduce a hundred square, explaining how to count on one and how each row has ten numbers in it. Model how a hundred square allows us to add 10 more quickly (exaggerate how quickly) by just moving down a row. Ask children what they notice. What changes in the number? (only the digit in the tens column changes, but the digit in the units column stays the same when we move down a row i.e. add ten more) <br> Teach children saying and actions of: <br> - To add one (put one finger up), we move forward (point to the side) <br> - To add ten (put ten fingers up), we move down a row (point down) <br> Model how to find ten more or one more than a number using this method, reinforcing the saying above and how we add ten by only changing the tens number <br> (At this point you may get middle ability children to begin their independent work) <br> Model for higher ability children how to use a hundred square to add multiples of ten and 2-digit numbers To add multiples of 10 you need to see how many tens there are and move down this many rows e.g. to calculate $30+40$, there are 4 tens in 40 so you need to start on 30 and move down 4 rows to get to 70 . To add 2 digit numbers you need to first move down however many tens there are and then forward how many units e.g. to calculate $30+56$ there are five tens so you move down five rows and there are six units so then you move forward six spaces. <br> Cover examples where you need to cross a 'tens barrier' e.g. $48+26$ and model how to move back to the beginning of the next row down when you reach the end of a row e.g. when you get to 50 , to count on one more you move down and back to 51 . | Lower ability find one more than a number <br> Middle ability find one more or ten more than a number on a hundred square <br> Higher ability find multiples of ten more than a number e.g. $43+$ 20 <br> Gifted and talented - add two-digit numbers to a number e.g. $43+36$ <br> Extension - make up some of their own addition number sentences to calculate | Revise sayings and actions from introduction. In ability partners give children 2 questions per pair, one for each partner. Children need to talk to their partner, explaining why they are using the method that they are using e.g. moving down 4 rows to add 40 because there are 4 tens in forty. |


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| Tu | Mental: <br> To recognise odd and even numbers <br> Main: <br> Add with objects / on a number line <br> Aut007 | Mental: <br> On hundred square at http://www.taw.org.uk/lic/itp/num grid.html highlight odd numbers. Have children write a number on their pupil whiteboards. Ask them to hold their number up if it is odd / even <br> Main: <br> TA to take children who are unsure how to use concrete objects e.g. cubes, counters to add TA to model how to add using such concrete objects e.g. to do $4+2$ get 4 cubes, get two more and count how many there are <br> Ask each child to do an example. Children who are confident can get started on their independent work and children who are unsure can go through more examples with TA <br> Teacher (with remainder of class) <br> Model how to add on a number line by starting on the first number, then doing the number of jumps for the second number e.g. to calculate $4+2$, start on number four and do two jumps. <br> Do another example making deliberate mistakes of missing out numbers when jumping or landing in between numbers. Ask children to explain why these are mistakes. <br> Emphasise: <br> - need to land on a number (not between numbers) <br> - not skip a number <br> - make sure not to count the first number, only count after the first jump <br> (You may wish to have middle ability children start their work at this point) <br> Revise how when you add multiples of ten, only the tens number changes e.g. in $45+20$, only the 4 changes, not the 5 . <br> Model how we can use a blank number line to calculate with 2-digit numbers: <br> 1. Write the first number in the addition sentence at the start of the number line <br> 2. See how many tens there are in the number to be added and carry out this many jumps of 10. <br> 3. Do jumps of one for however many units there are <br> 4. e.g. for $40+23$, do two jumps of ten (one from 40 to 50 and another from 50 to 60 , then three jumps of one, from 60 to 61,61 to 62 and 62 to 63) <br> Encourage children working on addition of 2-digit numbers to use larger jumps e.g. to calculate 40 +23 they may do one jump of 20 and one jump of 20 and one jump of 3 , as using larger jumps is quicker if children can do it accurately | Lower ability use concrete objects to add with numbers below 10 <br> Middle ability use a number line with all numbers on it, to do jumps of 1 <br> Higher ability use a blank number line to add multiples of 10 <br> Gifted and talented - use a blank number line to add 2-digit numbers <br> Extension children to make up their own addition sentences to calculate on pupil | In ability partners give children 2 questions per pair, one for each partner (lower ability children to use cubes and middle ability children to use laminated number lines). Children need to talk to their partner, explaining why they are using the method that they are using e.g. using four jumps of ten to add 40 because there are 4 tens in forty. |


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| W | Mental: To recognise multiples of 10 <br> Main: <br> Add using our fingers / in our heads <br> Aut008 | Mental: <br> On hundred square at http://www.taw.org.uk/lic/itp/num grid.html highlight multiples of 10 . Show children a number and ask them if it is a multiple of 10 or not <br> Main: <br> TA to take children who are still insecure on adding with their fingers with numbers below 10. If unsure ask children to quickly do a couple of questions to check <br> Model how to add numbers using your fingers: <br> - with both numbers being below 5 e.g. $3+4$ by putting 3 fingers on one hand, four fingers on the other hand and counting all of the fingers, touching your chin with each finger as you count it to help count reliably <br> - with one number being more than 5 e.g. $8+5$, by placing the first number in your head and using your fingers to count on by the second number ( 9 , put a finger up, 10 put a finger up etc until you have five fingers up) <br> Emphasise the need to start counting from the next number e.g. to calculate $6+$ <br> 3 , count from 7 , so $7,8,9$, and not count from 6 , so $6,7,8$ <br> Teacher (with remainder of class) <br> Model how to add numbers using your fingers with one number by placing the first number in your head and using your fingers to count on by the second number <br> Emphasise the need to start counting from the next number e.g. to calculate $6+$ <br> 3 , count from 7 , so $7,8,9$, and not count from 6 , so $6,7,8$ <br> (Middle ability children begin work) <br> Briefly revise how to add the following with a hundred square and a number line. Tell children that they will not be using these today, but that if they imagine them in their minds it will help them. <br> Revise how to add multiples of ten by only changing the tens digit e.g. $45+20$, only the 4 in the tens column changes. <br> Revise how to add 2-digit numbers by adding the tens first and then the units e.g. $45+23$ you add the two tens first to get 65 and then add the units to get 68 Remind children to visualise number lines and hundred squares as they work to help them | Lower ability - adding with fingers (with totals up to 10). Children who work slowly to work on sheet rather than in books <br> Middle ability - adding with fingers (with totals up to 100) <br> Higher ability - adding multiples of ten mentally <br> Gifted and talented adding 2-digit numbers mentally <br> Extension - children to make up their own addition sentences to calculate on pupil whiteboards <br> (If children are really struggling to work without number lines / hundred squares, provide them, but only as last resort as aim of them is to give children mental images / strategies to work with, rather than becoming reliant / dependent on them) | In ability partners give children 2 questions per pair, one for each partner. Children need to talk to their partner, explaining how they are working out the calculation |


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| Th | Mental: To recognise multiples of 2 <br> Main: <br> Find one or ten less / subtract two-digit numbers Aut009 | Mental: <br> On hundred square at http://www.taw.org.uk/lic/itp/num grid.html highlight multiples of 2 . Show children a number and ask them if it is a multiple of 2 or not <br> Main: <br> TA to take children who are unable to find one less than another number. If unsure if some children can do this, ask them to do a couple of examples quickly to find out. <br> TA to model for children how to find one less than a number on a number line, by beginning on the first number and moving one space backward. Emphasise how when we add less we move back / down the number line. <br> Once children are confident with this, model how to find one less than a number mentally, by putting the number in their heads (pretend to push it in to your head) and counting back one <br> Teacher (with remainder of class) <br> Explain that we will be learning how to find 1 less or 10 less than a number. <br> Model how to do this on a number line (exaggerate how slow it is and how long it takes to jump ten spaces) <br> Introduce a hundred square, explaining how to count back one and how each row has ten numbers in it. <br> Model how a hundred square allows us to subtract 10 more quickly (exaggerate how quickly) by just <br> moving up a row. Ask children what they notice. What changes in the number? (only the digit in the tens column changes, but the digit in the units column stays the same when we move up a row i.e. subtract ten) <br> Teach children saying and actions of: <br> - To take away one (put one finger up), we move back (point to the side) <br> - To take away ten (put ten fingers up), we move up a row (point up) <br> Model how to find ten less or one less than a number using this method, reinforcing the saying above and how we take away ten by only changing the tens number <br> (At this point you may get middle ability children to begin their independent work) <br> Model for higher ability children how to use a hundred square to subtract multiples of ten and 2-digit numbers <br> To subtract multiples of 10 you need to see how many tens there are and move up this many rows e.g. to calculate $70-40$, there are 4 tens in 40 so you need to start on 70 and move down 4 rows to get to 30 . To subtract 2 digit numbers you need to first move up however many tens there are and then back how many units e.g. to calculate 56-32 there are three tens so you move down five rows and there are two units so then you move back two spaces. <br> Cover examples where you need to cross a 'tens barrier' e.g. 42-26 and model how to move back to the beginning of the next row up when you reach the end of a row e.g. when you get to 51, to count back one more you move up and across to 50 . | Lower ability find one less than a number <br> Middle ability find one less or ten less than a number on a hundred square <br> Higher ability find multiples of ten less than a number e.g. 43 20 <br> Gifted and talented subtract twodigit numbers from a number e.g. 43-21 <br> Extension make up some of their own subtraction number sentences to calculate | Revise sayings and actions from introduction. In ability partners give children 2 questions per pair, one for each partner. Children need to talk to their partner, explaining why they are using the method that they are using e.g. moving up 4 rows to subtract 40 because there are 4 tens in forty. |


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| F | Mental: <br> To recognise multiples of 5 <br> Main: <br> Subtract using objects / on a number line <br> Aut010 | Mental: <br> On hundred square at http://www.taw.org.uk/lic/itp/num grid.html highlight multiples of 5 . <br> Show children a number and ask them if it is a multiple of 5 or not <br> Main: <br> TA to take children who are unsure how to use concrete objects e.g. cubes, counters to subtract TA to model how to subtract using such concrete objects e.g. to calculate $4-2$ get 4 cubes, take two away and count how many there are left <br> Ask each child to do an example. Children who are confident can get started on their independent work and children who are unsure can go through more examples with TA <br> Teacher (with remainder of class) <br> Model how to subtract on a number line by starting on the first number, then doing the number of jumps back for the second number e.g. to calculate 4-2, start on number four and do two jumps back <br> Do another example making deliberate mistakes of missing out numbers when jumping or landing in between numbers. Ask children to explain why these are mistakes. <br> Emphasise: <br> - need to land on a number (not between numbers) <br> - not skip a number <br> - make sure not to count the first number, only count after the first jump <br> (You may wish to have middle ability children start their work at this point) <br> Revise how when you subtract multiples of ten, only the tens digit changes e.g. in $45-20$, only the 4 changes, not the 5 . <br> Model how we can use a blank number line to calculate with 2-digit numbers: <br> 5. Write the first number in the subtraction sentence at the end of the number line <br> 6. See how many tens there are in the number to be subtracted and carry out this many jumps of 10. <br> 7. Do jumps back of one for however many units there are <br> 8. e.g. for $45-23$, do two jumps of ten (one from 45 to 35 and another from 35 to 25 , then three jumps of one, from 25 to 24,24 to 23 and 23 to 22) <br> Encourage children working on subtraction of 2-digit numbers to use larger jumps e.g. to calculate 45-23 they may do one jump of 20 and and one jump of 3, as using larger jumps is quicker if children can do it accurately <br> (If children prefer to start at the left of the number line, rather than the right, it does not matter as long as they are using and understanding the strategy) | Lower ability - use concrete objects to subtract with numbers below 10 <br> Middle ability - use a number line with all numbers on it, to do jumps of 1 <br> Higher ability - use a blank number line to subtract multiples of 10 <br> Gifted and talented use a blank number line to subtract 2-digit numbers <br> Extension - children to make up their own subtraction sentences to calculate on pupil whiteboards | In ability partners give children 2 questions per pair, one for each partner (lower ability children to use cubes and middle ability children to use laminated number lines). Children need to talk to their partner, explaining why they are using the method that they are using e.g. using four jumps of ten to subtract 40 because there are 4 tens in forty. |

