

Unit 8
Counting, properties of numbers and reasoning about numbers

Year 3
Spring term

This Unit Plan is designed to guide your teaching. You will need to adapt it to meet the needs of your class.

Unit Objectives
Year 3

- Describe and extend number sequences: **count on or back in tens or hundreds, starting from any two- or three-digit number;** count on or back in twos starting from any two-digit number, and recognise odd and even numbers to at least 100; count on in steps of 3, 4 or 5 from any small number to at least 50, then back again.
- Solve mathematical problems or puzzles, recognise simple patterns and relationships, generalise and predict. Suggest extensions by asking 'What if...?'.
- Investigate a general statement about familiar numbers or shapes by finding examples that satisfy it.
- **Explain methods and reasoning** orally and, where appropriate, in writing.

Pages 3, 5, 7

Page 63

Page 65

Page 65

Link Objectives

Year 2

- **Describe and extend simple number sequences: count on or back in ones or tens, starting from any two-digit number;** count in hundreds from and back to zero; count on in twos from and back to zero or any small number, and **recognise odd and even numbers** to at least 30; count on in steps of 3, 4 or 5 to at least 30, from and back to zero, then from and back to any given small number.
- Solve mathematical problems or puzzles, recognise simple patterns and relationships, generalise and predict. Suggest extensions by asking 'What if...?' or 'What could I try next?'.
- Investigate a general statement about familiar numbers or shapes by finding examples that satisfy it.
- **Explain how a problem was solved** orally and, where appropriate, in writing.

Year 4

- Recognise and extend number sequences formed by counting from any number in steps of constant size, extending beyond zero when counting back: for example, count on in steps of 25 to 500, and then back to, say, -100.
- Recognise odd and even numbers up to 1000, and some of their properties, including the outcome of sums or differences of pairs of odd/even numbers.
- Solve mathematical problems or puzzles, recognise and explain patterns and relationships, generalise and predict. Suggest extensions by asking 'What if...?'.
- Make and investigate a general statement about familiar numbers or shapes by finding examples that satisfy it.
- Explain methods and reasoning about numbers orally and in writing.

Resources needed to teach this unit:

- OHT 8.1
- OHT 8.2 (taken from *Mathematical challenges for more able pupils in Key Stages 1 and 2* NNS publication).
- OHT 8.3
- OHT 8.4 (taken from *Mathematical challenges for more able pupils in Key Stages 1 and 2* NNS publication).
- Activity sheet 8.1
- Activity sheet 8.2
- Large number line 0–100
- 0–100 cards
- Strips of paper
- Whiteboards
- Tambourine
- Large hundred square
- A3 paper
- Sticky notes
- Interlocking cubes
- Coat hanger, 18 pegs and a tea towel

Also see Problem Solving Strategies table.

(Key objectives in bold)

Planning sheet	Day One (page 2 of 2)	Unit 8 <i>Counting, properties of numbers and reasoning about numbers</i>	Term: <i>Spring</i>	Year Group: 3
Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions
			<p>Q How could you work out what goes in the first empty box?</p> <p>Allow time for children to discuss in pairs. Take feedback drawing the strategy of starting at 71 and counting back in 2s.</p> <p>Q Why did you count back/subtract 2s?</p> <ul style="list-style-type: none"> Record the sequence 54, 50, 46, 42 on the board and explain the rule is to subtract a number each time (i.e. counting back). Draw jumps with – 4 between each pair of numbers. Ask the children to continue the sequence. Give out Activity sheet 8.1. Ask the children in pairs to work out the rule and the missing numbers for the sequences on the sheet. 	

Planning sheet	Day Two	Unit 8 <i>Counting, properties of numbers and reasoning about numbers</i>		Term: <i>Spring</i>	Year Group: 3
Oral and Mental		Main Teaching			Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions	
<p>Add or subtract a single digit from a two-digit number crossing the tens boundary.</p> <p>VOCABULARY multiple of 10 partition</p> <p>RESOURCES Whiteboards</p>	<ul style="list-style-type: none"> Write 26 + 7 on the board. <div data-bbox="309 352 602 456" style="border: 1px solid black; padding: 2px;"> <p>Q How would you calculate the answer without having to count on in ones?</p> </div> <p>Draw out the strategy of bridging the multiple of 10 by partitioning the 7 into 4 and 3.</p> <ul style="list-style-type: none"> Write on the board: $26 + 4 = 30$ $30 + 3 = 33$ <p>Reinforce the importance of the number facts that the children know.</p> <ul style="list-style-type: none"> Write the numbers 36, 47, 58, 66 on the board. <p>Point to each of the numbers and ask the children to add on 7 and use their whiteboards to show their working.</p> <p>Ask questions such as:</p> <div data-bbox="309 1098 602 1201" style="border: 1px solid black; padding: 2px;"> <p>Q What's the next multiple of 10 after 36? What number could I add to 36 to get a multiple of 10?</p> </div> <ul style="list-style-type: none"> Repeat, this time adding 8 onto other two-digit numbers. 	<p>Describe and extend simple number sequences.</p> <p>VOCABULARY sequence rule</p> <p>RESOURCES A3 paper Sticky notes</p>	<div data-bbox="857 328 1693 355" style="border: 1px solid black; padding: 2px;"> <p>Q What strategies do you use when working out missing numbers in sequences?</p> </div> <ul style="list-style-type: none"> Write notes on the board from the children's responses. Ensure that the following are included. Find the difference between neighbouring numbers in the sequence. Patterns in the digits can be used to check the numbers. Unknown numbers can be worked out using the known numbers and the rule. Explain that today the children are going to use what they know about sequences to create their own. Write 16 and 18 on the board. Say that you will create a sequence using these numbers. Explain that we first need to decide what the rule is going to be. <div data-bbox="857 754 1693 782" style="border: 1px solid black; padding: 2px;"> <p>Q What could the rule be? Are we going to count back or forwards?</p> </div> <p>Take responses e.g. we add 2 going from 16 to 18, we subtract 2 going from 18 to 16.</p> <p>Choose one of these options and write the next three numbers following the chosen rule e.g. 16, 18, 20, 22, 24.</p> <div data-bbox="857 954 1693 981" style="border: 1px solid black; padding: 2px;"> <p>Q What number would come before 16?</p> </div> <div data-bbox="857 1007 1693 1034" style="border: 1px solid black; padding: 2px;"> <p>Q What numbers between 30 and 40 would be in the sequence? How do you know?</p> </div> <div data-bbox="857 1059 1693 1107" style="border: 1px solid black; padding: 2px;"> <p>Q What would the sequence be if the rule was to subtract 2 using the same cards, 16 and 18?</p> </div> <ul style="list-style-type: none"> Ask the children to work in pairs to choose two numbers which are less than 10 apart to create their own sequence which includes those numbers. State that they are expected to work out at least seven numbers in each of at least five sequences. Ask them to record their sequences on A3 paper writing the rule underneath each sequence. Draw the class together and ask them to prepare for the plenary by covering three of the numbers and the rules from their sequences with the sticky notes. 	<ul style="list-style-type: none"> Invite several pairs of children to show one of their sequences which includes covered numbers. Challenge the rest of the class to work out what the rule is and what the missing numbers are. Show the class the two cards e.g. 25 and 29. Explain that this time these cards cannot be next to each other in a sequence. Write on the board: $25, \square, 29, \square$ <div data-bbox="1727 679 2168 727" style="border: 1px solid black; padding: 2px;"> <p>Q How could you work out the rule and the missing numbers now?</p> </div> <p>Elicit the use of known facts to help solve the problem i.e. the difference between 25 and 29 is 4.</p> <div data-bbox="1727 852 2168 900" style="border: 1px solid black; padding: 2px;"> <p>Q What might the difference between 25 and \square be? Why do you think that?</p> </div> <p>Draw the two jumps of 2 to make a jump of 4.</p> <div data-bbox="1727 1007 2168 1054" style="border: 1px solid black; padding: 2px;"> <p>Q If the rule is to add 2, what will the missing numbers be?</p> </div> <div data-bbox="1727 1098 2168 1430" style="border: 1px solid black; padding: 5px;"> <p>By the end of the lesson, children should be able to:</p> <ul style="list-style-type: none"> create their own sequences with constraints such as: <i>It must have the numbers 7 and 16 in it;</i> decide on the information you need to describe and continue the patterns. <p>(Refer to supplement of examples, section 5, page 7 and Problem Solving Strategies table.)</p> </div>	

Planning sheet	Day Three	Unit 8 Counting, properties of numbers and reasoning about numbers	Term: Spring	Year Group: 3
Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions
<p>Count on or back in steps of 2 or 3 from any two-digit number.</p> <p>Recognise odd and even numbers.</p>	<ul style="list-style-type: none"> Put a selection of cards on the board and ask the class to decide in pairs which are odd and which are even. <p>Q How did you decide this number was even?</p> <ul style="list-style-type: none"> Sit the class in a circle. Select a number card from the 0–100 pack of cards. <p>Count around the circle in ones from that number. All children must hold up one thumb if a child says an odd number and two thumbs if a child says an even number e.g. 55 (one thumb), 56 (two thumbs), 57 (one thumb), 48 (two thumbs)...</p> <p>Q Why did you hold up two thumbs when Sam said that number?</p> <p>Q How did you recognise that number is odd?</p> <ul style="list-style-type: none"> Repeat with counting in steps of 3 from different start numbers e.g. counting backwards in threes. <p>Q If we carried on counting what other numbers would we say?</p>	<p>Investigate a general statement about familiar numbers by finding examples that satisfy it.</p> <p>Explain methods and reasoning orally and in writing.</p> <p>VOCABULARY rule odd even examples pattern consecutive</p> <p>RESOURCES Strip of paper with statement to be proved written on Interlocking cubes Whiteboards</p>	<p>Q What do you know about odd numbers? What do you know about even numbers?</p> <ul style="list-style-type: none"> Write several of the responses on the board e.g. an odd number of objects has an odd one left over when put into pairs. Even numbers are numbers in the two times table. Write on the board: <i>There are always five odd numbers between any two consecutive multiples of 10 such as 10 and 20, 30 and 40.</i> <p>Q What is the best way to find out if the statement is true or false?</p> <p>Agree the need to try out examples. Demonstrate how to list the odd numbers between 10 and 20 in order of size: 11 13 15 17 19.</p> <p>Q Have we demonstrated that the statement is true? Why not?</p> <p>Point to the word 'any' and explain that we have only shown this to be true for odd numbers between 10 and 20.</p> <p>Q What other examples could be tried?</p> <ul style="list-style-type: none"> Ask the class to choose two consecutive multiples of 10, and to test how many odd numbers are in between them. They should record their list on their whiteboards. After several minutes list responses. <p>Q What other multiples of 10 need to be tested?</p> <ul style="list-style-type: none"> Extend to test three-digit multiples of 10. <p>Q What pattern helps to convince us that there will always be five odd numbers between consecutive multiples of 10?</p> <p>Draw out the pattern of the ones digit – 1 3 5 7 and 9.</p> <p>Q Is this always the pattern between consecutive multiples of 10?</p> <p>Establish that it is and that any number whose last digit is 1, 3, 5, 7 or 9 is an odd number.</p> <p>Emphasise the need to consider a range of numbers when finding examples to prove a statement.</p> <ul style="list-style-type: none"> Challenge the class to demonstrate if the following statement is true or false: <i>An odd number add 1 equals an even number.</i> <p>Q How could you demonstrate if this statement is true or false?</p> <p>Draw out the need to try a variety of examples ranging from one-digit to three-digit numbers e.g. $7 + 1$, $59 + 1$, $343 + 1$.</p> <ul style="list-style-type: none"> Allow the class 10 minutes to work on providing a good mix of examples. Take feedback on examples found. 	<p>Q Why do you think it is always true?</p> <ul style="list-style-type: none"> Use interlocking cubes to show odd numbers as a pair of towers of cubes, one tower having one more than the other. For example, show 5 as a tower of 2 and a tower of 3. <p>Say that 5 is an odd number of cubes. Invite a child to add a cube to the tower of 2 cubes. Point out how the odd one at the top of the tower of 3 has now been made into a pair. Say that 6 is an even number because it is made of pairs of cubes with none left over.</p> <ul style="list-style-type: none"> Write $5 + 1 = 6$ on the board and link with the general statement. <p>Q What kind of number do you think we would get if we subtracted 1 from an even number? Why?</p> <p>Collect answers and discuss responses.</p> <p>Q What other number statements could you make using the statements we have made so far? i.e. $odd - 1 = even$ $even + 1 = odd$</p> <p>By the end of the lesson, children should be able to:</p> <ul style="list-style-type: none"> give examples to match statements such as: <i>Any odd number is one more than an even number.</i> <p>(Refer to supplement of examples, section 5, page 65.)</p>

Planning sheet	Day Four (page 1 of 2)	Unit 8 <i>Counting, properties of numbers and reasoning about numbers</i>		Term: <i>Spring</i>	Year Group: 3																																	
Oral and Mental		Main Teaching			Plenary																																	
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions																																		
<p>Recall addition and subtraction facts for numbers up to 20.</p> <p>Say a subtraction sentence corresponding to an addition sentence and vice versa.</p> <p>VOCABULARY number sentences add subtract</p> <p>RESOURCES Whiteboards Coat hanger 18 pegs Tea towel</p>	<ul style="list-style-type: none"> Hang 14 pegs at one end of the coat hanger and 4 at the other. <p>Q What addition fact could we write?</p> <p>Write $14 + 4 = 18$ on the board.</p> <p>Turn the coat hanger round.</p> <p>Q What addition fact could we write now?</p> <p>Write $4 + 14 = 18$ on the board.</p> <p>Cover 4 pegs with a tea towel.</p> <p>Q What subtraction fact could we write?</p> <p>Write $18 - 4 = 14$ on the board. Now cover the 14 pegs instead.</p> <p>Q What subtraction fact could we write now?</p> <p>Write $18 - 14 = 4$ on the board.</p> <ul style="list-style-type: none"> Write the following number sentences on the board: $12 + 5 = 17$ $18 - 4 = 14$ 	<p>Solve mathematical puzzles.</p> <p>Explain methods orally and in writing.</p> <p>VOCABULARY total sum</p> <p>RESOURCES OHT 8.1 OHT 8.2 taken from <i>Mathematical challenges for more able pupils in Key Stages 1 and 2</i> (NNS publication)</p>	<ul style="list-style-type: none"> Show OHT 8.1 of Micky's mice problem. Read through the problem together. <p>Q What facts are given?</p> <p>Highlight the three statements giving the combined ages of several of the mice. Explain that you will demonstrate how to use these facts to help solve the problem and also how to record them to make the problem easier to solve. Write Mouse 1, Mouse 2, Mouse 3 on the board.</p> <p>Q What do we know about Mice 1 and 3? What could their ages be?</p> <p>Establish their combined age is 5 and collect possible ages e.g. 1 and 4.</p> <ul style="list-style-type: none"> Ask the class to write on their individual whiteboards all the pairs of ages that Mice 1 and 3 could be. <p>Q What would be a good order to write them down in to ensure that all possible pairs are listed?</p> <p>Suggest that starting with Mouse 1 as 1 year old is a good idea and build up the following table.</p> <table border="1" data-bbox="835 754 1171 882"> <thead> <tr> <th>Mouse 1</th> <th>Mouse 2</th> <th>Mouse 3</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td>4</td></tr> <tr><td>4</td><td></td><td>1</td></tr> <tr><td>2</td><td></td><td>3</td></tr> <tr><td>3</td><td></td><td>2</td></tr> </tbody> </table> <ul style="list-style-type: none"> Focus on the first pair, 1 and 4. <p>Q What will the age of the second mouse be if the first mouse is 1 year old and the third mouse is 4 years old? How did you work that out?</p> <p>Draw out the fact that the ages of the second and third mice must add up to 8. Work through the list in the same way to end up with:</p> <table border="1" data-bbox="835 1106 1171 1233"> <thead> <tr> <th>Mouse 1</th> <th>Mouse 2</th> <th>Mouse 3</th> </tr> </thead> <tbody> <tr><td>1</td><td>4</td><td>4</td></tr> <tr><td>4</td><td>7</td><td>1</td></tr> <tr><td>2</td><td>5</td><td>3</td></tr> <tr><td>3</td><td>6</td><td>2</td></tr> </tbody> </table> <p>Q How can we work out which of these sets of ages is the correct one?</p> <ul style="list-style-type: none"> Draw out the use of the final fact to check down the list and place a tick by the correct answer i.e. 3, 6 and 2, because they add together to make 11. <p>Q Is each mouse a different age?</p> <p>Agree the ages are different. Check that each statement is satisfied.</p>	Mouse 1	Mouse 2	Mouse 3	1		4	4		1	2		3	3		2	Mouse 1	Mouse 2	Mouse 3	1	4	4	4	7	1	2	5	3	3	6	2	<ul style="list-style-type: none"> Agree that the correct answer to the problem is the cats weigh 5kg, 2kg and 6kg. Invite a child to explain the stages they went through to solve the problem. <p>Q How were you sure that you had the correct answer?</p> <p>Q What did you do to make solving this problem easier?</p> <p>Draw a diagram to illustrate the process of using known facts, then testing against the other facts to get the correct answer or answers.</p> <table border="0" data-bbox="1821 778 2134 898"> <tr> <td>List all possible answers using first fact</td> <td style="text-align: center;">→</td> <td>Test each answer against other facts</td> </tr> </table> <p>HOMEWORK – Solve the problem on Activity sheet 8.2 using what has been learned today about finding possible answers.</p> <p>By the end of the lesson, children should be able to:</p> <ul style="list-style-type: none"> choose and use a recording system to organise the given information; use one piece of information in the problem and see what effect it has; check the answer meets all the criteria. <p>(Refer to Problem Solving Strategies table.)</p>		List all possible answers using first fact	→	Test each answer against other facts
Mouse 1	Mouse 2	Mouse 3																																				
1		4																																				
4		1																																				
2		3																																				
3		2																																				
Mouse 1	Mouse 2	Mouse 3																																				
1	4	4																																				
4	7	1																																				
2	5	3																																				
3	6	2																																				
List all possible answers using first fact	→	Test each answer against other facts																																				

Planning sheet	Day Four (page 2 of 2)	Unit 8 <i>Counting, properties of numbers and reasoning about numbers</i>	Term: <i>Spring</i>	Year Group: 3
Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions
	<p>Ask the children to write on their whiteboards the other three number sentences which correspond to each one.</p> <p>$5 + 12 = 17$ $17 - 5 = 12$ $17 - 12 = 5$</p> <p>Q If we take 12 from 17, what are we left with? If we take 5 from 17, what are we left with? What subtraction facts can we write?</p>		<ul style="list-style-type: none"> Recap on the process of using the given information to work systematically to work out the solution to the problem. <p>Q How did listing the ages help?</p> <p>Agree that making a list of the ages of two mice enabled them to find the possible ages of the other mouse. Then they could look down the list to find which three ages had a total of 11.</p> <ul style="list-style-type: none"> Show OHT 8.2 of Kieran's cats problem. Read through the problem together and discuss how the problem is similar to the one just worked on. <p>Ask the children to discuss in pairs how they would solve the problem. Take feedback.</p> <p>Q What is the first thing that you need to do?</p> <p>Agree that writing headings and then listing the possibilities underneath is the first step. Ask them to solve the problem.</p> <ul style="list-style-type: none"> Stop the class to ensure that the children are using the known facts and recording in a clear and systematic way, by listing. <p>Q Which facts did you use first?</p> <p>Agree that one way is to find the possible ages of the first two cats and then use the second fact to find the age of the third cat.</p> <p>Q How are you making sure that you have got all possible pairs?</p> <p>Agree that listing the pairs in order is helpful, e.g. $1 + 6$, $2 + 5$, $3 + 4$, $4 + 3$, $5 + 2$, $6 + 1$.</p> <p>Ask the children to continue to solve the problem.</p>	

Planning sheet	Day Five (page 1 of 2)	Unit 8 <i>Counting, properties of numbers and reasoning about numbers</i>	Term: <i>Spring</i>	Year Group: 3
Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions
<p>Use vocabulary related to addition, subtraction, multiplication and properties of numbers.</p> <p>VOCABULARY digit sum total difference</p> <p>RESOURCES OHT 8.3 Whiteboards</p>	<ul style="list-style-type: none"> Display OHT 8.3. Choose two numbers from the grid e.g. 7 and 12. Ask children to make up sentences using those numbers and each of the displayed words. 'The total of 7 and 12 is 19' 'The sum of 7 and 12 is 19' 'The difference between 7 and 12 is 5'. After each sentence ask the whole class to repeat the sentences with you. Write number sentences on the board as each sentence is said: <ul style="list-style-type: none"> $7 + 12 = 19$ $7 + 12 = 19$ $12 - 7 = 5$ Ask the children to work in pairs to repeat the activity with numbers and words from OHT 8.3. They should record their number sentences on their whiteboards. After several minutes take feedback from pairs ensuring the correct vocabulary is used. 	<p>Solve mathematical puzzles.</p> <p>Explain reasoning orally and in writing.</p> <p>VOCABULARY digit sum total difference</p> <p>RESOURCES OHT 8.4 taken from <i>Mathematical challenges for more able pupils in Key stages 1 and 2</i> (NNS Publication).</p>	<ul style="list-style-type: none"> Review homework from yesterday and share ways of listing all possible answers using the given facts and then checking against other facts. Introduce Dan the detective with OHT 8.4. Read the first problem together. Point out that there are three pieces of information to consider in this problem. <p>Q What information have we been given?</p> <p>Agree the three facts in question 1.</p> <p>Q How are we going to solve this problem?</p> <p>Take responses, which may include listing all two-digit numbers up to 50 first, then checking the sum and differences of the digits.</p> <p>Q Which would be a better starting point?</p> <p>Draw out that it would be best to begin by finding all pairs of single digits which add together to give a total of 12. Write '1' next to that fact on OHT 8.4 (without listing the possible pairs).</p> <p>Q Which would be the best fact to check next?</p> <p>Draw out that it would be best to eliminate all numbers made with pairs of digits totalling 12 that are greater than 50.</p> <p>Q How could you record that?</p> <p>Discuss crossing out unwanted numbers or circling wanted answers. Write '2' next to that fact on OHT 8.4.</p> <p>Q What must the final check be?</p> <p>Write '3' next to 'the difference was 4'. Emphasise that thinking about the order in which the information is used can save time.</p> <ul style="list-style-type: none"> Allow the class 10 minutes to tackle the problem, intervening if necessary to ensure that they are working systematically. After 10 minutes take feedback on the solution and the ways of working/recording. Encourage the use of listing in a systematic order. 	<ul style="list-style-type: none"> Check the answer to the second problem and invite children to explain their way of working it out. Finish by making a class 'Dan the detective' style problem together. <p>Write: 'Dan found a number....'</p> <p>Q What could the first clue be?</p> <p>Prompt with words such as greater than, less than, odd, even, between.</p> <p>Complete the sentence e.g. 'Dan found a number between 40 and 70.'</p> <p>Q What clue could we give about the digits?</p> <p>Prompt with sum, total, difference or product. For example, write 'The product of its digits was 12.'</p> <p>Q What might the possible answers be?</p> <p>E.g. 43, 62.</p> <p>Q What can we give as a clue to decide which of these two numbers it is?</p> <p>E.g. Write 'It was odd.'</p> <p>Read through the problem together.</p> <p>Q Which fact would you encourage somebody to begin with to solve this problem? Why?</p> <p>By the end of the lesson, children should be able to:</p> <ul style="list-style-type: none"> identify the given facts and prioritise them; check that the answer meets all criteria. <p>(Refer to Problem Solving Strategies table.)</p>

Planning sheet	Day Five (page 2 of 2)	Unit 8 <i>Counting, properties of numbers and reasoning about numbers</i>	Term: <i>Spring</i>	Year Group: 3
Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions
			<ul style="list-style-type: none"> Show the second problem on OHT 8.4 and read through it together. <div style="border: 1px solid black; padding: 2px;">Q Which of these facts would give lots of possible answers to be checked?</div> <p>Agree that it is the statement 'greater than 50'.</p> <div style="border: 1px solid black; padding: 2px;">Q Which fact would be the best to start with?</div> <p>Agree that the second fact will give the fewest possibilities.</p> <p>Ask the class to solve the problem, again intervening to redirect groups/the class on the best way to approach the problem.</p>	