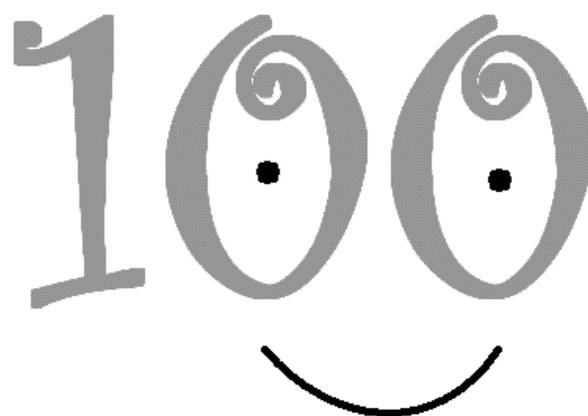


Week 1

| Focus + Resources | Lesson Notes |
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| <p>Lesson 1</p> <p>Main Focus Understand the place value of 2-digit numbers and order 2-digit numbers</p> <p>Objectives</p> <ul style="list-style-type: none"> • Understand place value in 2-digit numbers by creating 2-digit numbers, placing them on a number line and solving place value additions and subtractions; • Order and compare 2-digit numbers and say a number between. • Use language: equal to, more than, less/fewer than, most, least <p>Key Vocabulary digit; tens; ones; hundreds; before; after; between; more; less</p> <p>Prior Learning Know what each digit in a 2-digit number represents and compare 2-digit numbers</p> <p>Resources</p> <ul style="list-style-type: none"> • Soft toy • Resource Sheets 1 to 5 from Term 2 Appendix (see Preparation) • 10p and 1p coins (from WES Maths Kit) • Bead string (from WES Maths Kit) • Counters (from WES Maths Kit) • Y2 Abacus Workbook 2 | <p>Starter - Count in 2s Play 'Pass the bear'. Give a teddy bear or other soft toy to your child. Say a start number. Pass the bear back and forth counting in 2s each time the bear moves, to generate a sequence of numbers. Include counting forwards and backwards in 2s. <i>What happens when we start on an even number? What happens when we start on an odd number?</i></p> <p>Main Teaching</p> <ul style="list-style-type: none"> • Show your child the 100 square (Resource Sheet 1 in Y2 T2 Appx) and ask him what numbers are on it. Agree that it is the numbers from 1–100: all the 2-digit numbers plus the 1-digit numbers (top row) and one 3-digit number (100). • Give your child a bead string, a set of place value arrow cards (see Preparation) and a small pot of 10p and 1p coins. • Point to a number on the 100 square. Your child should show that number by arranging place value arrow cards, then by using 10p and 1p coins and finally by using the bead string. • Ask questions: <i>Show me the number after 30 using the coins. Show me the number before 3 using the bead string. Show me the number after 59 using the place value arrow cards. Show me a number between 30 and 40. Show me a number between 25 and 35. Show me a number between 85 and 100.</i> • Point to the number 35 on the 100 square, and discuss ways of describing this number, eg it's a number in the 5s count, a number we say when we count in 5s. It is more than 30 but less than 40, it's between 34 and 36. Repeat with number 18 (eg in the 2s count, less than 20). • Think of a number on the 100 square and invite your child to ask a series of questions about it to try to find out what it is. You answer either 'yes' or 'no'. Each answer should help your child to determine some numbers that it can't be. Ask him to cover those numbers using counters, until he is left with the number you chose. • Ask your child to work out how many times the digit 9 is used in the page numbers of a book with 100 pages. <i>How many times is the digit 0 used?</i> Does he think the answer will be the same? Discuss with your child how he could work this out systematically. He may suggest using a 100 square. Encourage this! • Ask your child to complete Y2 WB2 pages 2 and 3. Allow the use of coins and the bead string if your child needs them. <p>Plenary Discuss the THINK question on Y2 WB2 page 2 with your child then invite him to show you his purse of coins for his chosen number on the page 3 THINK question.</p> |

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| <p>Week 1 Lesson 2</p> <p>Main Focus Write place value additions and subtractions</p> <p>Objectives Understand place value in 2-digit numbers by creating 2-digit numbers, placing them on a number line and solving place value additions and subtractions</p> <p>Key Vocabulary digit; hundreds; tens; ones; before; after; between; partition; add; subtract</p> <p>Prior Learning Know what each digit in a 2-digit number represents</p> <p>Resources</p> <ul style="list-style-type: none"> • 100 square • Place value arrow cards (1s and 10s for Main Teaching; 100s for Extension) • Calculator • Y2 Abacus Workbook 2 • Number cards 1 – 9 (made from blank cards from WES Maths Kit) • Resource Sheet 6 from Term 2 Appendix (for Extension) | <p>Starter - Say the number before, after, between 2-digit numbers Use a 100 square and whiteboard. Give an instruction such as: <i>Write the number after 35. Write the number before 78. Write the number before 80. Write the number after 49. Write the number before 41. Write the number after 99. Write a number between 30 and 40. Write a number between 50 and 60. Write a number between 52 and 55.</i> Repeat, without the 100 square.</p> <p>Main Teaching</p> <ul style="list-style-type: none"> • Ask your child to use the 1s and 10s place value cards. Call out a 2-digit number, eg 36. Ask your child to use the place value cards to show you two numbers with this total, ie 30 and 6. Write on the whiteboard: $36 = 30 + 6$. Repeat with lots of other 2-digit numbers keeping the pace brisk. • Ask your child to show place value cards 40 and 7. Agree that he is showing 47 altogether. Record $40 + 7 = 47$. Read this together. • Drag the 7 away. <i>Now we have 40 left.</i> Write on the whiteboard a subtraction to match, ie $47 - 7 = 40$. Read this together. • Repeat, dragging 40 away. <i>What will we write? $47 - 40 = 7$.</i> Write this and read it together. • Enter 58 into a large calculator. <i>If I want to 'zap' (get rid of) the 5, what should I take away? Show on the calculator how to do 58 subtract 5, then 58 subtract 50. What is the 5 worth in the number 58? We need to take away 50 not 5.</i> • Ask your child to choose a 2-digit number and select one of its digits to 'zap', then enter a subtraction into the calculator to do this. Invite him to record the subtraction on his whiteboard. • Ask your child to complete the work in Y2 WB2 page 4. Let him complete this independently if possible but provide support if needed. Encourage your child to use place value arrow cards if he needs them. <p>Plenary Shuffle a set of 1–9 cards and place two cards face down in front of your child. When you say 'go', your child turns over the cards and uses the digits to make the biggest number that he can. Repeat 5 times.</p> |
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| <p>Week 1 Lesson 3</p> <p>Main Focus Add 10 and 11</p> <p>Objectives</p> <ul style="list-style-type: none"> • Add or subtract 10 to and from 2-digit numbers; • Add and subtract 9 and 11 to and from 2-digit numbers <p>Key Vocabulary count on; more; digit; tens; units</p> <p>Prior Learning Say the number that is 10 more than any given 2-digit number</p> <p>Resources</p> <ul style="list-style-type: none"> • 100 square • Place value arrow cards (1s and 10s) • Counter (from WES Maths Kit) • Bead string (from WES Maths Kit) • Y2 Abacus Workbook 2 • 10p and 1p coins (from WES Maths Kit) (for Support) | <p>Starter - Count on and back in 10s</p> <p>Use the 100 square to support counting in 10s from 6 to 96 and then back again. Repeat, encouraging your child to count in 10s starting from a different 1-digit number. Repeat for a third starting number.</p> <p>Main Teaching</p> <ul style="list-style-type: none"> • Explain that today we are going to be doing ‘easy-peasy additions’. • Show the 100 square. Point to 36. <i>What is 10 more than 36?</i> Model moving a counter one row down the grid. • Write $46 + 11 =$ on the whiteboard and read this together. Point out that we are adding 10 and 1 more. Remind your child how the 100 square can help us count on in 10s and 1s. Model using a counter to count on 10 and then 1 more. Complete the addition $46 + 11 = 57$. • Use place value arrow cards to do $74 + 11$, demonstrating that we add 10 by changing the 10s card to 80, then add 1 by changing the 1s card to 5, so $74 + 11 = 85$. • Write $23 + 11 =$ on the whiteboard and show the bead string. Model how to add 11 by sliding 10 beads along and then 1 more. • Say to your child that he is now so good at numbers that adding 11 is easy-peasy! Write $51 + 11 =$ on the whiteboard and challenge your child to write the answer on his whiteboard really quickly. • Repeat to add 11 to 85, to 67 and to 49. Allow your child to use the 100 square or bead string as he prefers. • Turn to Y2 WB2 page 5. Encourage your child to use a 100 square to complete the examples on the page. <p>Plenary</p> <p>Ask your child to point to a number on the 100 square. Challenge him to say the number that is 11 more. Repeat several times.</p> |
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| <p>Week 1 Lesson 4</p> <p>Main Focus Add 9 and 10</p> <p>Objectives</p> <ul style="list-style-type: none"> • Add or subtract 10 to and from 2-digit numbers; • Add and subtract 9 and 11 to and from 2-digit numbers <p>Key Vocabulary add; subtract; count on; count back; tens; ones</p> <p>Prior Learning Say the number that is 10 more than any given 2-digit number</p> <p>Resources</p> <ul style="list-style-type: none"> • Bead string (from WES Maths Kit) • 100 square • Counter (from WES Maths Kit) • 0-100 number line (from WES Maths Kit) | <p>Starter - Find 10 more</p> <p>Show your child a 2-digit number on the bead string. Ask him to write on his whiteboard the number that is 10 more. Repeat several times. How many can he do in 5 minutes? Challenge him by asking him to find 11 more than a 2-digit number.</p> <p>Main Teaching</p> <ul style="list-style-type: none"> • Show the 100 square and remind your child how we can add 10 by moving a counter down one line. • Ask your child to write an addition including 10, eg $27 + 10$ and demonstrate the addition by moving a counter on the 100 square. • Write $36 + 9 =$ on the whiteboard and read it together. Remind your child that we found an easy way to add 11 yesterday. <i>We are going to do some slightly different 'easy-peasy' additions today.</i> • Show 36 beads on the bead string then slide ten along to make 46. <i>Oh no, I only meant to add 9, not 10. What can I do?</i> Agree that you can put one bead back. • Model how to make a jump of 10 on the number line from 36 to 46, and then a hop back of 1 to 45. • Write $53 + 9 =$ on the whiteboard and read it together. Using a counter on the 100 square, show how to do this by moving down one line and then back one space to add one less than ten (9). • Repeat adding 9 to other 2-digit numbers. • Write $78 + 10$, $78 + 11$ and $78 + 9$ on the whiteboard. Ask your child which will have the biggest answer and why. Show the jump of 10 on the 100 square and the hops of 1 forwards and backwards. • If your child needs more practice, allow him to choose the 100 square or the bead string to help him add 9, 10 and 11 to a series of given numbers. • More practice in adding 9 is available on Y2 WB2 page 7. Work with your child on a couple of the questions so he understands the process and how to record the answers. Note that the 3 adjoining squares in each one represent part of a 100 square. <p>Plenary</p> <p>Use the THINK question on page 7 as a Plenary activity, with reference to a 100 square: <i>Start at 1, add 9. Keep adding 9 to each answer you get. What do you notice about the ones digit?</i></p> |
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| <p>Week 1 Lesson 5</p> <p>Main Focus Begin to subtract 9, 10 and 11</p> <p>Objectives</p> <ul style="list-style-type: none"> • Add or subtract 10 from 2-digit numbers; • Add and subtract 9 and 11 to and from 2-digit numbers <p>Key Vocabulary add; subtract; count on; count back; tens; ones</p> <p>Prior Learning Say the number that is 10 more or less than any 2-digit number</p> <p>Resources</p> <ul style="list-style-type: none"> • Bean bag or ball • Resource Sheet 7 from Term 2 Appendix • 100 square • Y2 WES Activity Book 2 • Number cards 20 – 90 (for Support) • Bead string (for Support) • 0-100 number line (for Support) | <p>Starter – Count on and back in 1s and 10s</p> <p>Throw a bean bag or ball to your child saying ‘8’. Your child should say the answer when 10 is added then throw it back to you. You add ten more and return it. Continue to 98 and shout, <i>Change!</i> This time count back in 10s. When you reach 28 say, +1. This time count on in ones as you pass the bean bag back and forth. At 36 say –1, changing to counting back. Repeat, changing the step size more frequently according to your child’s level of confidence.</p> <p>Main Teaching</p> <ul style="list-style-type: none"> • Write on the whiteboard $34 - 11 =$ and read this with your child. Explain that this is a different type of ‘easy-peasy’ calculation. Can your child say what is different about it? It is subtraction not addition. • Show Resource Sheet 7 from <i>Y2 T2 Appx</i> with toys priced between £20 and £80, and explain that the toys with blue tags are in the sale and their prices are reduced by £11, and the toys with orange tags are reduced by £9. • Choose a toy with a blue tag. Remind your child how we added 11: we added 10 and then 1 more. So to subtract 11 we take off 10, and then 1 more. Model doing this using a 100 square. We go up one line and then back one. Write the subtraction and read it together. • Repeat this to reduce the price of an item with an orange tag. We take off 10 and then add one back on because we took one too many off. Model this on the 100 square and write the subtraction. • Ask your child to find all the new prices. • Ask your child to complete all questions on Activity Sheet 1 in <i>Y2 WES Actbk 2</i>. <p>Plenary</p> <p>Summarise this week’s work and give it the heading <i>Easy-peasy add and subtract!</i> Remind your child that we can add 11 or 9 without doing much work. Point to 3 on a 100 square. Ask your child to add 11 and say the answer. Now ask him to add 11 again then continue to 91. Repeat, starting at 8 and adding 9 repeatedly.</p> |
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Week 1 Additional Teaching Points

Preparation

- The 100 square used in Lesson 1 will be need for a number of lessons throughout this term. Two copies are supplied. If your child did not follow the Term 1 course or if your 100 squares from Term 1 need to be replaced, cut out the ones supplied on Resource Sheet 1 in the Term 2 Appendix and back them onto card or, if you are able to, laminate them.
- If you do not have the place value arrow cards for 1s and 10s from Term 1, prepare them using Resource Sheets 2 and 3 in the Term 2 Appendix. This term we also add the 100s cards from Resource Sheets 4 and 5. In order to help with the differentiation between hundreds, tens, and ones, different colours are used for each. Back these numbers onto card or laminate them if possible. It can be helpful to keep the 1s cards, 10s cards and 100s cards in separate containers or envelopes, labelled accordingly.
- Your WES Maths Kit contains a pack of blank cards. Use these to make number cards 0 to 100 if you do not already have them from Term 1. These will be used for a number of lessons during the year so store them in an envelope or container for re-use. You will need cards 1-9 for Lesson 2 this week.

Additional Resources

This website provides practice and is a resource you may find useful for reinforcement activities throughout Year 2: <https://uk.ixl.com/math/year-2>

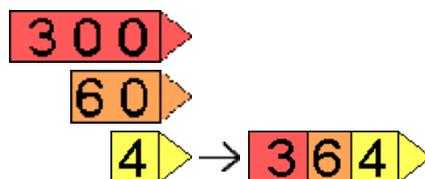
Another useful source of maths activities is: <http://www.topmarks.co.uk/maths-games/5-7-years/counting>. A helpful 'Guess the Number' game is included on <http://www.topmarks.co.uk/Flash.aspx?f=ThinkingOfANumberv3>

If you have access to the BBC iPlayer in your location, there are some helpful clips related to counting and number bonds. See <http://www.bbc.co.uk/education/topics/zknsgk7/resources/1>

Teaching Tips

A reminder about place value arrow cards

Arrow cards are a set of place value cards with an "arrow" or point on the right hand side. Children can organise the cards horizontally or vertically to represent numbers in expanded notation. The vertical layout is shown below. They can overlap cards and line up the arrows to form multi-digit numbers.



When arrow cards are colour coded by place, they are easier to organise, and the colour helps reinforce the concept of place. As children progress through the primary school years they will work with arrow cards up to the hundreds, thousands and even larger.

Lesson 1

Support

Give your child lots of practice using the bead string to show numbers such as 55, 66, 77... and pairs of numbers such as 19 and 91, 27 and 72, 38 and 83, etc so that he can see that the value of each digit is very different according to its place in a number. Also ask him to show 40, then 50, then numbers in between, discussing why they all have four tens.

Extension

In the main lesson, your child is asked to find out how many times the 9 digit and the 0 digit are used in numbers from 1 to 100. Challenge him to investigate how many times other digits are used. *Are some used the same number of times as the digit 9? As the digit 0? What about in a book with 200 pages?*

Lesson 2

Support

If your child needs more practice in making 2-digit numbers and subtracting either the 10s or 1s, repeat the activity in the main lesson several times before your child tackles the workbook page. Invite him to make a 2-digit number using the place value arrow cards, then write the number sentence that he makes if he removes the 1s digit, then if he removes the 10s digit.

Extension

- Show your child the 101 to 200-square on Resource Sheet 6 in the Term 2 Appendix and together count from 101 to 150. Point to different numbers on the number square and ask your child to identify them. Give him a set of 100s, 10s and 1s place value arrow cards and explain that we can use these to make numbers up to 1000 like we use 10s and 1s cards to make numbers up to 100. Ask him to take 100, 20 and 4, align the arrows and read the number. Partition (separate) to see the 100, 20 and 4. Point to other numbers on the number square and ask him to make the number. Include numbers such as 105 and 140, with 0 as a place holder. Ask him to write some place value additions, eg $100 + 40 + 5 = 145$
- Say: *A 100 square has been printed on both sides of a piece of paper. What is on the back of 100? 58? 23? 19?*

Lesson 3

Support

- Pull five beads to the left of the bead string. Slide a group of ten beads across to join them. *How many beads are there now?* Continue until you reach 35. Slide another ten beads across. *There were 35 beads, and then I slid another ten beads across, so how many are there now? But I meant to slide eleven across, so what shall I do?* Agree that you can slide one more across to make 46 beads. Keep adding 11 until you reach 79 beads, encouraging your child to predict each answer. Repeat, starting from 8.
- Give 10p and 1p coins to your child. Ask him to work out how he could add 11p (10p and 1p) to different start amounts, eg 46p, 38p, 65p, 29p. Ask him to find the new total each time.
- Practise adding and subtracting 10s from different start numbers for your child to see the pattern. Use a bead string to add 10, then 11, then 10 so your child has lots of practice in adding 1 more.

Extension

Y2 Abacus Workbook 2 page 6 may be used as an Extension activity. Can your child describe the pattern he notices?

Lesson 4

Support

Make sure that your child realises that when he is adding 9 or 11, he starts by adding 10 each time. Use a bead string to add 10 then 1 more to add 11. Then use the bead string to add 9, adding 10 beads, then moving 1 back.

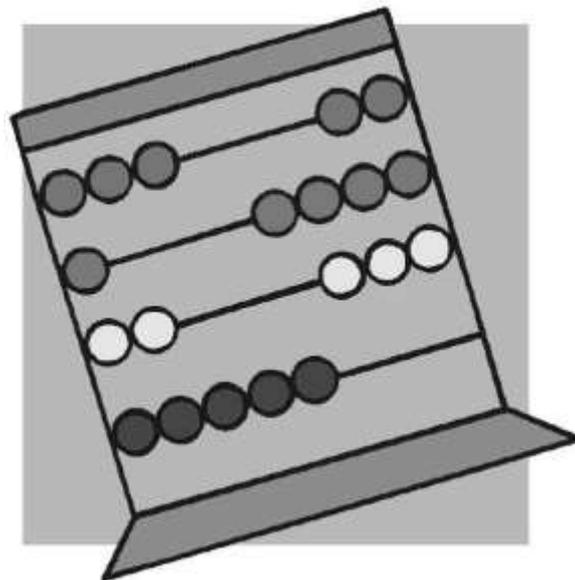
Extension

Make sure the Plenary is completed then ask your child what happens if he starts at 3 and continues to add nine after 100? *What starting number would get us to exactly 200?*

Lesson 5

Support

Use number cards 20 to 90 shuffled and placed face down in a pile. Ask your child to choose a card then subtract 11 by first subtracting 10 then 1. Encourage use of a 0-100 number line, a bead string or a 100 square to show the steps, according to your child's preference.



Activity Sheet 1

Add and subtract 9, 10 or 11

Add and subtract 9, 10 or 11 

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|-------------------------|-------------------------|
| 1. $37 + 10 = \square$ | 11. $34 + 9 = \square$ |
| 2. $37 + 9 = \square$ | 12. $91 + 9 = \square$ |
| 3. $37 + 11 = \square$ | 13. $40 - 9 = \square$ |
| 4. $48 - 10 = \square$ | 14. $74 - 9 = \square$ |
| 5. $48 - 11 = \square$ | 15. $34 + \square = 44$ |
| 6. $48 - 9 = \square$ | 16. $56 + \square = 65$ |
| 7. $63 + 11 = \square$ | 17. $45 + \square = 56$ |
| 8. $49 + 11 = \square$ | 18. $65 - \square = 54$ |
| 9. $72 - 11 = \square$ | 19. $72 - \square = 62$ |
| 10. $31 - 11 = \square$ | 20. $47 - \square = 38$ |



21. Choose five 2-digit numbers and subtract 9 from each.

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| 1. | 14. |
| 2. | 15. |
| 3. | 16 |
| 4. | 17. |
| 5. | 18. |
| 6. | 19. |
| 7. | 20. |
| 8. | 21. |
| 9. | |
| 10. | |
| 11. | |
| 12. | |
| 13. | |

